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Starting in 2010, an online journal on suicide was initiated: *Suicidology Online*, http://www.suicidology-online.com/ It has published no articles since 2021. Upon checking, I found that abstract services such as PsycINFO do not provide abstracts for articles in *Suicidology Online*. When publishing in that journal, the authors retained copyright for their articles. Therefore, in order to disseminate my research in that journal, I have reprinted them all in this issue of *Suicide Studies*.

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Essay Suicide and the Partition of India: A Need for Further Investigation

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Abstract: A search was undertaken to document cases of suicide during the partition of India into India and Pakistan in 1947. Cases were found for India and for women. The experience of those in Pakistan and of men was hard to locate. There is a need for further investigation to provide a fuller picture of suicide during this period.

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The plan to partition India (into India and a regionally divided Pakistan) was announced on June 3, 1947. The movement of Hindus, Muslims and Sikhs to the other territory began in earnest in August and September, 1947. There followed a massive disruption as more than ten million people moved from one country to the other across the western border alone. Villages were abandoned, crops left to rot, and families separated by the new borders. The governments of India and Pakistan were completely unprepared for this.

But more than this disruption, there was a genocide as members of one religion slaughtered and raped those of the other religions. Estimates of the dead range from 200,000 to two million, while about 75,000 women were abducted and raped by men of other religions and sometimes by men of their own religion. In particular, the humiliation of women was foremost, including raping and disfiguring women in front of their relatives, tattooing and branding them with 'Pakistan, Zindabad' or 'Hindustan, Zindabad' marking a halfmoon on their breasts or genitalia, and amputating their breasts.

To prevent capture, torture and death at the hands of others or forced religious conversions, people murdered their own children, spouses, parents and other relatives. Some also committed suicide. Pennebaker (2000) mentions women who jumped into wells or set themselves on fire,

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USA Tel: +1 609-652-4254 sometimes individually, but on occasions all the women in a family together.

This topic has political and socio-cultural aspects, and it is easy to offend one or more groups by discussing partition. The focus here is on suicidal behavior. Some of the articles and books cited do have a bias, but the issue of suicide during such times of genocide is of scholarly importance. This essay will mention the apparent bias of the reports and try to find some "facts" independent of the bias.

The Indian Perspective

Butalia (2000) talked to and recorded the experiences of those in one region during this crisis, the Punjab. She heard from her informants tales of hundreds of women jumping into wells (and sometimes being forced to jump) to avoid capture, rape, abduction and forced conversions. One informant reported watching more than ninety Sikh women jump into a well in her village in Rawalpindi on March 15th, 1947, when it was under attack from Muslims. The informant jumped in too with her children, but survived because the water was no longer deep enough for her to drown. When the well filled up, villages dragged the women who were still alive out of the well (p. 35).¹ The incident was reported in the April 15^{th} , 1947, edition of *The Statesman*, an English daily newspaper. The informant's brother-in-law had already killed his mother, sister, wife, daughter and uncle, and her daughter was also killed. Before they jumped, the women were given some opium mixed in water. The brother-in-law poured kerosene on himself and jumped into a fire and, later perhaps, his son also

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¹ The newspaper accounts reported that three women were saved.



committed suicide.² Later, India's Prime Minister, Nehru, visited the well, and the English closed it up.

This incident has acquired iconic significance, illustrating the bravery and manliness of the Sikhs, although Butalia points out that it was women who died. The Statesman compared the "sacrifice" of such women to the mass immolations of Raiput women when their husbands were killed in wars. Those women who survived are typically seen as "inferior" to those who died. The deaths of those who died are seen as "saving" those who survived these times. But it is likely that the villagers would have been killed, abducted and raped if the attackers had not withdrawn. Butalia, however, notes the failure of the men in such incidents to defend their village and retaliate, but instead acquiesce in the murder and suicide of their family members.³ Butalia also questions the extent to which the suicides of these women were "voluntary."4

Another survivor interviewed by Butalia reported seeing a girl, who was being dragged away, jump into a canal to escape and another who jumped off a roof to avoid rape and abduction (Butalia, 2000, p. 271).

Butalia recounted one story from information obtained from newspapers and memoirs. Zainab, a young Muslim girl, was abducted as her family tried to move from India to Pakistan, and sold to a Hindu, Buta Singh, who married her. They came to love each other and had children, but a program was set up by the two governments to "rescue" abducted women and return them to their new countries. Zainab was found and forced to leave Buta Singh.⁵ Buta Singh tried to change the decision and to go to Pakistan. He converted to Islam and applied for a Pakistani passport. He was refused. He applied for a short-term visa which was granted. When he arrived, he found that Zainab had already been married to a cousin. Zainab, almost certainly under pressure from her family, rejected Singh in front of a magistrate, and the next day Singh threw himself under a train and died (Butalia, 2000, p. 103). His suicide note asked to be buried in Zainab's village, but the villagers refused this request, and Singh was buried back in Lahore in India. This tale has become a legend, with books and a movie based on it.

Menon and Bhasin (1998) also noted that women jumped into wells or set themselves on fire either singly or in groups. The Fact Finding Team set up by the Indian government recorded that, in Bewal Village (in the Rawalpindi district), many women committed suicide by self-immolation on March 10, 1947. They put their bedding and cots in a pile, set fire to it and jumped onto it. A school teacher, whose family was in a camp that was attacked on August 26, 1947, reported that his daughter had a man try to strangle her three times, but she survived despite losing consciousness (Menon & Bhasin, 1998, p. 42). Many women carried vials of poison around their neck so as to have the means for suicide easily available should it become necessary (Menon & Bhasin, 1998, p. 46).

One male informant told Menon and Bhasin that his town of Muzaffarabad was raided in October 17, 1947. The Hindus were overpowered and surrendered. Their money was taken, and they were marched away. His three sisters swallowed poison, and then several women jumped off a bridge in order to drown in the river. A female informant who survived this incident recalled that women committed suicide using opium (which was slow) and then using a faster-acting poison. Another informant told of a woman who tried to throw her 10-month old baby on a burning pile, but someone saved the baby. Later the mother and this baby escaped and hid in a cave. When the mother heard that her husband had been killed (falsely), she swallowed poison and died. Three women in this village refused to take the poison or kill their children, and later they were accused of cowardice, their "lack of courage in facing death" (Menon & Bhasin, 1998, p. 54).

Menon and Bhasin (1998), like many others, reject the term "suicide" for these deaths. In their opinion, the women did not voluntarily endorse the honor code and choose death. If they had not committed suicide, they would have been killed by their own kin and neighbors to "protect their honor." Menon and Bhasin note that acquiescence does not imply consent, and submitting is not the same as agreeing. Pandey (2001) prefers the term "martyrdom" to describe the suicides on the Hindus and Sikhs.

On the other hand, these women were caught in a horrendous bind. They faced rape, mutilation and torture. Some individuals might choose suicide over this. However, the role of the men in murdering their kin and forcing suicide upon them took away the women's freedom of choice. It is unknown what these women might have done if the men had not exerted pressure. These women grew up in a culture that held these values, and so they may have been enculturated sufficiently so that they would have chosen suicide "freely."

In contrast to the myth that has grown up around the suicides of Hindu and Sikh women during this time, Pandey (2001) pointed out that some women did flee. He reports that some boys were disguised as girls for these escapes to escape death if they were captured. Some argued that it made sense to convert to Islam in order to have their lives spared

² Most of the accounts of this incident mention only women, but Butalia's informant said that boys jumped in also.

³ Butalia notes that women were sometimes traded to the attackers in return for freedom.

⁴ Pandey (2001) notes that the village had been under attack for three days, and the Hindus and Sikhs had fought, but could no longer hold out.

⁵ Supposedly, Singh's brothers feared that they might lose his property to Zainab if Singh died and so reported the situation to the authorities. Zainab's family wanted her back so that she could claim her property in Pakistan.



and, although some of those who advocated this were murdered by their kin, some Sikh families did convert. Pandey also notes that a few families, on both sides of the border, were willing to sacrifice young women to abduction in order to buy security for the family (Pandey, 2001, p. 195).

Problems With These Accounts

The reports cited above have two biases: (1) they are written from the Indian perspective, and (2) they are written from a feminist perspective. The result is that it much more difficult to locate examples of suicide during partition in Pakistan and in men.

When Indian authors write about the mass suicide of Sikh women in the village in Rawalpindi mentioned above, they note that the village was under attack by Muslims (as were many others in the region). They fail to note that Sikhs attacked Muslim villages in the Jullundur and Amritsar districts, as well as packed refugee trains heading for Pakistan, often operating from the safety of neighboring Sikh princely states (Talbot, 1998). Thus, the violence was perpetrated by all sides, and it is hard to place sole blame on any one group, save perhaps the British, Indian and Pakistani authorities who failed to anticipate the horrendous problems that partition was likely to create and, therefore, failed to prepare adequately for partition.

The Pakistan Experience

What was the experience of the Muslims during partition? In commenting on this, Indian writers minimize the trauma for the Muslims. They assert that Muslims were less concerned with the purity and impurity of women, and so they would have been more willing to take women back who had been raped or abducted by Hindus. Muslim women, they argue, would not have been stigmatized by their society (e.g., Menon & Bhasin, 1998, p. 77). It would, of course, be useful to have a Muslim perspective on this issue.

During the repatriation of women back to their home country, Menon and Bhasin (1998) cite a report that Muslim women abducted by Hindus often refused to leave their new homes, and some threatened suicide when threatened with forcible repatriation.⁶ This suggests that suicidal behavior was not unknown in the Muslim population.

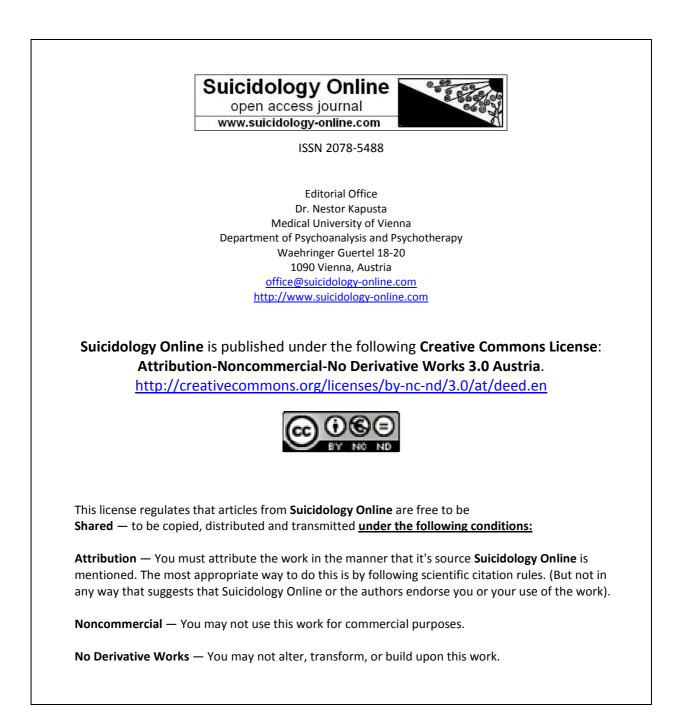
Conclusions

Clearly, a large number of suicides occurred during this violent and turbulent time. However, the majority of cases located are of Indian women. Cases occurring in Pakistan and by men are rare. There is a need for further investigation in order to arrive at a fuller picture of suicide during this era.

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⁶ Menon and Bhasin note that 20,728 Muslim women and 9,032 Hindu and Sikh women were repatriated after partition.





Review Suicide in Mass Murderers and Serial Killers

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Abstract: Research carried out by the author on suicide in mass murderers and serial killers is reviewed. The incidence of suicide in rampage murderers (34.7%) is much higher than in serial killers (4.4%). Whereas all of the suicides in mass murderers occurred during attempts to arrest them, 52% of the suicides in the serial killers occurred after arrest. Case studies are presented, and suggestions made for future research.

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Murder followed by suicide is not an uncommon event, and several research reports have appeared on the topic. For example, Palermo, et al. (1997) found that typical murder-suicide in the Midwest of America was a white man, murdering a spouse, with a gun in the home. In England, Milroy (1993) reported that 5% to 10% of murderers committed suicide. Most were men killing spouses, with men killing children second in frequency. Shooting was the most common method. Similar patterns have been observed in Canada (Cooper & Eaves, 1996) and Japan (Kominato, et al., 1997).

Mass murder has become quite common in recent years, from workers at post offices "going postal" to school children killing their peers in school. Data from the United States indicate that the percentage of homicides with more than one victim increased over the period from 1976 to 1996 from 3.0% to 4.5% (Lester, 2002). Indeed, Lester (2004) recently called mass homicide "the scourge of the 21st Century".

Examples are easy to find. Here are three cases from recent media reports:

March 11, 2009:

Winnenden, Baden-Württemberg, Germany

Tim Kretschmer, aged 17, a former student, enters the Albertville-Realschule and kills 9 students and a teacher, flees and kills 3 others before committing suicide when confronted by police.

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Parts of this article have been presented in Würzburg (Germany) in June 2009 as a talk in celebration of Prof. Dr. Armin Schmidtke's career.

April 3, 2009:

Binghamton, New York

Jiverly Wong, aged 41, a Vietnamese immigrant, kills 13 immigrants and wounds 4 others at a community center, and then commits suicide.

April 30, 2009:

Baku, Azerbaijan

Farda Gadyrov, a Georgian citizen, enters the Azerbaijan State Oil Academy, kills 12 and injures 13 before turning his gun on himself.

There are many categories of mass homicide, including familicides (in which a person slaughters other members of his or her family), terrorists such as Timothy McVeigh who killed 168 people at the Alfred P. Murrah Federal Building in Oklahoma city on April 19th, 1995 (Michel & Herbeck, 2001), and those who simply "run amok," such as Martin Bryant who killed 35 people and wounded over 30 others at Port Arthur, Australia, on April 29th, 1996 (Cantor, Sheehan, Alpers, & Mullen, 1999).

Holmes and Holmes (1992) classified mass killers into five types: Disciples (killers following a charismatic leader), family annihilators (those killing their families), pseudocommandos (those acting like soldiers), disgruntled employees, and set-and-run killers (setting a death trap and leaving, such as poisoning food containers or over-the-counter medications). It has been difficult to study several of these categories of mass murderers because no one has developed a comprehensive list of murderers falling into the groups. The only category studied hitherto has been the pseudocommandos (also known as rampage murders).

In a preliminary study of mass murderers, Lester, Stack, Schmidtke, Schaller and Müller (2004) examined 143 incidents of mass murder committed by 144 men and one woman reported in the *Frankfurter Allgemeine Zeitung* between January 1, 1993 and August 31, 2002. They found that the death toll was



significantly higher for those murderers who committed suicide (an average of 5.6 victims) than for those killed by police officers (4.2 victims) or captured (3.1 victims). Mass murders in Europe (2.8 victims) and the Americas (2.8 victims) had fewer victims than mass murders committed elsewhere in the world (6.3 victims)¹. The number of victims was not associated with the year of the event, the sex or age of the murderer, the number of offenders, or whether strangers, friends or family were the victims.

Lester, Stack, Schmidtke, Schaller and Müller (2005) studied 100 rampage homicides since 1949, listed in an article on rampage murders in the United States published in the *New York Times* in the year 2000. They sought to explore two facets of the sample (the outcome and the deadliness) and two questions: (1) what are the differences between those rampage killers who completed suicide at the time of the act and those who were captured, and (2) whether any of the characteristics of the rampage killers were associated with the deadliness of the rampage.

Several attempts were made to obtain the data set that the New York Times reported as having collected. The requests were rejected. Since access to this purported data set was refused, data were collected on each of the 100 rampage homicide incidents using searches of the Internet (from www.google.com and other search engines) and the electronic data-base provided by Lexis-Nexis. For some killers, information was easily available. For example, Charles Whitman who killed 16 and wounded 31 on August 1st, 1966, on the University of Texas campus, has a full-length biography available (Lavergne, 1997), while others had only a paragraph or two available from the Internet (such as Drew Cade who killed one and wounded two in a supermarket in Pennsylvania on June 20th, 1997).

The reports were coded for characteristics of the rampage and of the killer. Characteristics (such as marital status) were coded when the information was available, and lack of information was coded as missing data. On the other hand, characteristics such as prior psychiatric care and interest in guns were coded as present if mentioned and absent if not mentioned in the reports.

The 98 incidents with a single perpetrator took place from 1949 to 1999, with 90% taking place in the period 1980-1999. The age of the 98 killers ranged from 14 to 70 with an average age of 34. There were 93 men and 5 women. It was noticeable that fewer of these incidents took place on Saturdays or Sundays (an average of only 4.5% each day) compared to weekdays (an average of 17.8% each day). This is in contrast to homicide in general in the United States for which the incidence is higher on weekends (Rogot, Fabsitz & Feinleib, 1976).

The mean number of victims killed was 4.15 (SD: 3.84) and the mean number of victims wounded was 4.72 (SD: 5.99). The number killed in the 98

incidents and the number wounded were moderately associated (Pearson r = .50, two tailed p < .001), and the correlates of these two measures of deadliness were similar. Fifty-six of the killers were captured, 7 were killed by the police and one by a civilian, and 34 completed suicide at the time of the act (that is, within a few hours of the first killing and before capture). For all three measures of deadlines (the number killed, the number wounded, and the total number of victims), the acts of rampage killing became less deadly in recent years, and were more deadly if the killer had had shown an interest in guns and had parents who were divorced. Several variables were associated with two of the measures of deadlines: killing significant others, prior evidence of violence in the killer, paranoia and suspiciousness, and prior service in the military.

The deadliness of the rampage homicides was also associated with the outcome. Those killers who were killed by the police were more deadly than those who killed themselves who, in turn, were more deadly than those who surrendered or who were captured. Overall, those killed by police killed and wounded an average of 18.3 victims, those who committed suicide had 10.1 victims, and those who surrendered or were captured had 6.9 victims. These differences were also found separately for the number killed (8.1, 4.8, and 3.2, respectively) and the number wounded (10.1, 5.3, and 3.8, respectively).

Since only seven individuals were killed by the police, the analysis of outcome compared the 56 who surrendered or were captured with the 34 who completed suicide. Only a few significant differences emerged. Suicide as an outcome was less likely if the killers were adolescents or diagnosed as schizophrenic and more likely if the killer had friction with co-workers or the killings took place at work.

These results are of interest because they suggest that it may be possible to create a classification of rampage killers as well as profiles of the different types of killers. However, the results of this study were limited because of the lack of detailed information on many of the rampage killers. The study had to rely primarily on newspaper reports and websites maintained by individuals interested in mass murder. Thus, information for many of the variables in the study was not available, and absence of a mention of a characteristic (such as interest in guns) was coded as "absent" whereas it may instead not have occurred to the newspaper reporter to ask about this characteristic. Reports in the press and online may also be limited in accuracy (or validity). For cases in which several alternative reports exist, the reliability of the information (i.e., does it appear in several independent reports) could be checked.

Ideally, in the future, researchers trained in psychological autopsies should investigate a sample of rampage killers, using a detailed interview schedule, so that all of the critical variables can be explored for their absence or presence in each case. If this were done, the data and results obtained would have greater validity than those obtained for the present study.

¹ This may be related to the phenomenon that more people have to die in an incident of any kind in under-developed nations than in Western nations for it to be reported in Western newspapers.

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A Case Study: Joseph Wesbecker

On September 14th, 1989, Joe Wesbecker went to the printing plant where he worked (although he was on disability leave at the time) and, firing his semi-automatic assault weapon, killed eight coworkers and wounded many more. He then shot himself in the head with a pistol and died (Cornwell, 1996).

At the time of the massacre, Wesbecker lived alone and had been on disability for about a year. Occasionally he visited and slept with his second ex-wife, Brenda. He was seeing a psychiatrist, Dr. Lee Coleman, who had given Wesbecker lithium for his manic-depressive disorder and Prozac for his depression, but Coleman was beginning to think that Wesbecker had a schizoaffective disorder, a psychosis that is a mix of schizophrenia and depression. Wesbecker had been in and out of treatment before, attempting suicide in 1984 with an overdose and with car exhaust. Over the years, all kinds of psychotropic medications had been tried, but the current medications did not seem to be helping Wesbecker, and they seemed to be making him agitated. Coleman had tried to persuade Wesbecker to go into the hospital on September 11th, but Wesbecker refused.

On September 13th, Wesbecker drove his son James to his college classes and picked him up after class. He insisted on buying a textbook James needed for class. He spent that night with Brenda, his ex-wife. On September 14th, Wesbecker failed to pick James up. He was already on his way to the Standard Gravure printing plant to get revenge.

Wesbecker was born on April 27th, 1942, in Louisville to Martha Wesbecker who had married the previous year at the age of fifteen. Wesbecker's father fell to his death while mending a church roof the next year, and Wesbecker's grandfather (who had become his surrogate father) died when Wesbecker was almost two. The next few years were filled with moves as Wesbecker's mother moved to different sets of relatives and then back to Louisville. He was even placed in an orphanage for a year when he was ten. Although he was back with his mother the next year, life was still unstable – for example, Martha attempted suicide by drinking rat poison soon after Wesbecker arrived back with her.

As a teenager, Wesbecker was rather wild. He dropped out of high school and was arrested several times for disorderly conduct and fighting. He spent a night in jail for siphoning gas out of someone else's truck. He often carried a starter gun which he fired just to scare people.

At the age of eighteen, Wesbecker went to work as a printer and married Sue White. For the next twelve years, Wesbecker settled down. He worked hard and moved to Standard Gravure in 1971, bought better and better houses for his family, and had two sons, Kevin who developed curvature of the spine and James who later became a compulsive exhibitionist, causing Wesbecker a great deal of stress. Wesbecker had some strange traits. He was a perfectionist and seemed to have an unusual desire to be clean. He frequently quarrelled with his neighbors. His mother lived with him for a time, and the problems with the two boys began to get worse when they became teenagers. The stress in the marriage grew, and it ended for good in 1980.

Meanwhile the stress at Standard Gravure had become overwhelming. The printing plant had once belonged to the local newspaper, the Courier-Journal, but the paper was sold to Gannett (who published USA Today). The plant was then sold to Brian Shea who ran it independently. Faced with rising costs and a demand for increased productivity, the plant installed high-speed machines, and the men were forced to work sixteen-hour shifts. The noise was tremendous, and the fumes from the toluene used in the ink made the men pass out. The men were made to work night and weekend shifts, and there were pay cuts and erosion of job security as men were laid off. Strangely, rather than banding together against the foremen, the men started taking out their frustration on one another, such as pouring water on the printing paper and fouling up the machines that others were trying to run. In the mid-1980s, the men began bringing guns to work.

Wesbecker attended Parents without Partners and met Brenda Beasley who had two teenage girls. They married in 1981. Wesbecker wanted Kevin to have surgery for his spinal problem, but Kevin refused and the relationship between the two grew distant. James continued to expose himself, and Brenda's ex-husband was concerned about the safety of his daughter, eventually getting custody of them. Wesbecker paid for residential psychiatric care for James, but James continued his exhibitionism. Wesbecker and his ex-wife continued to fight, and Wesbecker won a lawsuit against Sue for slander and had her placed on two-years probation for threatening him.

Wesbecker thought that the foremen at Standard Gravure were deliberately assigning him the most stressful jobs, and he talked to the plant's social worker about it. (Eventually, his psychiatrists wrote to the plant to insist that Wesbecker get less stressful tasks.) It was at this time that Wesbecker attempted suicide and was committed to a psychiatric hospital (on April 16th, 1984) where he was diagnosed as Major Affective Illness, Depressed, Recurrent Type. The hospital's psychologist also thought that Wesbecker had a borderline personality disorder. After his discharge, Wesbecker was put on an antidepressant (one of the many medications that he tried), but Brenda moved out and divorced him in 1984. Despite this separation, they remained good friends and lovers.

Wesbecker continued to press for easier working conditions, even going to the Human Relations Commission in Louisville in May 1987. But his case worker there made little progress in his negotiations with the plant.

Wesbecker began to buy weapons in 1988 and to read magazines such as Full Auto Firearms and

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Soldier of Fortune. He went to shooting ranges with Brenda. His son James was caught exposing himself again and was sentenced to ninety days in jail. Wesbecker was so irritable that, when he had trouble with his lawnmowers, he wrecked them with an axe and drove his car over them. He often talked to his friends and co-workers about bombing the plant or "wiping the whole place out." On September 7th, 1988, Dr. Lee Coleman got Wesbecker placed on disability leave, but Wesbecker believed that he had been cheated over the amount of his disability pay.

Wesbecker visited a funeral home and arranged and paid for his cremation. He deeded his house to Brenda, and he continued to accumulate an arsenal of guns. As 1989 passed, Wesbecker's son James continued to get into trouble almost every week. In July, Wesbecker discussed suicide with his friend James Lucas.

Wesbecker's grandmother, who had been a surrogate mother for him, died on August 5th, 1989, and a few days later Dr. Coleman switched Wesbecker to Prozac (Fluoxetine) and began to wean him off the other medications. Wesbecker told his friend Lucas not to go to work because he had a plan to eliminate the place. He had a list of seven people there he wanted to eliminate. Lucas swore (later in court) that he warned the managers at the plant but that they did not take the threat seriously.

On September 14th, 1989, Wesbecker arrived at the printing plant just after 8:30 am and began his shooting rampage.

What makes this mass murder of special interest is that those who were wounded, but who survived the massacre, sued Eli Lilly, the makers of Prozac, arguing that Prozac was responsible for Wesbecker's rampage at the plant. The jury decided that Eli Lilly was not responsible, but the author of the book on the case, John Cornwell (1996) suspects that a deal may have been made "under the table" between Eli Lilly and the plaintiffs.

Serial Killers

In contrast to mass murder, serial killers are defined as those who kill three or more victims over a period of at least thirty days (Lester, 1995). No study had appeared prior to 2008 on the extent to which serial killers complete suicide, but the informal impression gained from studying the cases (e.g., Lester, 1995) is that suicide is less common among them. However, occasional serial killers do complete suicide.

For example, Herb Baumeister was a married man with three children who was suspected of killing 16 gay men by strangulation in Indiana and Ohio during the 1990s. An organized lust killer, he buried some of his victims on his property. Baumeister began killing when he was age 33. When Baumeister became a suspect in the disappearances of gay men in the area, and when his marriage fell apart, he drove to Ontario and shot himself in the head after leaving a two-page suicide note.

Another example of a serial killer who chose suicide over prison was Leonard Lake. He and his partner, Charles Ng built a bunker in which to keep female sex slaves, and it is believed they killed 12 people. When apprehended for shoplifting, Lake took a cyanide capsule and died.

Some serial killers commit suicide after being sent to prison. Richard Trenton Chase suffered from paranoid schizophrenia when he killed and mutilated six people in Sacramento, California in 1978. Chase drank the blood of some of his victims because he thought his own blood was turning into powder. After being arrested, charged, and convicted of murder, he was sentenced to die in the gas chamber. Chase committed suicide in prison by taking an overdose of his medication that he had saved for several weeks.

Some serial killers have made failed suicide attempts (e.g., Cary Stayner) before they embarked upon their serial killing. They appear to have turned their suicidal urges into murderous rampages.

Newton (2006) has provided a detailed listing of serial killers, and his data were used to explore the occurrence of suicide in his sample of serial killers in a study by White and Lester (2008). Newton listed solo serial killers and group serial killers. He also listed cases from around the world and back into the 19th Century. In order to make the sample comparable to the study of mass murderers in the United States by Lester, et al. (2005), the cases were restricted to solo killers, in the United States, from 1950 to 2002.

Newton provided data on age, sex, race, the year that the murders took place, and the number of murdered victims. The types of serial murderers were classified as nomadic, territorial or stationary. The motives were classified as criminal enterprise, personal causes, sexual and sadistic, and some killers were classified as having more than one motivation. The outcome was coded as suicide, captured, killed by police during attempts to capture, and other (including murdered by others and death from natural causes).

The sample consisted of 594 serial killers: 559 men, 31 women and 4 of unknown sex; 392 were white, 95 African American, 38 Hispanic, 5 "other" and 64 unknown. The mean number of victims was 6.4 (SD: 7.1) with a range of 3 to 70. Several cases were listed as having "numerous" victims and these were entered as "missing data." Of the 594 killers, 26 committed suicide, 67 were executed, 481 others caught and processed by the criminal justice system but not executed, 8 were killed by police officers, 6 were murdered and 6 had missing data. By decade, 19 cases came from the 1950s, 66 from the 1960s, 162 from the 1970s, 196 from the 1980s, 134 from the 1990s, 13 from the 2000s, and 4 had missing data.

Three hundred and seventeen were classified as territorial killers, 27 as stationary, 246 as nomadic, and 4 had missing data. 29% were classified as having a criminal enterprise motive, 37% as personal cause,



50% as sexually motivated and 14% as sadistic. (Some killers were assigned multiple motives.)

The number of victims was associated with the type of crime: Territorial killers killed fewer victims (5.2) than stationary (8.0) or nomadic (7.8) killers. The number of victims was not related to whether the motive was criminal enterprise, personal cause, sex, or sadism. The number of victims was not associated with the decade that the killings began, but men did kill more victims than women (means 6.6 versus 3.9).

	sample size	proportion of suicides
United States		
> 3 victims		
1900 - present	696	4.17%
1900 - 1949	103	2.91%
1950 - present	593	4.38%
2 victims ^a		
pre 1900	68	2.94%
1900 - present	248	4.03%
1900 - 1949	10	0%
1950 - present	238	4.20%
Other Countries		
Total	399	5.26%
United Kingdom	80	7.50%
Australia/Canada/NZ	54	5.56%
Europe	150	7.33%
Rest of the world	116	0.86%
Team Killers		
Complete sample United States	159	4.40%
1950 - present	74	2.70%
^a Comparing the suicides	with those wit	h other outcomes

^a Comparing the suicides with those with other outcomes (1900-present) produced no significant differences with the variables (year, sex, race, criminal enterprise, personal cause, sexual motive, sadism, or territorial/stationary/ nomadic).

There were no differences by race (White, Black and Hispanic) in the number of victims. Those executed tended to kill fewer victims than those captured but not executed (means 4.9 versus 6.7).

Those committing suicide (n=26) were compared with those captured (n=547). The two groups did not differ in sex, race, whether territorial, stationary or nomadic, or motive (personal cause, sex, or sadism). However, those killing for criminal enterprise were more likely to complete suicide (5.7% versus 1.8%).

In this very large sample of serial killers in the United States from 1950 to 2002, only 26 committed suicide, that is, 4.4%. (A more detailed breakdown of the incidence of suicide in Newton's complete sample is shown in Table 1.) In contrast, in the study on rampage mass murderers in the United States during the same period, reported above, 34.7% committed suicide, a far higher proportion. It is perhaps possible that rampage murderers are energized by such a great amount of anger that even killing many victims is not sufficient to discharge the anger, and the residual anger is turned inward on the self. Serial killers, on the other hand, may be less impulsive, with much more cognitive planning and self-control. Empirical studies comparing the psychodynamics of rampage and serial killers are needed to explore such potential psychological differences.

The study was limited by the variables that Newton used to describe the serial killers. Future research should explore more characteristics of the serial killers and their criminal acts for their relationship to the deadliness of the killings and to the outcome (suicide versus capture).

A More Extensive Study of Suicide In Serial Killers

In order to pursue the study of suicide in serial killers, a data set for serial killers who completed suicide was created. The list of serial killers is shown in Table 2, and data were available for 58 serial killers. For these, the timing of the suicide was as follows:

Prior to identification	5 (8.6%)
To avoid arrest	10 (17.2%)
During arrest	13 (22.8%)
Before trial	15 (25.9%)
After conviction	15 (25.9%)

It can be seen that the timing of the suicide varies quite widely. Only 9% completed suicide prior to identification, motivated by guilt perhaps or despair at their uncontrollable murderous impulses, 17% completed suicide to avoid arrest, and 23% completed suicide during the arrest process. In contrast, almost all mass murderers complete suicide during these phases of the process. Suicide after arrest and suicide after conviction were equally common, each accounting for 26% of the suicides.

Analysis of the psychodynamics of the motives of these serial killers is difficult because the biographies are typically written by journalists or writers (rather than mental health crime professionals), and most of their accounts focus on the details of the crimes and crime scenes rather than psychodynamically relevant information. Whereas it has been relatively easy to profile the typical rampage mass murderer, there is no "typical" serial killer who completes suicide. However, it is of some interest to examine briefly two cases.



Table 2. Serial killers who completed suicide (20th Century).

Name	Birth year	Year of death	Nationality	Suicide	Method	Place	Prior suicide attempt	Alone
Akinmurele, Stephen	1978	1999	England	before trial	hanging	jail	yes	yes
Ball, Joe	1896	1938	USA	during arrest	gun	his bar		yes
Baumeister, Herbert	1947	1996	USA	avoid arrest	gun	park		yes
Birnie, David	1951	2005	Australia	after conviction	hanging	prison		no
Brandt, Carl	1956	2004	USA	at crime scene	hanging	home		yes
Butts, Vernon	1957	1981	USA	before trial	hanging	jail	yes	no
Carr, Hank		1998	USA	during arrest	gun	store		yes
Carter, Jonathan	1980	1999	USA	prior to capture	gun			yes
Chanal, Pierre	1946	2003	France	after arrest	cut	jail	yes	yes
Chase, Richard	1950	1980	USA	after conviction	medication	prison		yes
Clements, Robert	1890	1947	England	avoid arrest		home		yes
Costa, Antone	1945	1974	USA	after conviction	hanging	prison		yes
Cota, Fernando	1946	1984	USA	traffic stop	gun	van		yes
Crutchley, John	1946	2002	USA	after conviction	plastic bag	prison		yes
DeJesus, Carmello	1934	1973	USA	prior to identification	gun	field		yes
Denke, Karl	1870	1924	Silesia	after arrest	hanging	jail		yes
Edwards, Mack Ray	1919	1971	USA	after conviction	hanging	prison	yes	yes
Evonitz, Richard	1963	2002	USA	during arrest	gun	public place		yes
Fazekas, Julia	1865	1929	Hungary	avoid arrest	poison	home		no
Gamper, Ferdinand	1957	1996	Italy	during arrest	gun	home		yes
Glover, John Wayne	1932	2005	Australia	after conviction	hanging	prison	yes	yes
Grossman, George	1863	1921	Germany	?	hanging	jail		yes
Hatcher, Charles	1929	1984	USA	after conviction	hanging	prison		yes
Herzog, Loren	1966	1999	USA					
Hohenberger, Robert		1978	USA	during arrest	gun	public place		yes
lqbal, Javed	1959	2000	Pakistan	after conviction	hanging	prison		no
Jackson, Michael	1945	1986	USA	during arrest	gun	barn		yes
Lake, Leonard	1945	1985	USA	after arrest	cyanide	jail		no
Macek, Richard	1948	1987	USA					
Merrett, John	1908	1954	UK	avoid arrest?	gun	?		yes
Moore, Douglas	1967	2004	Canada	after arrest	hanging	jail		no
Perry, Calvin	1965	1984	USA	after arrest	hanging	jail		yes
Player, Michael	1960	1986	USA	prior to identification	gun	hotel room		yes
Pleil, Rudolf		1958	Germany	after conviction	hanging	prison		no



Table 2. (continued) Serial killers who completed suicide (20th Century).

							Prior suicide	
Name	Birth year	Year of death	Nationality	Suicide	Method	Place	attempt	Alone
Poehlke, Norbert		1985	Germany/Italy	avoid arrest	gun	car		yes
Pough, James	1948	1990	USA	during mass murder	gun	business place		yes
Prudom, Barry	1944	1982	England	during arrest	gun	public place		yes
Rezala, Sid Ahmed	1979	2000	France	after arrest	fire	jail		yes
Richards, Robert		1989	USA	?	v-p murder	cell		yes
Robbins, Gary	1935	1988	USA	during arrest	gun	highway		yes
Rodriguez, Robert	1950	1992	USA	avoid arrest?	poison	highway		yes
Rolle, Randal	1918	1949	USA	?	gun	home		yes
Rooyen, Gert van		1990	South Africa	during arrest	gun	in public		no
Sack, George		1963	USA					
Savini, Paul		1992	Italy	avoid arrest?	?	?		yes
Schlatter, Darrell	1952	1993	USA	after arrest?	hanging	jail		yes
Schmidt, Helmuth		1918	USA	after arrest	?	jail		yes
Schmidt, William	1933	1989	USA	avoid arrest?	?	?		yes
Shipman, Harold	1946	2004	UK	after conviction	hanging	prison		yes
Succo, Roberto	1962	1998	Italy	after conviction	plastic bag	prison		yes
Tannenbaum, Gloria		1971	USA	after conviction	poison	mental hospital		yes
Travis, Maury	1965	2002	USA	after arrest	hanging	jail		yes
Unterweger, Jack	1952	1994	Austria/Czech/USA	after conviction	hanging	prison		yes
Vakrinos, Dimitros		1997	Greece	after arrest	hanging	jail		yes
Vermilyea, Louise		1910	USA	during home arrest	poison	home		yes
Weber, Jeanne	1875	1910	France	after conviction	strangulation	asylum		yes
Wenzinger, Gerd	1944	1997	Germany/Brazil	awaiting extradition	hanging	jail	yes	yes
West, Fred	1941	1995	UK	after arest	hanging	jail	-	no
West, John		1948	USA	during arrest	gun	public place		no
Wheat, Clarence		1980	USA	prior to identification	gun	?		yes
Whitt, Jimmy	1971	1994	USA	during arrest	gun	highway		yes
Wilcox, Donald	1968	2003	USA	during arrest	gun	motel		yes
Wilder, Christopher	1945	1984	Australia/USA	during arrest	gun	gas station		yes

Two Cases Of Serial Killers Who Completed Suicide



Herbert Baumeister

Baumeister was born on April 7, 1947, in Indiana (Weinstein & Wilson, 1998). His father was an anesthesiologist. He had one younger sister and two younger brothers. He experienced an apparently normal childhood. In adolescence, however, he exhibited bizarre behavior, playing with dead animals and having strange fantasies such as wondering what urine tastes like. He was diagnosed as schizophrenic (or multiple personality – the journalistic report confuses the two diagnoses), but he did not receive any treatment. He had a series of jobs, worked hard, but continued to exhibit bizarre behavior, such as ranting at fellow workers and urinating on his boss's desk. He once sent a Christmas card with a photo of himself and another man dressed in drag.

He married Juliana Saiter in 1971 and had three children, but Juliana reported later that they had sex only six times in their 25 years of marriage, and she never saw her husband nude. He founded the Save-A-Lot chain of discount stores in 1988 and quickly rose to affluence and prominence in his community. By the mid-1990s, however, the business began to falter.

In the 1990s, a number of gay men in the Indianapolis area disappeared, and in 1993, police were contacted by a man claiming that a "Brian Smart" had killed a friend of his and attempted to murder him. In his interaction with "Brian," Baumeister had the man strangle him while he masturbated, and then they reversed roles.

In 1995, he saw the man again, recorded the license plate of the car, and the police traced the car to Baumeister. Investigators approached Baumeister, informed him that he was a suspect and requested permission to search his house. Baumeister refused. In 1996, his wife filed for divorce, frightened by Baumeister's mood swings and erratic behavior, and permitted the search while Baumeister was on vacation. The search yielded the remains of eleven men, four of whom were identified.

Baumeister fled to Ontario where he committed suicide in Pinery Provincial Park by shooting himself in the head. His suicide note gave his failed marriage and his business problems as the cause. It made no mention of the murders. Baumeister is also suspected of the murder of nine men found along Interstate 70 in Indiana and Ohio.

Baumeister showed early signs of psychiatric disturbance but, despite this, was reasonably successful at work and managed to marry and have a family. His disturbance, whatever it was, did not grossly impair his life-path. He had homosexual inclinations and sadistic fantasies and, in killing gay men, an obvious hypothesis is that he projected his self-loathing for his own homosexuality onto others, permitting him to abuse and murder them.

In the opinion of Virgil Vandagriff (unpublished), Baumeister fits the profile of a "lust

killer" (rather than the psychotic, the missionary or the thrill killer).

Richard Chase

Richard Chase is an example of a psychotic serial killer (Biondi & Hecox, 1992). He was born on May 23, 1950, in California. He was abused by his mother and, by the age of ten, showed the classic triad of danger signs: bedwetting, pyromania and sadism toward animals. In his teenage years, he abused alcohol and drugs and had impotence problems.

He developed delusions that his heart occasionally stopped beating and that someone had stolen his pulmonary artery. He tried to absorb vitamin C by holding oranges over his head, and he shaved his head so that he could watch his cranial bones move around. He left his mother's home, believing that she was trying to poison him. In his apartment, he captured, killed and disemboweled animals which he ate raw to prevent his heart from shrinking.

In 1975, he poisoned his blood by injecting rabbit blood into his veins and was committed to a psychiatric institution. He was treated with medication and released in 1976. His first murder was a man, killed in a drive-by shooting on December 29, 1977, but he then switched to women. Chase entered the home of Teresa Wallin on January 21, 1978, shot her, had intercourse with her dead body and bathed in her blood. On January 27th, he entered the home of Evelyn Miroth, shot a man there and her son and her nephew, and then repeated his pattern with her body. He fled with the dead 22-month-old nephew and ate parts of him. The police arrested him at his apartment, where he proclaimed his innocence. He was found guilty of six counts of murder and sentenced to death. He was found in his cell on December 26, 1980, where he had committed suicide using an overdose of anti-depressants prescribed by the prison doctor that he had hoarded.

Discussion

It is clear that serial killers are less likely to complete suicide than mass murderers. The reasons for this are far from clear, and psychological autopsy studies are needed to suggest hypotheses for this difference. For American rampage mass murderers, those who completed suicide (typically at the scene of the crime) killed and wounded more victims than those who were captured, but had fewer victims than those killed by the police.

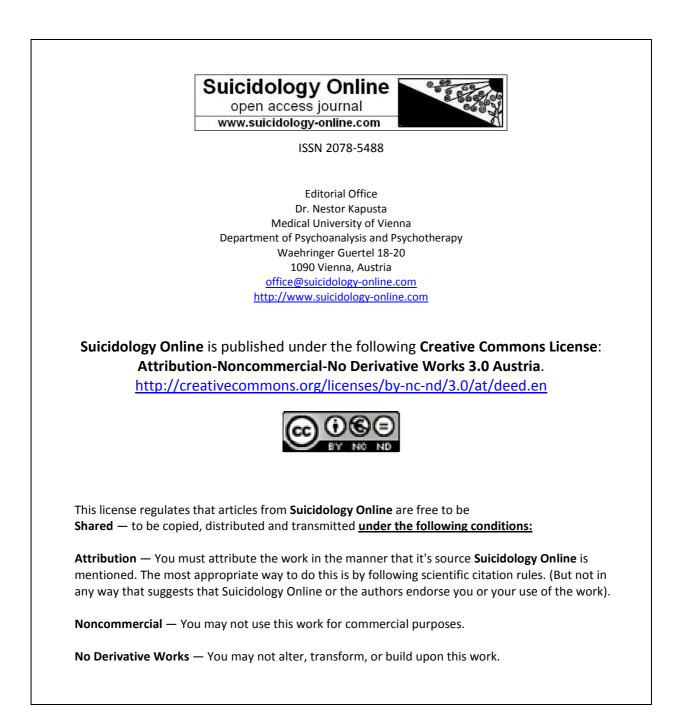
An understanding of the reasons why a small percentage of serial killers complete suicide (only about 3% to 5%), as well as the timing of their suicide, must similarly await a sound psychological autopsy study. In the meantime, John White and I are collecting a data set for over 500 serial killers, based on biographies, newspaper reports and website information, and one of the analyses we plan is a comparison of those who completed suicide with those who did not. We hope that this study will provide clues to the suicide of serial killers.



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Original Research Lay Theories of Suicide in Turkish and American Students

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Abstract: The purpose of this study was to compare the lay theories of suicide held by Turkish and American respondents. Measures of attitudes toward suicide and of personality variables were administered to 330 Turkish undergraduates and 419 American undergraduates. Turkish students saw interpersonal factors as less important and societal factors as more important in causing suicide as compared to the American students, and they also reported more stigma toward attempted suicides. Personality correlates of these attitudes were similar in the two groups. The similarities between the two groups of respondents in their theories of suicide outweighed the differences.

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In recent years, several studies have explored lay, as opposed to scholarly, theories of behavior, such as lay theories of schizophrenia (Furnham & Bower, 1992) and suicide (Knight, et al., 2000). These studies typically entail giving an inventory consisting of a variety of statements about the behavior of interest, and so they resemble inventories devised to measure attitudes toward suicide.

There have been several scales devised to measure attitudes toward suicide (e.g., Diekstra & Kerkhof, 1989; Domino & Perrone, 1993) and scales to measure myths about suicide (e.g., McIntosh, et al., 1985). However, none of these scales were devised with any particular theoretical model in mind, and efforts to see if meaningful scales can be devised from these inventories have proved fruitless (e.g., Anderson, et al., 2008).

In contrast, Lester and Bean (1992) proposed that the causes of suicide could be attributed to intrapsychic factors (such as depression), interpersonal factors (such as the break-up of a romantic relationship) or social factors (such as oppression on the basis of race or religion). More recently, Voracek, et al. (2007) have devised a scale to measure the degree to which respondents believe

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that there is a genetic basis for suicide. These scales provide a more useful way of assessing lay theories of suicide than more general inventories measuring attitudes toward suicide.

The present study used the Lester and Bean (1992) scale to explore the way in which respondents weigh the different factors that are possibly implicated causing suicide (intrapsychic, in interpersonal and social). Using this scale, Walker, Lester and Joe (2006) found that African American students saw interpersonal problems as less important in causing suicide than did European American students. On other scales, the two groups did not differ in the stigma they felt toward attempted suicides, but they did differ in their responses to an inventory that measured beliefs about who "owns" one's life. African American students gave God more importance in this regard and one's self and the state less importance.

Voracek, Loibl and Lester (2007) gave a German translation of the scale to Austrian students and found that scores on all three subscales were positively associated with one another, indicating that the critical dimension is a belief that suicide has definite causes regardless of the type of cause. Voracek, et al. found that religiosity and political views were associated with these beliefs. For example, religiosity was positively associated with the belief in intrapsychic causes, while liberal political views were negatively associated with a belief in interpersonal causes.

In further studies of the scale, Loibl and Voracek (2007) found that the Lester and Bean scale

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had moderate internal consistency and the factor pattern matched the content of the scales. Scores on all three subscales were again positively associated, but were unrelated to sex, intelligence, knowledge about suicide, personality traits and social desirability. Endorsing intrapsychic causes for suicide was associated with an older age, religiosity, a conservative political orientation and belief in an internal locus of control. Loibl, Tran, Hirner and Voracek (2008) found moderate test-retest reliabilities for the scales, and they replicated the association of a belief in intrapsychic causes for suicide with belief in an internal locus of control.

Lay theories of suicide may vary greatly from culture to culture. Several studies have noted that culture affects how people perceive mental illness and how they respond to individuals with mental illness (Leff, 1988). In Asian cultures, mental illness is often hidden since it affects the family's reputation and status (Furnham & Murao, 1999). Furnham and Chan (2004) found that Chinese respondents in Hong Kong favored social explanations of schizophrenia as compared to British respondents.

The present study explored lay theories of suicide in two very different nations, the United States (a mainly Christian culture) and Turkey (a mainly Muslim culture) in order to explore whether the differences in nationality/ethnicity played a role in lay theories of suicide.

Method

Subjects

The samples were convenience samples chosen because of the affiliations of the authors. In Turkey, 330 undergraduate students were recruited from five universities: Middle East Technical University, Hacettepe University, Ankara University, Gazi University and Süleyman Demirel University. There were 163 females and 167 males with a mean age of 20.8 years (standard deviation =1.6). In the United States, 419 undergraduate students were recruited from two universities: The Richard Stockton College of New Jersey and the University of South Carolina. There were 316 females and 103 males with a mean age of 21.2 years (standard deviation = 4.0).

Questionnaire

The questionnaires, given anonymously and presented in Turkish for the Turkish students and in English for the American students, contained the following scales:

(1) A questionnaire devised by Lester and Bean (1992) to measure the extent to which respondents assign intrapsychic, interpersonal or societal causes to suicide. Each subscale has six items answered on Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). Scores on each subscale range from 6 to 36. Cronbach alphas for the Turkish sample were, respectively, 0.51, 0.50 and 0.51 and for the American sample 0.56, 0.41 and 0.55.

(2) A social distance scale devised by Lester (1988) to measure the stigma associated with dying people which was adapted to measure the stigma felt toward attempted suicides. This was based on conventional social distance scales (e.g., Kalish 1966) and consisted of 8 items asking such questions as, "Would you buy a house next to this person," answered Yes/No. Scores range from 0 to 8. Cronbach alpha for the Turkish sample was 0.75 and for the American sample 0.85.

In addition, a number of scales were given as possible correlates of attitudes toward suicide assessed by the two scales mentioned above.

(3) The Beck Hopelessness Scale (Beck, et al, 1974), a 20-item scale answered using a true/false format. This scale has excellent reliability and validity, and it has been used in hundreds of studies and consistently found to be a strong correlate of current suicidal ideation, recent suicide attempts and future suicidal actions both nonlethal and lethal (Reinecke & Franklin-Scott, 2005). Scores range from 0 to 20. Cronbach alpha for the Turkish sample was 0.85 and for the American sample 0.80.

(4) A manic-depressive experience scale (Thalbourne, et al., 1994), with 9 items to measure depression and 9 items to measure mania, answered using a true/false format. These two scales have shown good reliability and good validity (Lester, 2000). Scores on each subscale range from 0 to 9. The Cronbach alphas for the Turkish sample were 0.32 for mania and 0.55 for depression, and for the American sample 0.42 and 0.64, respectively

(5) The Reynolds (1987) Suicide Ideation Questionnaire, with 30 items answered on a sevenpoint scale ranging from 1 (I never had this thought) to 7 (almost every day). Scores range from 0 to 180. Cronbach alpha for the Turkish sample was 0.92 and for the American sample 0.95.

(6) A questionnaire devised by Ross and Kaplan (1993-1994) to measure whether the respondent believes that life belongs to the individual, to God or to the state. Each subscale has 7 items answered on a scale from 1 (disagree) to 5 (agree). Scores on each subscale range from 7 to 35. Cronbach alphas for the Turkish sample were, respectively, 0.57, 0.86 and 0.64 and for the American sample 0.77, 0.90 and 0.63.

(7) A questionnaire devised by Gorsuch and McPherson (1989) to measure the religiosity of respondents and distinguishing whether their religiosity was motivated by intrinsic motives (e.g., "It is important for me to spend time in private thought and prayer") or extrinsic motives (I go to church mostly to spend time with my friends"). The items are answered on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Scores on the 8-item intrinsic subscale range from 8 to 40 and on
 Table 1: Mean scores for the Turkish and American students.

	Turkish students N=330	American students N=419		
Variable	Mean (SD)	Mean (SD)	t	two-tailed p
Stigma for attempters	2.29 (2.14)	1.86 (1.83)	2.96	< .01
Causes of suicide:				
Intrapsychic	24.13 (4.84)	23.59 (4.26)	1.62	ns
Interpersonal	20.24 (4.63)	21.43 (3.66)	3.91	< .001
Societal	22.55 (4.38)	21.15 (3.97)	4.55	< .001

the 6-item extrinsic subscale from 6 to 30. Cronbach alphas for the Turkish sample for the intrinsic and extrinsic subscales were 0.79 and 0.66, respectively and for the American sample 0.84 and 0.79.

The Turkish translations of the scales were back-translated and checked for accuracy in conveying the meaning of the items. The study was approved by the institutional review boards.

Results

The Turkish and American respondents differed significantly in their attitudes toward suicide (see Table 1). The Turkish respondents displayed greater stigma toward an attempted suicide than the American respondents -2.3 versus 1.9 on a scale ranging from 0 to 8 (see Table 1).

With respect to the causes of suicide, Turkish and American respondents did not differ in the extent to which they saw intrapsychic factors as causes of suicide, but the Turkish respondents saw interpersonal factors as somewhat less important and societal factors as somewhat more important as causes of suicide than did the American respondents.

The Causes of Suicide

Interestingly, in both groups, scores for the three causes of suicide (intrapsychic, interpersonal and societal) were positively, but weakly, associated (see Table 2). For the Turkish respondents, the correlations were 0.37, 0.32 and 0.50 and for the American respondents 0.38, 0.40 and 0.47 (two-tailed p < .001).

For the Turkish respondents, the correlations between stigmatising attempted suicides and a belief that suicide was caused by intrapsychic and interpersonal factors were positive (rs = 0.23 and 0.17, respectively). Similarly, for the American respondents the correlations between stigmatising attempted suicides and a belief that suicide was caused by intrapsychic, interpersonal and societal causes were all positive (rs = 0.29, 0.25 and 0.12, respectively).

Correlates of Stigmatising Attempted Suicide

Kalish (1966) and Lester (1992-1993) found that the stigma reported toward attempted

suicides by American students on a social distance scale was greater than that reported toward ethnic and religious groups (such as African Americans and Jewish individuals). Neither of those studies sought to identify correlates of this stigma.

For the Turkish respondents, stigmatising attempted suicides was positively associated with hopelessness (r = 0.16, p < .01), suicidal ideation (r = 0.11, p < .05), intrinsic and extrinsic religiosity (rs = 0.25 and 0.33, p < .001), and a belief that one's life belongs to God and to the state (rs = 0.25 and 0.20, p < .001), and negatively with depression (r = -0.18, p < .01) and a belief that one's life belongs to oneself (r = -0.17, p < .01).

For the American respondents, stigmatising attempted suicides was not associated with intrinsic or extrinsic religiosity. The association with depression was negative (r = -0.16, p < .001), as were the associations between stigma and hopelessness and suicidal ideation (rs = -0.12 and -0.20, p < .05 and .001, respectively). Belief that one's life belongs to God was positively associated with stigma (r = 0.16, p < .001) and negatively with a belief that one's life belongs to oneself (r = -0.11, p < .05).

Correlates of Endorsement of Causal Factors

The patterns of associations between personality variables and beliefs about the causes of suicide showed some similarities. In both Turkish and American students, religiosity scores were positively associated with a belief in intrapsychic causes while depression scores were negatively associated with a belief in intrapsychic causes. Belief that one's life belongs to the state was positively associated in both samples with a belief in interpersonal and in societal causes, while a belief that one's life belongs to oneself was associated a belief in societal causes.

Discussion

This comparison of Turkish and American students revealed only slight differences in the beliefs about causal factors for suicide. Turkish students viewed societal factors as more important and interpersonal factors as less important than the American students. The Turkish students did stigmatise attempted suicides more than did the American students.



Table 2: Correlates of attitudes and beliefs about suicide

	Stigma	Intrapsychic causes	Interpersonal causes	Societal causes	
Turkish Students					
Age	-0.08	0.02	0.02	0.09	
Sex	0.08	0.13*	0.08	-0.11	
Hopelessness	0.16 **	-0.09	0.19***	0.05	
Suicidal ideation	0.11*	-0.08	0.08	-0.02	
Manic tendencies	-0.09	-0.08	-0.03	0.03	
Depressive tendencies	-0.18**	-0.17	0.08	0.12*	
Intrinsic religiosity	0.25 ***	0.30***	0.12*	0.01	
Extrinsic religiosity	0.33***	0.34 ***	0.25***	0.11	
Ownership of life:					
God	0.25 ***	0.38***	0.13*	0.01	
The individual	-0.17 **	-0.06	0.12*	0.19***	
The state	0.20***	0.16**	0.35 ***	0.24 ***	
Stigma	-	0.23***	0.17**	-0.02	
ntrapsychic causes	-	-	0.37 ***	0.32***	
nterpersonal causes	-	-	-	0.50***	
American Students					
Age	0.02	-0.05	-0.12	-0.14 **	
Sex	-0.04	-0.01	0.11*	0.01	
Hopelessness	-0.12*	-0.14 **	-0.05	0.03	
Suicidal ideation	-0.20 ***	-0.14**	-0.01	0.07	
Manic tendencies	-0.06	0.01	0.12*	0.14**	
Depressive tendencies	-0.16***	-0.10*	-0.01	0.09	
ntrinsic religiosity	0.06	0.14**	0.02	-0.08	
Extrinsic religiosity	0.08	0.21***	0.04	0.06	
Ownership of life:					
God	0.16 ***	0.28***	0.08	0.00	
The individual	-0.11*	-0.10	0.01	0.10*	
The state	-0.03	0.08	0.17 ***	0.17***	
Stigma	-	0.29***	0.15**	0.12	
ntrapsychic causes	-	-	0.38 ***	0.40***	
Interpersonal causes	-	-	-	0.47 ***	

* two-tailed p < .05; ** two-tailed p < .01; *** two-tailed p < .001

However, the two groups showed similar patterns of response to the measures. For both samples, belief in one cause for suicide was associated with belief in the other causes, and belief in the causes was associated with less stigma toward those who attempt suicide. In both samples, the more religious students showed less stigma toward attempted suicides, while the more depressed students showed more stigma. The results of this study suggest, therefore, that the similarities in views about suicide of Turkish and American students and their correlates outweigh the differences.

The fact that scores on all three subscales of the Lester and Bean scale were positively associated in both Turkish and American students indicates that the concerns of psychologists about the causation of suicide are largely irrelevant to lay people. Whereas psychologists debate the contributions of nature



(genes) and nurture (experiences), and the relative contribution of different kinds of experience, lay people seem to be concerned with whether suicide is understandable and predictable or not, a much more holistic concern. This result replicates the finding of Voracek, Loibl and Lester (2007) in a sample of Austrian students, and suggests that scales need to be devised that assess lay attitudes and theories about suicide that are more relevant to lay concerns.

The study does have some limitations. As is the case for much psychological research, the samples were composed of undergraduate students, and the beliefs and attitudes of this population may differ considerably from those of less educated respondents. The Cronbach reliabilities for some of the scales were rather low, especially the Lester and Bean questionnaire, the manic-depression scale, and the ownership of life scale. It would be preferable in future research to use more reliable scales. Third, the American sample had more women than men and, although sex did not correlate with most of the measures, future research should endeavor to obtain a more balanced sex distribution.

Although the students came from two countries that have different compositions by religion, the religious affiliation of the students was not asked. Although we can assume that the study compared Muslim and Christian students, the presentation of this study has been phrased in terms of comparing Turkish and American students. Future research should explore more carefully the role of religious affiliation on lay theories of suicide and psychiatric disorders and, in addition, take into account the particular sect within the major religion. For example, in Muslim cultures, Shi'ites and Sunnis may have different beliefs while, in Christian cultures, Catholics and Protestants (as well as the different sects within the Protestant group) may have different beliefs. However, this study is rare in comparing lay theories and attitudes toward suicide in two countries, thereby examining the generality of the associations, and it is hoped that the study stimulates further research in this interesting area.

Turkey and the United States differ in many social and cultural ways. For example, it may be that they differ along the dimension of individualism/collectivism. Future research might also focus on ways in which cultures differ and choose a sample of nations that differ on these dimensions in order to explore how these dimensions affect attitudes toward suicide and correlates among the attitudes.

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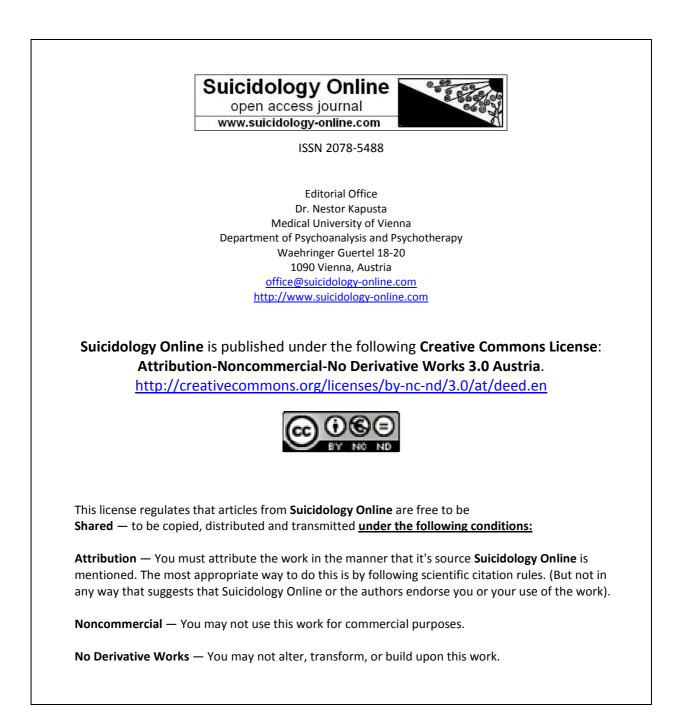
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Invited Essay

Qualitative Research in Suicidology: Thoughts on Hjelmeland and Knizek's "Why we Need Qualitative Research in Suicidology"

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Abstract: A recent article by Hjelemand and Knizek presented the case for qualitative research in suicidology. The present essay identifies and illustrates six dimensions in their discussion: explaining versus understanding, qualitative versus quantitative studies, case studies versus large samples, descriptive versus inferential statistics, idiographic versus nomothetic approaches and phenomenological versus interpretative approaches.

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Hjelmeland and Knizek (2010) made a convincing case for the importance of qualitative research in suicidology.¹ This essay will explore and elaborate some of the dimensions discussed in their article and provide some examples from the suicidology literature.

Explaining versus Understanding

Hjelmeland and Knizek drew attention to the distinction between explaining and understanding. They note that much research into suicidal behavior seeks to identify causes of the behavior in a simple linear cause-and-effect way.² Most of this research is quantitative. In contrast, efforts to *understand* suicidal behavior typically use qualitative methods and focus on the meaning of the behavior for the individual.

Butt (2004) also drew a distinction between understanding people and explaining their behavior. Hebb (1949) noted that we do not have to

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explain why people behave. As long as we are alive, we are always doing something. What we have to explain is the choice of behavior – why we do this rather that. Therefore, causal explanations do not have to explain what "kick-starts" our behavior (as Butt describes explanation). Some theorists see the causes of behavior (the determinants of our choices) as being in the mind, some in our genes and physiology, and others in the social forces that impinge upon us. The truth is usually a boring compromise of all of the alternatives, but theories tend to take extreme positions since that is the way to become noticed. Other approaches enable us to *understand* behavior. They provide a vocabulary to describe our inner experience, to explore the experience in greater depth and, occasionally, to provide tactics for changing the experience.

Can we ever explain suicidal behavior? I once humorously argued that the reason why we fail to prevent completed suicide is that the behavior is so rare (Lester, 1974)³. If it occurred much more frequently, then we would be more successful in predicting it and preventing it. The same is true for explaining suicide. Its rare occurrence makes it impossible to find any *necessary* or *sufficient* factor that causes it. This is why we have difficulty in answering the question, "Why do people kill themselves?" In contrast, a

¹ Their published article was a shortened version of an originally longer article.

² Occasional research is teleological, that is, seeking to identify the *purpose* of the suicidal behavior.

³ "...in order to prevent suicide more effectively, we must increase the suicide rate. Only then will we be able to reduce the rate!" (Lester, 1974, p. 27).



qualitative approach might enable us to understand why *this particular person* committed suicide.

Qualitative versus Quantitative Studies

Hjelmeland and Knizek use the bipolar construct of qualitative versus quantitative frequently, but this confounds two separate dimensions. A typical *quantitative* study appears in the same issue as the article by Hjelmeland and Knizek. Britton and Conner (2010) reported a logistic regression to predict which of 2,966 individuals would attempt suicide after treatment for substance abuse. They found that sex, age, race, suicidal ideation and daily cocaine use were significant predictors of subsequent suicidal behavior.

A representative qualitative study is that by Lester (2010) who examined the understanding that the diary, written over a lifetime, by an eccentric individual provides for his suicide. Lester noted that writing the diary gave the man, Arthur Inman, a purpose for his life and perhaps enabled him to survive the many crises he experienced. Although his suicide seems to have been precipitated by construction in his neighborhood that would have forced him to move. Lester argued that writing about his emotional and traumatic experiences had a beneficial impact on his physiological functioning and mental health, as Pennebaker (1997) has noted that such writing often does, and that the diary involved beneficial self-disclosure to his significant others (who read the diary regularly). There are no numbers, counts and descriptive or inferential statistics in Lester's article.

Case Studies versus Large Samples

These two examples illustrate а confounding element here: (1) qualitative versus quantitative studies and (2) case studies versus studies of large samples. Case studies can be quantitative. Although the study of the diary by Lester mentioned above did not use descriptive or inferential statistics, studies of a single individual can use statistics. For example, Barnes Lawal-Solarin and Lester (2007) studied the letters written by a young man to a friend for the two years prior to his suicide, put the letters through a computer program for linguistic analyses and reported correlations over time. Case studies can be quantitative.

Qualitative case studies are common, of course, in the clinical literature, for example, Sonneck and Etzerdorfer's (1996) account of a patient whose psychotherapy failed to prevent his suicide.

Descriptive versus Inferential Statistics

There is also a distinction that can be made between the use of descriptive and inferential statistics. In a study in progress (Kaus & Lester, 2009), one of the researchers read the diary of a suicide, devised content categories and counted these in the diary overall and for each month prior to the man's death. Kaus views her analysis as qualitative since she presents only descriptive statistics in the paper.

To give another example, after many years of conducting research into suicide, I realized that I had no idea why people kill themselves. I decided that, if I could understand why one person committed suicide, then I could continue to conduct and publish research even though the research did not help me understand why people committed suicide. I started with reading a biography of Marilyn Monroe, and I felt that I understood her life and death. Being obsessive, I continued reading until, by now, I have read perhaps one hundred biographies of suicides. After reading the first thirty, I noticed (and counted) that fifteen of them had experienced loss of a parent or parent surrogate, and that fourteen of these fifteen loses occurred during latency. I published this finding (Lester, 1989). The statistical presentation was purely descriptive. Hielmeland and Knizek noted that qualitative studies are often used to generate hypotheses that are then tested in quantitative research, and this perhaps is true of my study.

Idiographic versus Nomothetic Approaches (Generality versus Uniqueness)

Windelband (1904) distinguished between idiographic and nomothetic approaches. The nomothetic approach deals with statistics and generalizations, while the idiographic approach involves the intense study in individuals as unique individuals, an approach advocated by Allport (1962) and which he illustrated in his book on the letters written by a young woman (Allport, 1965). This bipolarity clearly overlaps with those discussed above.

Phenomenological versus Interpretative Approaches

Hjelmeland and Knizek also discuss the distinction between phenomenological versus interpretative approaches. Although couched in jargon, George Kelly's (1955) theory of personality permits a phenomenological description of people's cognitive processing. Similarly, Laing's (1969) descriptions of his schizophrenic patients are phenomenological. In contrast, psychoanalytic theory is replete with interpretation. Hjelmeland



and Knizek cite their own work on suicidal behavior as a communication as an example of an interpretive approach.

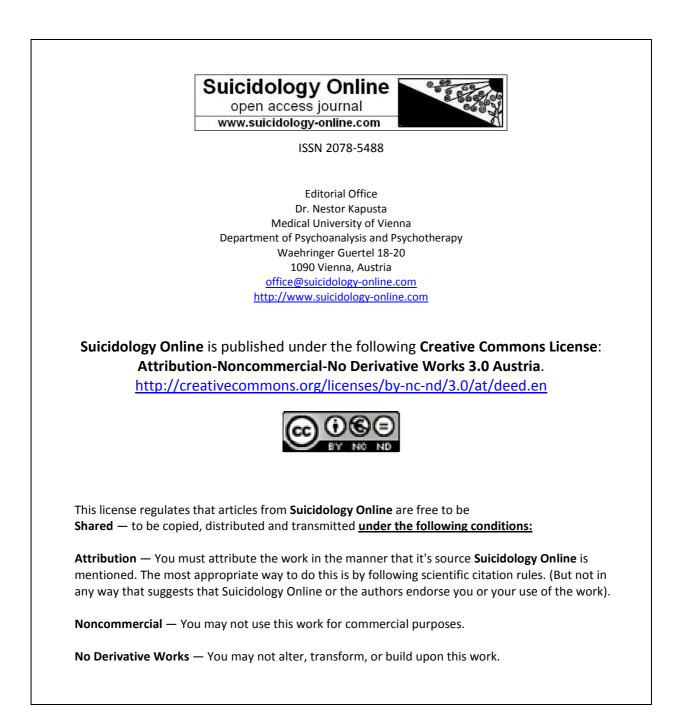
Conclusion

Hjelmeland and Knizek's article on qualitative approaches to the study of suicide is provocative, and the present essay has attempted to tease out the many bipolar constructs touched on in their article. Many of these constructs are related in a one-to-one manner, but others, although associated, permit "crosstabbing" into four, eight and maybe more categories of research approaches in suicidology.

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Letter to the Editors Is There an Economic Argument for Suicide Prevention? A Response to Doessel and Williams

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Abstract: A recent article in Suicidology Online by Doessel and Williams presented an economic argument for a policy of suicide prevention. This response raises several issues that Doessel and Williams fail to address: (1) the fact that suicides may result in economic savings for the society, (2) the finite resources of governments so that governments have to decide in which issues to become involved, (3) the fact that most government policies product benefits for some members of the society and costs for others, and (4) the role of governments versus charities, NGOs and Quangos.

Key words: Suicide, economy, government, NGO

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Doessel and Williams (2010) proposed an economic argument for a policy of suicide prevention. This critique will briefly summarize their argument and then offer criticisms of the reasoning.¹

The Argument of Doessel andWiliams

Doessel and Williams used normative (welfare) economic theory to provide a wellresearched framework for their argument. Normative economics is concerned with policy evaluations and recommendations. It explores alternative ways of arriving at conclusions such as that one social state is to be preferred over another social state (Pearce, 1989).

In their "conceptual paper," Doessel and Williams define the social welfare function as depending upon the utility level of the individuals in the society and the impacts stemming from the concerns of both economic efficiency and income distribution. They expand these impacts from the conventional "measure of the distribution of utility (or welfare) between the members of the community" to include the impact from the time horizon as indicated in their equation (3c) on page 72.

Without specifying the behavioral equations involved in the neoclassical constrained maximization framework and without considering the "scarcity" constraint faced by the public sector (Dreze & Stern, 1994), the authors conclude that suicide prevention results in an increase of social welfare because prolonging life itself improves the welfare of individuals and thereby the social welfare

The present critique consists of two parts. One addresses the issue of using the prolongation of life as the basis for defending suicide prevention,

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¹ Doessel and Williams began their argument with a digression on what stimulated their thinking – a conservation, Gaia-based critic at a talk they gave. Their discussion of this is not relevant to their economic argument and so is not addressed in this critique.

while the other presents additional issues that Doessel and Williams fail to address.²

Measuring the Impact of Suicide

Preventing suicides does result in the prolongation of life for the would-be suicides. However, this is not the end of the story for the social cost of preventing suicide should also include the resources devoted to maintaining the remainder of the lives for the individuals who are saved by the suicide prevention program. As Yang and Lester (2007) pointed out, suicide does not incur an economic loss (or cost) to the society but rather provides an economic savings for the society.³ If this is the case, the extra years of life created by preventing people from committing suicide decrease the social welfare of the society.

According to Yang and Lester (2007), the majority of suicides are depressed and suffering from affective disorders. The direct costs of treating these individuals, had they not committed suicide, include the cost of treatment (physicians visits, hospitalization, medications and travel costs when seeking care). The indirect costs accrue from the loss of productivity (and income) of those who have a major depression. It is important to note here that other scholars who have estimated this loss of income assume that suicidal individual individuals are productive members of society. In reality, they are often marginal members of the society, and the loss of income is not as great as other scholars assume. The deaths of depressed individuals suffering from depression eliminates the need for treatment of these individuals in later years. Yang and Lester estimated that the total savings from not having to treat the psychiatric disorders of those who complete suicide was about \$8.11 billion.² Yang and Lester also estimated the savings from the reduced pension payments (from both private sources and social security) and nursing home care costs as \$12.99 billion. The savings from assisted suicide was estimated to be \$0.80 billion.

In contrast, the economic costs of suicide, which include direct costs (medical care and medico-legal expenses) and indirect costs (foregone lifetime earnings) were estimated at \$16.83 billion. Subtracting these costs from the savings produced a net savings of \$5.07 billion.

Yang and Lester did not include the huge medical care costs involved in treating the 30,000 or so individuals who commit suicide each year, if they were prevented, as they aged and developed medical problems, including cancer and coronary and heart disease, although Stack (2007) noted that their medical illnesses might provide additional employment opportunities for doctors and nurses.

To summarize. Doessel and Williams are correct that suicide removes years of life from the members of the society. What they failed to note is that suicide may incur savings for the society.

The Choice between Alternatives

There is another aspect that the argument of Doessel and Williams make for prolonging life fails to acknowledge. If the longevity of people's lives is the goal that governments should pursue, as Doessel and Williams assume, there are other programs that governments can initiate to save even more lives than those lost from suicide. In the United States in 2005, there were 2,448,017 deaths (www.who.int). Of these, malignant neoplasms caused 559,312 (including 41,491 from breast cancer alone). Deaths from motor vehicle traffic accidents caused 43,721 deaths, but suicide only 32,559 deaths. There may be more pressing public health problems than suicide, and this might be even more starkly illustrated in under-developed nations where malaria and dysentery inflict a tremendous toll on lives.

In other words, any policy evaluation has to take into account the social opportunity cost involved since governments are confronted with finite and limited funds and resources at their disposal. Unfortunately, Doessel and Williams make no mention of this important component of welfare economics.

The second part of this critique concerns issues other than the prolongation of life: (1) the importance of psychache, (2) who loses as a result of suicide prevention and (3) the role of private organizations.

Psychache or the Quality of Life

Many years ago, Shneidman (1996) introduced the term *psychache* to label the mental pain and anguish experienced by suicidal individuals. The purpose of suicide is often (and maybe primarily) to end or escape from this pain. Since pain is a psychological concept, it is rarely addressed by economists since it is difficult to allocate a monetary amount to pain.⁵ Economists prefer to use the concept of *utility*, to which it is usually possible to assign a monetary amount. Doessel and Williams defined the social welfare as

² There are some technical problems with the formal economic analysis present by Doessel and Williams, including a failure to use a constrained maximization procedure, limiting the initial model to only two products, and an odd way of introducing time into the model which differs from the typical way (see Stiglitz, 1994). However, these problems are not central to the argument and so not addressed in the present critique.

³ Yang and Lester concluded that suicide prevention programs should be enacted on humanitarian grounds rather than on economic considerations.

⁴ All dollar amounts are in 2005 dollars.

⁵ In formulating an economic model of suicide, Yeh and Lester (1987; see also Lester & Yang, 1997; Yang & Lester, 2006) suggested that a possible measure of the level of stress in an individual was the cost of the psychological and psychiatric services required to eliminate it. In the present case, the monetary cost of psychache could be measured using the total cost of medication and psychotherapy required to eliminate the psychache.

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a function of the individual utilities of the members of the society. Conceptually, psychache can be treated as "negative" utility and thus accounted for.

How much psychological pain is there in a society? The 30,000 suicides in the United States each year tell us that there is a great of psychache, but the 350 million American who do not commit suicide each year are also enduring a great deal of psychache. If we could monetarize psychache, what would the social welfare function for suicide look like? We would add (for the sake of argument) all those years of life gained, some of which would be marginally productive, as Doessel and Williams pointed out, but we would also have to subtract all the psychache that persisted for those individuals whose suicides were prevented by the suicide prevention program. As a result, the inclusion of psychache might strengthen the argument that suicide results in savings for the society.

Who Loses as a Result of Suicide Prevention?

Doessel and Williams are content to answer the question of whether there is an economic rational for having a government policy of suicide prevention without exploring the issue they themselves raise of who benefits and who incurs costs directly from a policy.

There are two main techniques for suicide prevention: passive and active. As an example of a passive techniques, communities (or nations) can set up telephone crisis hotlines. The crisis counselors then sit and wait for distressed individuals to call. In more active techniques, mental professionals could identify individuals at risk for suicide and institutionalize them, perhaps on occasions against their will. Another example of an active technique is to restrict or remove lethal methods for suicide, such as fencing in bridges from which people jump or detoxifying domestic gas.⁶

Let us consider gun control. Doessel and Williams noted that most policy changes involve benefits for some members of the society and costs for others, such as the repeal of the Corn Laws in England in 1846 which penalized producers and benefited consumers. Let us consider, as an example, a suicide prevention policy that, not merely restricted access to guns in a society (or a policy that bought back guns from those willing to hand them in), but actively confiscated the guns that the members of the society possessed and prevented all purchases of new guns.⁷ This would undoubtedly reduce the use of guns for suicide and murder, eliminate accidental deaths from guns and, in addition, eliminate all non-fatal injuries from guns whether suicidal, accidental or homicidal. In the United States, this would cause tremendous distress to those who own guns for self-defense. At the very least, the government would be voted out of office. At the worst, there would a massive civil uprising with tremendous costs. At one point in Europe, a proposal was made to put emetics in tablets of paracetamol (acetominophen) so that people who tried to overdose using the tablets would vomit. However, this would have harmed those who use paracetamol legitimately to relieve pain, and the proposal was not implemented (Lester, 2009).

The Role of Private Organizations

Another issue which merits attention is the role of private organizations such as private charities, NGOs (non-government organizations) and Quangos (quasi-NGOs). Although some nations are now formulating policies regarding suicide prevention, the majority of efforts in the past have been led by NGOs, such as the Befrienders (also known as the Samaritans), the American Association of Suicidology, the American Foundation for Suicide Prevention and Span-USA. In many areas of government (such as education), there is a move in many nations to decentralize control and give local community groups more control over policies. In these cases, the government policy is to hand the control of policy to non-government groups!

Conclusions

Doessel and Williams make several errors in their paper. They argue that there is a legitimate rationale for governments to have a suicide prevention policy rather than taking a *laissez-faire* attitude, primarily because suicides incur costs to the society (years of life lost). However, they ignore the fact that suicides probably result in savings to the society. Doessel and Williams did not fully account for the total social cost of sustaining the would-be suicides, who now continue to live, with psychiatric and medical treatments and with pension, nursing home and other costs.

They also ignore the problem that, given the finite resources of a government, decisions must be made about what issues the government can or should get involved in. Moreover, they overlook the psychache suffered by the would-be suicides who now continue to live. Furthermore, they do not discuss the fact that they themselves raise, namely that most (if not all) government policies incur costs to some members of the society in addition to benefits for others. Finally, private organizations and charities can plan and run suicide prevention programs just as they do in many other areas such as education.

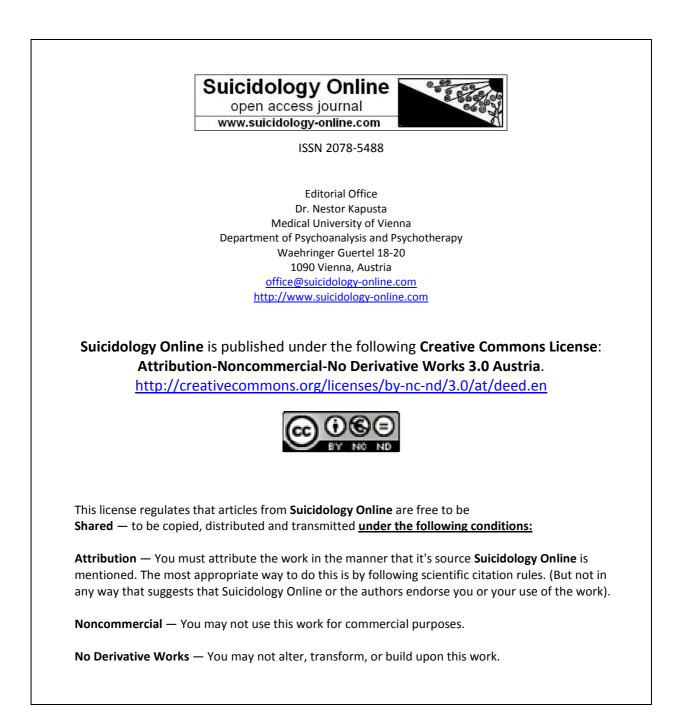
⁶ It is interesting to note that most of these measures were not done to prevent suicide. Domestic gas was detoxified when natural gas became available and cheap; subway platforms were fenced in to cut the cost of air conditioning subway systems. ⁷ A recent buy-back program in Australia is reported to have halved the number of households possessing guns. The 1997 buy-back program collected 650,000 firearms ("Howards' gun buyback slashed firearm suicides." Australian Broadcasting Coorporation: <u>www.abc.net.au</u>, August 30, 2010).



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Original Research Reasons for Committing Suicide in South Korean University Students

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Abstract: A study of 249 South Korean university students found that estimates of the likelihood that they might commit suicide in response to stressful life events was predicted by age, sex and attitudes toward life and death. Attitudes toward the body, attachment to their traditional culture and attachment style played a limited or nonsignificant role.

Keywords: suicide, reasons, South Korea, students

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Youth suicide is a growing problem around the world. According to the World Health Organization (http://www.who.int) suicide in youths (those aged 15-24) is a leading cause of death in South Korea. In 2006, the suicide rates for those aged 15-24 were 9.7 and 8.8 per 100,000 per year for men and women, respectively, in South Korea but, by 2009, these rates had risen to 16.1 and 14.9, respectively (http://www.kostat.go.kr, Accessed February 10, 2011). Youth suicide rates have, therefore, increased dramatically in recent years, and the increasing number of youth suicides challenges society both in terms of understanding the cause and developing strategies for responding to this serious public health problem.

Agnew (1998) used data from the General Social Surveys in the United States to test a socialpsychological model for the approval of suicide. He found that the strongest predictors of the approval of suicide were education, political liberalism and religion, measures that Agnew thought assessed social learning and social control factors. The experience of stressful life events played only a minimal role in predicting approval of suicide. In contrast to data from the General Social Surveys, the

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present study explored the role of psychological variables in predicting approval of suicide.

Durkheim's (1897) theoretical model proposed that integration with others is a preventive factor for suicide, and this has been widely supported by research findings. Those who die by suicide experience a weakened sense of belonging and a tendency to withdraw from others prior to their deaths. Most of these studies have focused exclusively on connectivity to contemporary groups or persons. Very little research has been conducted on the association of suicidality and ties to cultural traditions. Although individuals are affected by existing social relationships, bonds to one's own lineage and cultural legacy may also be important in protecting people from acting on suicidal impulses. The degree to which people adapt to the new culture (enculturation) may also play a role in suicidal behavior (Walker, Wingate, Obasi & Joiner, 2008).

Orbach, et al. (1991, 2006) explored two sets of attitudes for their association with suicidal behavior. Suicide involves a physical attack on the body, and Orbach, et al. (2006) argued that making such an attack might depend on the individual's attitudes and feelings toward the body. Suicidal individuals should have more negative feelings and attitudes toward their body, and having such negative feelings and attitudes might facilitate suicidal actions. They found that Israeli adolescents who had attempted suicide had more negative attitudes toward

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their body than did nonsuicidal adolescents. Lamis, et al. (2010) found that suicidal proneness was related to body attitudes in a sample of American university students.

Orbach, et al. (1991) argued that engaging in suicidal behavior might depend upon the individual's attitudes toward life and death. Rather than relying on simple measures of the fear of death, they devised a multi-attitude scale which distinguished between attraction to and repulsion from both life and death, giving them four subscales. They found that scores on these four subscales distinguished between three groups of adolescents: high school students, adolescents who had made a suicide attempt or who had suicidal ideation, and adolescent psychiatric patients who were not suicidal.

Attachment style has also been found to be associatioed with suicidality in adolescents and young adults. For example, Zeyrek, et al. (2009) found that suicidal risk was associated with unhealthy attachment styles (preoccupied and fearful versus secure) in a sample of Turkish undergraduate students.

The present study, therefore, explored the association of approval of suicide (for oneself and for others) with attachment to cultural traditions, attitudes toward life and death, attitudes toward the body and attachment style in a large sample of Korean undergraduate students.

Method

Subjects

The subjects were 249 students at a university in South Korea. There were 182 females, 66 males and one unknown; 79 (32%) were Protestant, 30 (12%) Buddhist, 20 (8%) Catholic and 114 (47%) with no religion; 78% said that they were middle class. Their mean age was 21.8 yr. (SD = 1.9), with a range of 18-29.

Questionnaire

The students completed a questionnaire containing the following scales.

(1) The Multi-Attitude Suicide Tendency Scale (Orbach, et al., 1991) is a 30-item scale answered on a 5-point Likert-scale from 1 strongly disagree to 5 strongly agree, which measures attraction and repulsion by life and death. Scores on the scale differentiate suicidal from nonsuicidal groups and suicidal ideators from attempted suicides. It has four subscales: attraction to life (e.g., "I enjoy many things in life"), attraction to death (e.g., Death can be a state of rest and calm"), repulsion by life (e.g., "No one really loves me") and repulsion by death (e.g., "Death frightens me more than anything else").

Table 1. The reasons for committing suicide.

	Sui	cide:
	Self	Others
Become severely disabled	3.10	3.45
Incurable disease	3.05	3.23
Responsible for someone's death	2.79	2.95
Old and crippled	2.75	3.02
Loved one died	2.67	2.91
Suffer severe chronic pain	2.61	2.74
Admitted to a mental hospital	2.44	2.67
Become very poor	2.29	2.55
Family disputes	2.24	2.35
Family in heavy debt	2.21	2.48
Parents have to arrange a dowry	2.17	2.30
Cannot have children	2.15	2.33
Having a disabled child	2.15	2.38
Have no freedom in marital choice	2.03	2.18
Could not find a life companion	2.02	2.19
Left alone by partner	1.99	2.13
Do not achieve academic qualifications	1.97	2.05
Become unemployed	1.95	2.13

Respondents were asked under what circumstances would they (or people in general) would commit suicide. A high score indicates a higher likelihood. The possible responses ranged from 5 (definitely yes) to 1 (definitely no). The reasons have been rearranged in order of likelihood for oneself committing suicide.

(2) A scale to measure how connected to their culture the respondents felt. This scale was devised for the present study and consisted of 14 items answered on 5-point Likert-scale from 1 strongly disagree to 5 strongly agree. Typical items were "I feel I have a close affinity with my ancestors" and "I participate actively in ancestral rites or religious services held in remembrance of my ancestors."

(3) Adult attachment was measured using a scale devised by Brennan, Clark and Shaver (1998) which has two 18-item subscales assessing avoidance (e.g., "I get uncomfortable when a romantic partner wants to be very close") and anxiety (e.g., "I worry about being abandoned"), answered on a 7-point Likert-type from 1 (disagree strongly) to 7 (agree strongly).

(4) The Body Investment Scale (Orbach & Mikulincer, 1998) has 24 items scored on 5-point Likert-scale from 1 strongly disagree to 5 strongly agree. The scale measures bodily love versus bodily rejection, and research (reviewed above) has found that bodily rejection was positively associated with suicidal tendencies. The scale has four subscales: body image (e.g., "I am satisfied with my appearance"), body touch (e.g., "I don't like it when people touch me" - reversed), body care (e.g., "I am not afraid to engage in dangerous activities" - reversed).



Table 2: Correlational and regression analysis

_	Mean score	SD	Cronbach alpha	Corre	alations	_	Multiple re (beta coe	
				sui	cide:		suic	ide:
				others	self		others	self
Age				0.13 *	0.15	*	0.20 **	a 0.25 *** a
Sex				-0.16 *	-0.17	**	-0.13 ^a	-0.24 ** ^a
Body Investment Scale:								
Image	20.3	4.1	0.79	-0.23 **	** -0.26	***	-0.06	-0.12
Touch	19.6	3.7	0.68	-0.14 *	-0.09		0.01	0.02
Care	22.5	2.6	0.41	-0.08	0.01		0.03	0.08
Protection	22.2	3.0	0.40	-0.07	-0.03		-0.10	-0.05
Attitudes to life and death:								
Attraction to life	26.7	3.6	0.77	-0.23 **	** -0.31	***	-0.22 **	-0.29 *** ^a
Repulsion by life	16.4	4.0	0.74	0.16 *	0.15	*	-0.08	-0.06
Attraction to death	17.9	4.5	0.69	0.14 *	0.14	*	0.02	-0.01
Repulsion by death	21.3	7.8	0.92	0.16	0.25	***	0.06	0.17 * ^a
Enculturation:	42.4	5.4	0.64	-0.11	-0.11		0.09	0.07
Adult attachment:								
Anxiety	69.9	17.1	0.89	0.25 **	** 0.15	*	0.20 *	^a 0.03
Avoidance	59.6	14.2	0.85	0.11	0.06		0.03	-0.07
R							0.43	0.49
Kerkhof & Nathawat Scale:								
Others	46.1	13.3	0.93					
Self	42.2	14.5	0.94					

* two-tailed p < .05; ** two-tailed p < .01; *** two-tailed p < .001; ^a significant in a backward multiple regression.

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Table 3: The correlation matrix for all variables.

	Age Sex		AL	RL	AD	RD	Attachement	Attachement style		Body investment			
							to culture	Anxiety	Avoidance	image	touch	care	protect
Age	-	-	-	-	-	-	-	-	-	-		-	
Sex (male=1; female=0)	.73 *	-	-	-	-	-	-	-	-	-		-	
Attitudes to life and death													
Attraction to life AL	02	.08	-	-	-	-	-	-	-	-		-	
Repulsion by life RL	.02	05	43 *	-	-	-	-	-	-	-		-	
Attract to death AD	07	19	21 *	.46 *	-	-	-	-	-	-		-	
Repuls by death RD	.08	02	18 *	.37 *	.24 *	-	-	-	-	-		-	
Attachment to traditional culture	.02	.04	.34* *	27 *	18 *	07	-	-	-	-		-	
Adult attachment:													
Anxiety	04	16 *	27 *	.43 *	.19 *	.22 *	18 *	-	-	-		-	
Avoidance	.10	08	30 *	.37 *	.15 *	.13 *	10	.11	-	-		-	
Body Investment Scale:													
Image	.08	.20 *	.42 *	37 *	19 *	18 *	.24 *	36 '	· .19 '	- *	-	-	
Touch	09	.04	.28 *	29 *	14 *	18 *	.10	07	46 '	· .21 *	-	-	
Care	.02	.06	.22 *	10	03	.08	.14 *	15 '	20 '	[•] .11	.24 *	-	
Protection	02	02	01	17 *	14 *	04	.03	.03	19 '	· .19 *	.11	.19 '	
Kerkhof & Nathawat Scale:													
Self	.15 *	17 *	31 *	.15 *	.14 *	.25 *	11	.15 '	.06	26 *	09	.01	03
Others	.13 *	16	23 *	.16 *	.14 *	.16 *	11	.25 *	.11	23	14 *	08	07

* two-tailed p < .05 or better

(5) 18 circumstances in which people might commit suicide and the same 18 circumstances for why the respondent might commit suicide, answered on a 5-point Likert scale ranging from 5 definitely yes to 1 definitely no. These circumstances were taken from the suicide attitude scale devised by Kerkhof and Nathawat (1989) for a study of the reasons for committing suicide in India and the Netherlands. The responses of the students are shown in Table 1 where it can be seen that an incurable disease and being severely disabled were rated as the most likely reasons for committing suicide, both for oneself and for others. Suicide proneness was measured by the summing the scores for all 18 items. For the present sample, scores on the reasons why oneself might commit suicide were strongly associated with scores on the reason why others might commit suicide (Pearson r = 0.76, two-tailed p < .001).

Mean scores (and standard deviations) of the scale scores for the present sample, together with Cronbach alpha coefficients, measuring the inter-item reliability of the scales, are shown in Table 2.

Results

Correlations between suicide proneness (the circumstances under which they themselves or others might commit suicide) and other variables were similar whether the person was the self or others. Suicide proneness (in which the higher the score, the more suicide prone the respondent is) was associated with age and sex (Table 2). Older respondents obtained a higher score for suicide proneness (Pearson r = 0.15, two-tailed p < .05), indicating a stronger endorsement for the reasons for committing suicide. Men were less suicide prone (r = -0.17, p < .01).

Suicide proneness was most consistently associated with attitudes toward life and death (see Table 2). Suicide proneness was negatively associated with attraction to life (r = -0.31, p < .001) and positively associated with repulsion by life and attraction to death (rs = 0.15 and 0.14, respectively, p < .05). Surprisingly, suicide proneness was also positively associated with repulsion by death (r = 0.25, p < .001).

Attachment to one's culture was not associated with suicide proneness (r = -0.11), and only anxiety (and not avoidance) of social relationships was associated with endorsement of the reasons for committing suicide (r = 0.15). Of the body attitudes, only body image (but not body care, body protection or touch/comfort) was associated with suicide proneness (r = -0.26, p < .001) indicating that suicide proneness was associated with a more negative body image.

The results of multiple and backward regression analyses are also shown in Table 2. Attraction to life scores predicted suicide proneness

for both the self and others in the full and backward regressions, along with age and sex.

Because sex was significantly associated with some of the variables, the results were examined separately for the women and the men. The results were similar for both sexes, with age, attraction to life and repulsion by death being the strongest correlates of suicide proneness for both sexes.

Discussion

The present study of university students in South Korea found that age, sex and attitudes toward life and death were the strongest and most consistent correlates and predictors of estimates of the likelihood of oneself and of others committing suicide. Attitudes toward the body, connection to their traditional culture, and attachment style played a limited or nonexistent role.

The suicidality of the respondents in the sample was not assessed directly. They were asked to think hypothetically about the possibility of committing suicide and it is, therefore, reasonable that their general attitudes toward life and death play a role in their thinking. It would be of interest in future research to see whether the correlates and predictors of suicidal ideation and suicidal acts (attempted suicide) were similar to those found in the present study, or whether, attitudes toward the body, attachment to their traditional culture and attachment style might play a stronger role in predicting suicidal behavior (as opposed to attitudes toward suicide).

The role of age and sex was strong in the present study, with older students and female students rating themselves and others as more likely to commit suicide under stressful life events. The sex difference was unexpected since men have a lightly higher suicide rate than women in South Korea. However, this was a study of attitudes toward suicide, and so the sex difference may resemble the sex difference in non-fatal suicidal behavior, which is more common in women than in men. The age range of the students was limited (only 18 to 29), but the results suggest that the older students do find life experiences more stressful and so, hypothetically, view suicide in reaction to stressful life events as a little more likely. Further research on the role of stress and suicidality in Korean university students throughout their college years would be of great interest.

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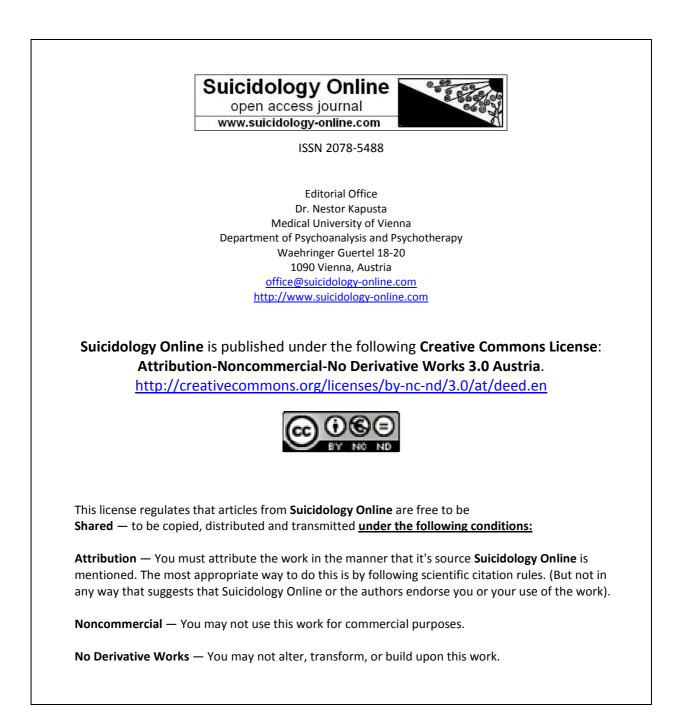


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Essay Female Suicide Bombers: Clues from Journalists

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Abstract: Journalist reports, mainly from the *New York Times*, are used to identify the motives behind female suicide bombers: post-traumatic stress, feelings of burdensomeness, feeling of hopeless and despair, and a desire to transform their image in their families and communities.

Keywords: female suicide bombers, motives, media, journalists

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Friedman (2008) noted that American news media has paid a great deal of attention to female suicide bombers in recent years. Friedman examined a sample of reports from 2002 to 2004 to see how these women were portrayed and found five typical motives: (1) strategic desirability, (2) the influence of men, (3) revenge, (4) desperation, and (5) liberation. Friedman was also interested in how the news reports reinforced or challenged popular beliefs about women and war.

The orientation of Friedman's study was the behavior of the news media and journalists and how their biases influence public opinion. In contrast, the present paper explores what we can learn about female suicide bombers from the reports of journalists. Since suicide bombers, unless captured on the way to their goal, are deceased, they are unavailable for study. As a result, the use of opensource information, such as reports in the media, becomes of great importance (Lee, David & Noji, 2007).

In the case of female suicide bombers, the relative scarcity of female cases makes understanding their motives even more difficult. Psychologists

Distinguished Professor of Psychology The Richard Stockton College of New Jersey Pomona, NJ 08240-0195 USA Tel: +1 609-652-4254 Email: David.Lester@stockton.edu rarely have the opportunity to interview female suicide bombers, and so the reports from journalists may provide important clues to the psychodynamics of these women. The present paper is based on reports about female suicide bombers downloaded from The New York Times using www.lexisnexis.com and the search term "female suicide bomber" (accessed May 13, 2010). Seventy-six articles were listed and downloaded. These articles were read for information pertaining to the past history and motivations of the females. The majority of articles simply noted that the suicide bomber was female, but a few included details of her life. All of those with relevant information are cited in the case descriptions that follow.

RUSSIAN BLACK WIDOWS

Dzhanet Abdullayeva

Dzhanet Abdullayeva, a 17 ear-old woman from Dagestan, a predominantly Muslim region of southern Russia, grew up without a father and was raised by her single mother who traded goods at a local market (Levy & Barry, 2010). Teachers remember Dzhanet as a promising student who recited poetry in local competitions. The family moved to larger city after a few years, and Dzhanet met Umalat Magomedov, a 30 year-old militant leader, through the Internet. One source felt that the fatherless Dzhanet had been attracted to a strong (albeit brutal) man who gave her a sense of support. The Russian forces killed Magomedov in a firefight on December 31, 2009, after which Dzhanet made the decision to

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become a suicide bomber. She traveled to Moscow with another female suicide bomber, accompanied by a man. They assembled the bombs in an apartment there, and Dzhanet blew herself up in a subway train. A passenger in the train noted that Dzhanet was not wearing a scarf. "Her eyes were very open, like on drugs, and she rarely blinked, and it was scary... I thought that she might be just mentally ill."

Maryam Sharipova

The second woman mentioned above was Maryam Sharipova, a 28 year-old teacher married to an extremist leader (Levy, 2010). She had a degree in psychology and worked as a school teacher. She was devout and loved at home, but she had secretly married an insurgent leader, Magomedali Vagabov. When her father asked her if this was true, she denied it.

Satsita Dzhbirkhanova, Amanat Nagayeva and Roza Nagayeva

Satsita (aged 40) and Amanat (aged 26) boarded airplanes and detonated bombs that brought down the planes, while Roza (aged 24) blew herself up outside a Moscow subway (Myers, 2004). All three were divorced, and their husbands had divorced them because they could not bear children, which is a stigma in Chechnya. Amanat and Roza had a brother severely beaten by Russian forces and then arrested three years earlier. He has not been heard from since. The three women lived lives "mired in squalor and devastation." They lived with three other women in a two-bedroom apartment in Grozny, with plastic film for windows and matting and blankets on the floor for beds. They worked in a central market selling clothes and other goods they obtained from Azerbaijan.

Zulikhan Yelikhadzhiyeva

Zulikhan Yelikhadzhiyeva had studied at a village medical vocational school in Chechnya and interned at the local clinic (Myers, 2003). At the age of 20, she went to Moscow with another woman, and they both blew themselves up at the entrance to a music festival. Zulikhan had no deceased father, husband, brother or son. Five months earlier she had disappeared, and her grandmother said that she had been kidnapped on the orders of her half-brother.

Zulikhan lived with her father, mother and a younger sister and young brother. Her father had a disability pension and had a 21 year-old son from an earlier marriage that ended in divorce. This son was estranged from his father and involved in radical Islam. In November of the previous year, Russian forces had destroyed many houses in the village and arrested some men. Zulikhan's father was arrested and beaten, after which he fled the village with his wife and youngest son, going to a refugee camp in Ingushetia. Bullough¹ (2010) mentioned two women who blew themselves up at a rock concert. He noted that one of these women had been married to a rebel and had become pregnant. The group leader forced her to have an abortion, and then her husband had been killed in a battle. Left with no child or husband, she decided to kill herself. The other woman had been sent by her husband since the husbands of female suicide bombers earn great praise from their peers. It is not clear which of these descriptions is of Zulikhan.

Zarema Muzhikhoyeva

One potential bomber, who lost the will to die and surrendered, deliberately botched her attempt to blow herself up at a café in Moscow in July, 2003 (Myers, 2003, 2004). Zarema Muzhikhoyeva (aged 22) said that she had been recruited to terrorism out of shame and debt. Her husband had been murdered in a business dispute in one account and in a car accident in another account. She may have had an infant daughter. On the day of the bombing, she was given orange juice that made her dizzy and disoriented. The information given in article in the New York Times is limited, and this can be illustrated by this case. Bullough (2010) has written a book about the Caucasus region in Russia (see footnote 1), and he profiles one female suicide bomber - Zarema Muzhikhoveva.

According to Bullough, Zarema was 23 when she was sent to Moscow to blow herself up. Her mother abandoned her when she was ten months old, and her father died while working as a laborer in Siberia, seven years later. She lived with her father's parents. She had a loveless childhood, followed by a loveless marriage (in 1999). The man who kidnapped her from her home, the tradition in Chechnya, was twenty years older then she was. She quickly became pregnant, but two months later her husband was shot, leaving her in his family's home whom she hardly knew. Burdened with this daughter-in-law, her inlaws gave her daughter to one of their other sons, and sent Zarema back to her grandparents, again a common practice in Chechnya.

Zarema visited her daughter from time to time, bringing toys and clothes, but her daughter called her adopted parents "Mommy" and "Daddy," and this broke her heart. She stole some jewelry from her grandmother, and sold it with the plan of buying plane tickets and kidnapping her daughter. She made it to the airport, but she had left a note for her grandmother telling her about the plan, and her aunts stopped her at the airport. She was taken home, and her daughter was sent back to her adoptive parents.

Zarema was beaten by her grandparents, both for the theft and for bringing disgrace to the family. Her aunts told her that they wished she was dead. Eventually they refused even to acknowledge her. Her

¹ Bullough is not a journalist for the *New York Times*, but a Russian-based journalist working for Reuters who has written a book about the Caucasus.

life felt completely worthless. She then volunteered to become a suicide bomber, thinking that to do so would obtain \$1000 for her relatives, a way of paying back the debt from the theft. She was sent on one mission, but her nerve failed her. She lied about the reasons for her failure, but she felt more disgrace. Then she was sent on the mission to Moscow.

ISRAEL

Hanadi Jaradat

Hanadi, a 27 year-old apprentice lawyer, detonated a bomb in Haifa, killing herself and 19 others (Burns, 2003a, 2003b; Burns & Myre, 2003). She was from the town of Jenin in the West Bank. Her father, aged 50, had a degenerative liver disease. She had seven brothers and sisters. On the day she left her parents, she seemed happy. Four months earlier, Israeli forces had killed the oldest son of the family (Fadi, aged 23) and his cousin.

The father had worked as a house painter in Israel supporting his daughter's legal studies in Jordan. After Israel closed its borders to Palestinian workers, the family lived on the pittances Fadi earned working in the vegetable market. Hanadi was deeply religious, rising before 5 each morning to pray and read the Koran. After her brother's murder, she became more radical. She sometimes awoke at night, screaming from nightmares about Fadi. A week before her death, Hanadi went to the Israeli military to request a permit for her father to go to Haifa for treatment of his liver disease. The Israelis told her to get out and not come back.

Wafa Idris

Wafa, aged 28, blew herself up, killing one man and wounding several others in 2002 (Bennet, 2002a, 2002b, 2002c). Wafa was born and lived in the Amarai refugee camp north of Jerusalem. Her parents, refugees from Ramia, Israel, had moved there in 1948. Her father had died many years ago. She lived in three rooms with her mother, a brother and his wife, and their five children.

Her husband had divorced her because they had failed to have children. She was a volunteer medic with the Palestinian Red Crescent Society, raised doves and loved children. Her relatives said that she was motivated by seeing many Palestinians wounded and killed by the Israelis. Her brother said that she had an "independent mind," and she had long been an activist, demonstrating against Israel in the first intifada (in the late 1980s). Her relatives thought that she was motivated by nationalist fervor rather than religion. One of her brothers was a Fatah leader and had been imprisoned by the Israelis for ten years and was still wanted by the Israelis. However, no relatives had been killed by Israeli forces, although friends had been seriously injured. Wafa spoke of wishing to be a martyr when she saw pictures of suicide attacks.

Wafa had been married for several years but, after a miscarriage left her unable to have children, her husband wanted to take a second wife. She objected, and so he divorced her. He had two children with his new wife. After he had his first child, Wafa asked him to let her return to him, but he refused saying, if he let her return, his wife would leave him and take the child. Her mother, however, claimed that Wafa had recovered from the miscarriage and the divorce. The mother claimed in public that she was proud of her daughter, but in private wept bitterly, saying, "I lost my daughter."

Arien Ahmed

Arien Ahmed, a 20 year-old student of business administration, was captured before she detonated her bomb after she changed her mind (Bennet, 2002d). Arien was motivated in part by lost love, her fiancé who was a leader of a Bethlehem group affiliated with Al Fatah. She believed that he had been killed by Israeli forces, but the Israeli forces said he had accidentally blown himself up.

Her father died when she was six months old. Her mother remarried when she was six and moved to Jordan, leaving her with relatives. Arien made friends easily and was a good student. At one point, she attended a Lutheran school in Bethlehem and met Israeli students, some of whom became friends. Her family tried to discourage her liaison with the militant. Before she decided on her mission, Arien quarreled bitterly with her aunt and left without a word to her family. When recalling the death of her fiancé, Arien said, "So I lost all my future."

IRAQ

Baida Abdul Karin al-Shammari

Baida was captured by the Iraqi forces in 2008 (Rubin, 2009). She lived in an isolated community (New Baquba) dominated by extremists and had lost her father and brothers in the war. Like all Muslim women in the region, she had no power over her life - who to marry, how many children to have or whether to go to school beyond primary school. The Islamic influence in her region (Divala) strong brutal, orchestrating mass was and execution, beheadings and kidnappings. mass ambushes.

Baida told Rubin that she was one of eight children, five of whom had been killed by Iraqi and American troops. Her brothers were mujahideen, making improvised explosive devices (IED), and she helped them. She went to school through 8th grade and had wanted to become an architect, but her mother wanted her to stay home. Her mother died when Baida was 17, and her father married her off a few months later to a man who beat her regularly.

Baida told Rubin that her main motive was revenge – revenge for the death of her father and four of her brothers. She recalled seeing a neighbor killed

by American troops and dying horribly. When her husband beat her, she often went back home for a while, but the deaths of her father and brothers stopped that means for escaping temporarily from her husband. She then went to work with her cousins building IEDs. One introduced her to a suicide bomb cell before dying himself in a suicide attack. The group dynamic led her to volunteer too.

Baida had three children (two boys and a girl, all under the age of eight), but was waiting for release so that she could carry out her mission. She spoke of her own life in the past tense, as she did when talking of her husband whom she hated.

Ranya

Ranya, 15 years old, was captured before her explosive vest could be detonated (Rubin, 2009; Shanker, 2009). She told interrogators that she had been given some juice that made her queasy and dizzy. She was pushed toward the checkpoint. Ranya, like Baida, lived in an isolated community dominated by extremists. She had lost a father and brothers in the war.

Ranya was from an insurgent family, and her aunt recruited women for the cause. Her father, who was probably involved in making bombs, was kidnapped and executed by Shiite militia. Her mother acquiesced in Ranya's marriage to a political figure in the Islamic State of Iraq. Her husband took her to a house where she was given juice to drink and fitted with a bomb vest. However, she was captured before detonating it.

Wenza Ali Mutlaq

Wenza Ali Mutlaq, a woman in her 30s, detonated her bomb on June 22, 2008 (Rubin, 2008). Wenza grew up in Buhriz in southern Diyala, north of Baghdad, in a very traditional tribe which allied itself with Al Qaeda. Her brother and husband became influential emirs. Her husband was killed in June 2007, and her older brother, a potential suicide bomber, had detonated a bomb during a shoot-out with Iraqi government forces on June 10, 2008.

Discussion

What can we learn about the psychodynamics of female suicide bombers from these accounts written by journalists? Kramer (2010) argued that there was no single reason why Chechen women decided to become suicide bombers. They have often suffered a traumatic event such as the death at the hands of Russian forces of a child, husband or family member or a rape. The Russians claim that often the women are drugged. In Iraq, it was claimed that some of the female suicide bombers

had schizophrenia or were mentally retarded, but later reports found that this was untrue.²

Lester (2008, 2010; Lester, et al., 2004), using reports from the Internet, suggested several factors that are common in female suicide bombers. First, it seems likely that the women have posttraumatic stress disorder after experiencing severe trauma. In these war zones (Chechnya, Iraq and Palestine), all of the citizens have witnessed brutality and death from childhood on, not only at the hands of the dominant power's military, but also from their own ethnic group. For example, in Chechnya, the kidnapping and rape of women by fellow Chechnyans is common and tolerated by the women's family (Bullough, 2010). In Iraq, the Muslim militias often tortured and executed those fellow Iraqis whom they believed had cooperated with the American military.

Lester also noted the development of feelings of burdensomeness in some female suicide bombers. Divorced or thrown out by their husbands, they become a burden to their families who have to take them in, with little prospect of finding a new husband, especially if part of the reason for the divorce was a failure to bear children. Burdensomeness has been proposed as a common component in the decision to commit suicide in the theory of suicide proposed by Joiner (2005)

The result is that some women in these countries develop feelings of depression, hopelessness and purposelessness in life. Suicide is seen as a way of escape from this psychological pain, and dying as a martyr is not only an escape, but also as a way of transforming their image. In fiction, Lester (2002) illustrated this motive (of transforming one's image) in the case of Antigone (in the play of the same name by Sophocles) who buried her brother against the King's wishes, hoping to be executed (suicide by victim-precipitated homicide) and become as famous as the goddesses in Greek mythology. The act of martyrdom is viewed as making the female suicide bombers heroines in their community.

The limitation of journalists is that they are not conversant with psychology and, in particular, suicidology, and so they do not know the critical issues to explore when they interview those female suicide bombers who were captured or the relatives of those who died. What is impressive, therefore, is that Bennet, in the case of Wafa Idris in Israel, and Bullough, in the case of Zarema Muzhikhoyeva in Chechnya, were able to ferret out the details of the lives of those women that make their choice to become suicide bombers more understandable.

In future research and clinical case studies, it would be of interest to explore differences in the cases in different countries. For example, in the present

² One female suicide bomber was thought to have been a

psychiatric patient, but this patient was seen at the psychiatric clinic after the suicide bombing, and so the original identification of the suicide bomber was a mistake.



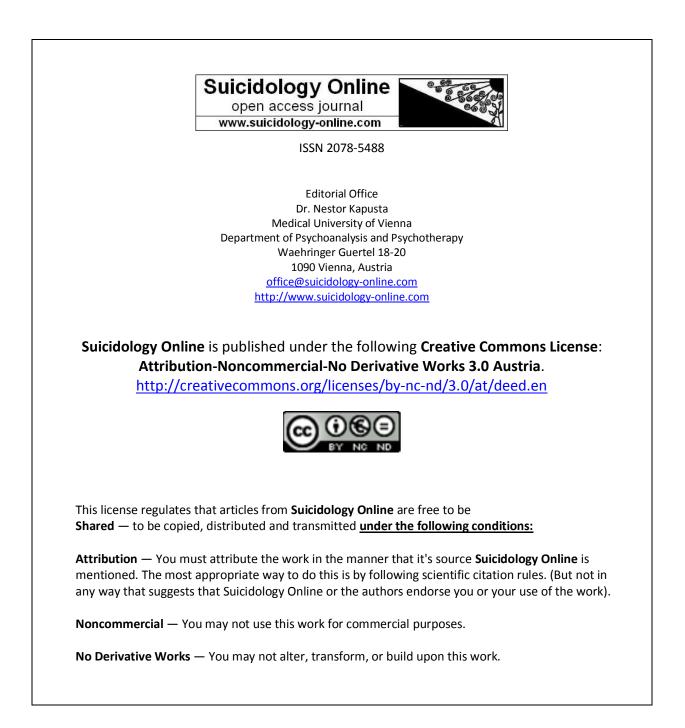
series of cases, in Chechnya, the women seem to have been abused and traumatized more often by their own families and other members of their own ethnic group. In Iraq and Palestine, the women were more often abused and traumatized by the occupying forces (Americans and other alliance troops in Iraq and Israeli forces in Palestine, respectively). The goal of becoming a martyr may be stronger in the Iraq and Palestinian women than in the Chechnyan women. More intensive study of these differences would be valuable.

Finally, the present paper ignores the social and cultural factors that affect these women (and other suicidal terrorists, both male and female). The roles of religion, the brutality of the wars (particularly in Chechnya), media publicity and adulation of previous suicide bombers, and the recruitment and training of suicide bombers are important, but they were ignored in the present paper because the newspaper reports studied did not address these issues. In recent years, several scholarly publications have discussed these factors in great detail (e.g., Ali & Post, 2008; Moghaddam, 2005).

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Essay The Presentation of the Self: An Hypothesis about Suicide Notes

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Abstract: Typically, suicide notes are viewed as providing insights into the psychodynamics of the suicidal individual. The present essay proposes, in contrast, that some suicidal individuals use their suicide note to present a picture of themselves that they want others to remember. Suicide notes may sometimes present a façade self rather than a real self.

Keywords: suicide notes, presentation of self

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In taking any psychological test, there is always the possibility that, instead of responding truthfully, individuals wish to present a particular view of themselves. To detect this, the Minnesota Multiphasic Personality Inventory (MMPI), for example, has subscales to detect presenting a healthy self (faking good) and presenting a pathological self (faking bad). Research has supported the ability of people to fake the image that they present to others. For example, Braginsky, Braginsky and Ring (1969) demonstrated that schizophrenic psychiatric inpatients could chose whether or not to report major symptoms (such as hallucinations) depending on the expected outcome (being placed on a locked ward versus being released). In a second study, Braginsky and Braginsky (1971) found that adolescents in an institution for retarded could vary their mental age on intelligence by three years, again depending on the

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outcome (being placed in a pleasant versus unpleasant program at the institution).

Individuals present various images on a daily basis as a result of the different roles and corresponding functions that they perform. We are used to switching from one image to another and choosing the image to fit the occasion, and there is no reason to doubt that this is true when we die. In modern times, the popularity of online activities such as Twitter and Facebook have allowed people to craft the narrative of their lives and to present themselves to friends and family, and to the world, in a particular light. This fits a popular television message - Image is everything.

In contrast, some psychological tests ignore this behavior and assume that the individual's selfpresentation is not faked. For example, the Thematic Apperception Test (TAT), a projective test, asks respondents to tell stories to pictures shown to them. The interpretation of their stories assumes that the stories will reveal accurate information about the respondents' psychodynamics. The scoring does not take into account the possibility that the respondents' stories are affected by the desire of the respondents to present a particular image of themselves. A recent volume, in which suicidologists were asked to write

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1,500 words about themselves (Pompili, 2010), resulted in a very diverse set of protocols. Some were very personal, revealing details of the writer's life; some listed professional accomplishments; some avoided personal information but were brief scholarly articles on a particular topic; while occasional essays revealed strong emotions such as anger. These essays illustrate the different ways for writers to present the self, and these essays may be treated as similar to TAT stories so as to speculate about the conscious and unconscious psychodynamics of the writers.

Suicide notes have been examined in the past in a similar way to TAT stories in that researchers assume that suicide notes reveal accurate information about the psychological states of those committing suicide and the reasons for their suicide. As a result, researchers have not viewed suicide notes as a possible means by which the suicides consciously present a particular self-image. A broader way of stating this hypothesis is to propose that those writing suicide notes have a hidden agenda.

The present essay argues that suicide notes may often be a result of a decision (conscious or unconscious) to present the self in a particular way and may not, therefore, provide clues to the psychodynamics of the suicidal act. In the following sections, five topics are covered: (1) examples of the hypothesis of the essay using suicide bombers and kamikaze pilots; (2) an exploration of whether the suicidal act and the suicide note can also be constructed so as to be presentations of the self to others; (3) pseudocides (i.e., those who fake their own suicide); (4) an analysis of one suicide note in detail; and (5) the classification of suicide notes by Jacobs is examined for its relevance for the present hypothesis. The final section draws some conclusions.

Crafted Self-Images by Suicide Bombers and Kamikaze Pilots

A good example of the presentation of the self in suicide communications comes from the videos recorded by suicide bombers prior to their departure and released to the media after the suicide attack. Best (2010) analyzed the content of some of these videos and noted that they focus on the political nature of the act and that they cast the act as altruistically motivated. However, Best also noted that the videos show evidence of editing, and this editing is done by persons unknown (for example, by those who sent the suicide bomber on his or her mission or by the media outlets that broadcast the video). Although the videos seem to be produced for the public, unedited versions may have contained messages for the suicide bomber's family and indications of the individual's state of mind.

Most commentators on suicide bombers focus on the "official" motivation for the suicide bombing provided by the suicide bomber or the organization that planned the attack. There is a reluctance by scholars to analyze the psychodynamic processes that led the individual to become a suicide bomber, as Lester, Yang and Lindsay (2004) have noted, and a reliance on what the individual says in the video as the "truth" rather than as an attempt to present the self in a particular manner.

A similar problem arises with analyses of the letters sent home by Japanese kamikaze pilots from the Second World War. Orbell and Morikawa (2011) analyzed the themes in these letters, a meaningful project, and classified the themes into mentions of an honorable or beautiful death, expressions of familial love, and so on. But to consider these letters as insights into the psychodynamics of pilots is perhaps misguided. These letters were written in the presence of other members of the unit and superiors, with the awareness that they might be read by superiors. As a result, the letters are most likely to be presentations of the self rather than windows into the minds of the pilots.

For example, in one of the most conforming populations in the world where what others think of you is of paramount importance, no Japanese pilot wrote that he was doing this because he was too scared not to volunteer, according to Orbell and Morikawa (2011). No pilot wrote home that he was experiencing panic or somatic symptoms of terror. No pilot said that he had had a lifetime of depression and that going on a kamikaze mission was a way of committing suicide in a covert manner.

Suicide Notes as Public Statements

As Etkind (1997) argued, suicide notes are meant to be public. They are written for others to read and sometimes to be published. Etkind noted that writing suicide notes became more common after newspapers in Europe started publishing them in the 18th Century. MacDonald and Murphy (1990) observed that suicides, expecting their suicide notes to appear in the newspapers, saw that they had access to a mass audience, and the suicides could craft their suicide note so as to achieve sympathy or revenge, or perhaps to project an image that others would remember.

Etkind (1997) presented suicide notes from those accused of misdeeds and noted that they often do not admit guilt, but rather present themselves as victims of persecution. For example, Major Henry Hubert manufactured evidence to convict a Jewish officer, Captain Alfred Dreyfus, of treason. Hubert's suicide note in 1898 made no admission of guilt.

Some suicide notes are written to advance a cause – perhaps assisted-suicide or for political reasons. Percy Bridgman, a Nobel Prize winner in physics, committed suicide in 1961 suffering from cancer and wrote: *It isn't decent for society to make a man do this thing himself. Probably this is the last day I will be able to do it myself.* Bridgman's note is often used by those advocating physician assisted-suicide.



Jo Roman (1980) wrote a book, as well her suicide note, arguing for the establishing of places where people could go in order to commit suicide peacefully in pleasant surroundings. Craig Badialis and Joan Fox committed suicide after a Vietnam Peace Moratorium rally at Glassboro State College (in New Jersey) on October 16, 1969 (Asinof, 1971), and left notes that advocated peace (but which were suppressed by the local authorities). Etkind argued that, "instead of being intensely personal documents, many suicide notes should be read as social acts" (Etkind, 1997, p. i).

Suicides can indeed be choreographed. Etkind (1997) described the suicide in 1944 of Lupe Velez, a Hollywood actress known as the Mexican Spitfire. She was divorced from Tarzan's Johnny Weismuller and pregnant by a man who was unwilling to marry her. She ordered a Mexican feast, decorated her bedroom with satin sheet, flowers, candles and a crucifix, and ingested 75 Seconals. Her note was addressed to the lover and blaming him for her death and that of their unborn child.

Some suicides occur in public, along with a public statement intended to shape the image presented to others. Yukio Mishima committed seppuku in 1970 in front of a regiment of soldiers after urging them to rise up and restore the Emperor to his rightful, powerful place in Japan. Bud Dwyer, the state treasurer in Pennsylvania, was convicted in 1986 of taking a \$300,000 kickback after awarding a state contract and faced a 55-year prison sentence and fine. On January 22nd 1987, one day before sentencing, he shot himself in his office in front of newspaper and television reporters, proclaiming his innocence.

Pseudocides

Some people fake their suicide, leaving a suicide note and then disappearing, moving elsewhere to start a new life. These instances include notes left on the Golden Gate Bridge in San Francisco for which no one saw anyone jump off the bridge. Seiden and Tauber (1970) studied these notes and found that they differed from those left by suicides. They tended to be longer, gave more realistic reasons for suicide (such as financial and legal problems), had less positive emotion, and made less mention of death and suicide than the genuine notes. Shown below is one short suicide note from a man who was a member of the board of San Francisco supervisors who turned up a year later selling bibles in Houston.

Loved ones: My nerves are shot. Please forgive me. Chris. (Etkind, 1997, p. 61).

An Illustration of the Thesis

To illustrate the thesis of this essay, here is a genuine suicide note from a man in his 90s who committed suicide.

A terrible fright! I wake up this morning at 9 o'clock and look over to my spouse's bed, and she doesn't move - on closer inspection she is dead. She had been ailing in the afternoon and stayed in bed, but had in the evening freshened herself up and enjoyed her supper, was, on the contrary, for the most part buoyant following her stay in the hospital. I gave her the medication. She did cough a lot, but she finally calmed down. I lay down and then fell asleep. After I awoke, see above.

What the cause of her decease is I cannot determine. I shall leave everything in the room the way it is. I myself am, at my age of 93, utterly unhappy and have no desire to continue living, above all as I have often been ill for years now. Why should I go on now?

I wish to add that my spouse was just in the clinic and had just been released by Dr. Y. following a thorough examination.

Our marriage has lasted since 1926 and might doubtless be termed good. My married son lives in <address>. He is a teacher, but very often ill, is not allowed to visit us, his grief! Instead, his wife helped out in our household while my spouse was undergoing surgical treatment (eye operation) and returned home when my spouse was released. As I said, I have no desire to continue living and am going to take my life with some medical drugs I collected years ago. I have not informed anyone of my spouse's death, as my own will follow immediately.

> In deepest mourning <signed>

At first reading, this note suggests an elderly, possibly frail man with not many years left to live, acting impulsively on discovering that his wife has died. His son is not well, and he may feel that he would be a burden to his son and daughter-in-law if they had to take care of him. He shows evidence of feeling that he would be a burden to others, and the death of his wife means that he has lost a very important social tie. This elderly man, therefore, seems to fit neatly into Joiner's (2005) theory of suicide which proposes that perceived burdensomeness and thwarted belongingness are the two most important causal factors for suicide.

But let us look at this note from a *presentation of the self* perspective. First, the note carefully lays out the facts and the man's decision-making processes. He is presenting himself as calm and rational. He is not a crazy, elderly man with dementia. Second, he knows (or strongly suspects) that his son and daughter-in-law will read this note. How will they feel? His son may feel guilty, and

perhaps his father wants him to do so! Although the son is ill, he has not visited his parents, nor had them visit him. He left taking care of his parents in an emergency to his wife. Has he telephoned or written regularly to them? How long ago is it since they were invited to visit and stay with him? Did he make his parents feel welcome if they did visit, or did he make them feel that they were an inconvenience? The man's suicide seems to be a sudden decision, but he and his wife may have talked about what they would do if one of them died. In their 90s, illnesses are common, and the day-to-day tasks of living quite difficult. Suicide may have been a well-thought out plan.

Alternatively, could this be a murder-suicide or double suicide, with the suicide note intended to mislead the police? After all, the wife is in her 90s, and a natural death is very likely. Is the medical examiner going to conduct as thorough an investigation as he or she would if the couple were in their 30s or 40s? Moreover, a double suicide is not a crime and, even if it is murder-suicide, the murderer is dead too, and why upset the children any more than the natural death plus the suicide will? Studies have found that the authorities sometimes show concern for the survivors. For example, Carpenter, et al. (2011) found that coroners in Oueensland (Australia) were less likely to carry out a complete autopsy on a suicide if the family had concerns about the procedure or if the religion of the deceased had proscription against autopsies.

Jacobs's Classification of Suicide Notes

Since the circumstances leading to suicide are subject to a wide variation, it is plausible to assume that suicide notes may by determined by the desire to present the self in a particular way. According to Jacobs (1967) suicide notes can be classified s into four types: (1) the person has a terminal illness, (2) the person accuses another of causing his or her death, (3) last will and testaments, and (4) *first form notes*. It is this last category that is relevant to the present hypothesis. By and large, in this type of note, the suicide tries to reconcile the image of himself/herself as a to-be-trusted person (who has been given the sacred trust of life) with the fact that he/she is about to break this trust through the act of suicide.

Jacobs summarized several components, some of which might be found in first-form suicide notes. (i) the person is faced with extremely distressing problems, (ii) he views this state of affairs as part of a long history of such distressing crises, (iii) he believes that death is the only solution to his problems, (iv) he has become increasingly socially isolated so that he cannot share his distress with others, (v) he has overcome his internalized moral constraint that categorizes suicide as irrational or immoral, (vi) he has succeed in this since his social isolation makes him feel less constrained by societal rules, (vii) he has constructed some verbal rationalization that enables him to view himself as a to-be-trusted person in spite of his trust violation by defining the problems as not of his own making or as open to no other solution, and (viii) he has made some provision that his problems will not occur after death. It is typically found that these notes beg forgiveness or request indulgence, show that the problem is not of his own making, notes the history of the problem, communicates that the problems have grown beyond endurance, notes the necessity of death, and finally communicates that he is fully aware of what he is doing but knows that the reader will not understand his reasons. While Jacobs felt that this expressed the genuine thoughts, desires and emotions of the suicide, the present hypothesis would view the suicide note as deliberately presenting the image of a rational and reasonable person making a sensible decision.

Conclusions

The hypothesis presented in this essay is that suicide notes may not simply reflect the motivations and psychological state of the person committing suicide, but rather may be a constructed so as to present an image to the person's significant others. In this case, the suicide is committing a psychosemantic fallacy, a term coined by Shneidman and Farberow (1957) to describe the situation where a person confuses the self as experienced by the self with the self as experienced by others. The suicide in this case is concerned with the reactions of others even though he or she will not be around to witness these reactions.

It is not possible to prove that a particular suicide note is a result of a desire to present the self in a particular manner, but likewise it is hard to prove that the note is not the result of such a desire. We should use caution, therefore, when using suicide notes as a means of understanding the psychodynamics of the suicidal mind.

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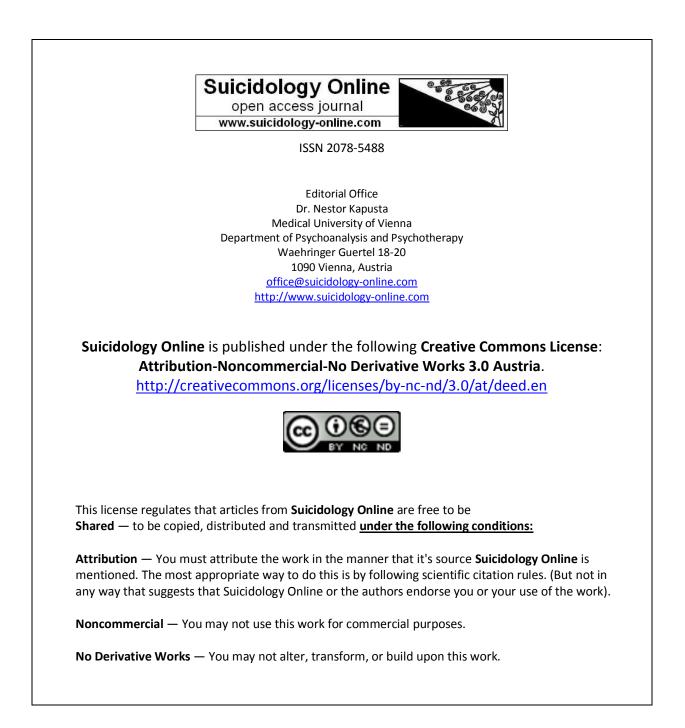
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Essay Gaia, Suicide and Suicide Prevention

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Abstract: The Gaia Hypothesis, in which the Earth is viewed as a self-regulating system, is explored for its implications for suicidology. Seven questions are raised by applying the Gaia Hypothesis to suicidal behavior: (1) Is suicide ever a rational act? (2) How common is burdensomeness as a motive for suicide? (3) Can suicide be an instinctive behavior? (4) Does suicide benefit the society? (5) Is suicide found in animals other than humans? (6) Why have we failed to have a major impact on the suicide rate despite all of our efforts and will we ever have an impact? (7) Is there a natural suicide rate?

Keywords: Gaia hypothesis; suicide; rationality; burdensomeness; instinct; animal suicide; preventing suicide; natural suicide rate

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The present paper explores whether the Gaia Hypothesis has any implications for suicidology. It may be that some of the implications offend readers, and the present author does not endorse all of the implications or, indeed, agree with all of the theories presented.

Lovelock (1995, 2000) proposed that the Earth was a cybernetic system with homeostatic tendencies as detected by chemical anomalies in the Earth's atmosphere, which he replaced with the term Gaia, suggested by William Golding (Margulis, 1998, p. 118). The Earth may be regarded as a superorganism (which is not the same as a single organism) that controls and maintains its environment – its temperature, acidity/alkinity and gas composition. Gaia is "emergent property of interaction among organisms, the spherical planet on which they reside, and an energy source, the sun" (Margulis, 1998, p. 119).

Margulis gave as an example the symbiosis between bacteria and mammals. Bacteria remove hydrogen from the air (both from the hydrogen gas itself, from hydrogen sulfide expelled by volcanoes, and from water), and they expel oxygen which mammals need to breathe. In an early computer model, Watson and Lovelock (1983) showed how the sun and plant species could achieve a stable surface temperature. In Daisyworld, the name of their computer model, they postulated two species of daisies, black daisies that grow best when it is cold and white daisies that grow best when it is hot. As the sun falls on a cool earth surface, the black daisies grow faster and, being black, absorb the heat. This warms the surface, resulting in lower rates of growth for the black daisies and a faster rate of growth for the white daisies. As the white daisies increase in proportion, they reflect back the sun's rays, thereby cooling the earth's surface, leading to the black daisies benefiting. The result is an equilibrium, oscillating in a limited temperature range.

It is interesting to note that Ward (2009) proposed a counter-hypothesis, which he called the Medea Hypothesis, after the mythological Greek goddess who killed her own children. Ward claimed that the Earth is a doomsday system experiencing cataclysm after cataclysm and that it can be saved only by human intervention. Ward pointed to earth-generated mass extinctions, such as the period of freezing which has been proposed as occurring roughly 650 million years ago, as evidence of the

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suicidal nature of the Earth's system.¹ It is interesting to note that this hypothesis at the level of the Earth is analogous to the Freudian hypothesis of the life and death instincts in individuals (see below) in which the death instinct is countered by the life instinct so that people continue to live and move forward despite self-destructive and regressive actions motivated by the death instinct. It may be that the Gaia and Medea trends at the level of the Earth stand in the same conflict as Eros and Thanatos at the individual level, so that existence is a compromise between the two trends.

Some scholars would view the Gaia Hypothesis and the Medea Hypothesis as metaphors rather than as genuine scientific hypotheses, more akin to religion than to scientific theory and, therefore, not testable by scientific methods.

Gaia and Suicide Prevention

Doessel and Williams (2010) reported that, at a conference in which they were presenting an argument that governments have a legitimate role to play in suicide prevention, an attendee argued that a laissez-faire approach to suicide is warranted in order to protect the Earth from degradation. Arguing from the perspective of the Gaia hypothesis, it was asserted that people leave carbon and ecological footprints (Wackernagel & Rees, 1996) which damage the Earth's ability to self-regulate and regenerate itself (Lovelock, 2006). The implication is that, the fewer people on the earth, the less damage humans can cause to the ecological system.

This seems to involve two alternative propositions. The first is that any action which leads to a reduction in the population is good since it limits the ecological degradation of the Earth by humans. In this case, policies such as those to eliminate (or reduce the incidence of) diseases are bad. The difference between mortality from suicide and from diseases is that suicide is an act chosen by the individual whereas malaria and cancer are not illnesses willingly sought by people. However, this encounters the often-made argument that suicide is an irrational choice made by psychiatrically disturbed individuals. If it is permissible to treat a medical disease, is it not permissible to treat a psychiatric disease (such as an affective disorder) so that individuals can make rational decisions? These considerations lead to the first question:

Question 1: Is suicide ever a rational act?

It could be argued, of course, that, for the Gaia hypothesis, it does not matter whether an act is rational or irrational. Suicide is part of the selfregulating system under the Gaia hypothesis, and explanations proposed by humans to explain this behavior are irrelevant. However, the role of decision-making in suicide, rational or irrational, is sometimes used as argument against preventing suicide (e.g., Szasz, 1971, 1986) whereas this argument is rarely used, if ever, as an argument against preventing and treating medical diseases.

The second alternative proposition is that Gaia will regulate itself even if one component of the Earth's ecosystem (humans) changes it, and even degrades, it. The composition of the Earth's ecosystem may change (as in some novels portraying dystopias and in apocalyptic movies), but eventually conditions will settle down to a new equilibrium. In this case, human behavior is irrelevant to the Gaia Hypothesis.

Can Suicide Benefit Gaia?

Burdensomeness²

The commentator at the presentation by Doessel and Williams mentioned above focused on the degradation of the planet by humans. However, there are other, narrower issues involved. One is the question of whether people ever commit suicide with the goal of contributing to Gaia.³ Perhaps not in the most abstract sense, but Joiner (2005; see also van Orden, et al., 2010) has proposed a theory of suicide in which three factors contribute to the desire for suicide: (1) thwarted belongingness and (2) perceived burdensomeness, combined with (3) an capability for acquired harming oneself DeCatanzaro (1995) also proposed that a sense of burdensomeness toward kin may erode selfpreservation desires. Joiner, et al. (2002) compared the notes written by those who attempted suicide with those who had completed suicide and found that statements related to burdensomeness were more characteristic of the suicide notes from the completed suicides than of the notes from the attempted suicides. Lester (2010) presented case studies of female suicide bombers in the Middle East which indicated that a sense of perceived burdensomeness to kin played a role in the decision of some of the women to complete suicide for political purposes. This motive for suicide resembles the motives implied in Durkheim's (1897) description of altruistic suicide, in which people commit suicide in order to help others.

In some societies in the past, the elderly occasionally committed suicide, sometimes passively (by ceasing to eat) in order not to be a

¹ Ward includes only cataclysms generated from the Earth itself and not caused by external forces such as meteor impacts.

² There are several theories of suicide mentioned in this essay, and each could be the subject of a comprehensive review and critique. The purpose of this essay is not to present such a critique but rather mention the theories for their relevance to the application of the Gaia Hypothesis to suicidology.

³ An interesting question raised by Richard Colby, a colleague of mine, is whether adherents of the Gaia Hypothesis have more accepting attitudes toward suicide and are more prone to suicidality, especially when facing personal crises.



burden to their kin. In The Ballad of Narayama, a Japanese film in 1983 made by director Shohei Imamura, based on the book Men of Tohoku by Shichiro Fukazawa, set in a small rural village in 19th Century Japan, an elderly matriarch of the family follows the tradition that, once a person reaches the age of 70, he or she must travel to a remote mountain to die of starvation.

These considerations lead to the second question:

Question 2: How common is burdensomeness as a motive for suicide?⁴

Ethology And Suicide

Ethology is the study of animal behavior, focusing on how and why animal behavior occurs. accurate observation Ethologists stress and description of animal behavior, particularly in the animals' natural habitats, but also in experimental situations where the stimuli with which the animals are confronted can be presented in a systematic fashion. Ethology believes that the mechanisms behind animal behavior are programmed into the animal's neural networks and, thus, are determined largely by the genes and by the ways in which evolution has changed the characteristics of the animal.

The basic concepts of ethology were developed by Karl von Frisch, Konrad Lorenz and Nikolaas Tinbergen who were awarded the Nobel Prize for Medicine in 1973 for their work. Consider the following example, the egg-rolling response of the greylag goose. When a goose which is incubating eggs notices an egg near the nest, its attention is focused on this egg. It slowly rises, extends its neck over the egg and with the bottom of its bill rolls the egg back up into the nest. This behavior is called a fixed action pattern. The response appears to be innate rather than learned, the coordination and patterning of the behavior is stereotyped, and, once initiated, the pattern is completed without any further sensory input. The stimuli which release the fixed action pattern is called the innate releasing mechanism. Because the goose responds to only one aspect of the object, the stimuli are also called the sign stimuli. The fixed action pattern is turned off and on by drives or motivation which limit the behavior to a particular period of time, in this case incubation until hatching. Innate releasing mechanisms are thought to illustrate the innate, programmed nature of much of animal behavior. They focus the animal's attention and enable animals to respond quickly to stimuli without interference from thinking.

Attempted Suicide As An Innate Releasing Mechanism

The first application of ethology to suicidal behavior was made by Stengel and Cook (1958). Referring to the work of Lorenz and Tinbergen, they suggested that the suicidal attempt acts very much as a 'social releaser' (p. 117). Stengel (1962) later wrote that "the suicidal attempt functions as an alarm system and an appeal for help. It does so almost with the regularity of an 'innate release mechanism'" (p. 726). It is of interest that these concepts are embodied in the title of Farberow and Shneidman's (1961) influential book, "The Cry for Help," where the suicide attempt, the innate releasing mechanism, is the stimulus which elicits a response, the fixed action pattern, in other people. The response elicited in others is evidently care-giving. This notion was suggested by Henderson (1974) also who characterized attempted suicide as care-eliciting behavior and saw it as a developmentally primitive signal for care.⁵

Attempted Suicide As A Fixed Action Pattern⁶

Attempted suicide can also be seen as a fixed action pattern. In Freud's early version of psychoanalytic theory, there was only one source of energy for human behavior, an energy which he called libido. In this version of the theory, the natural response to frustration is to aggress against the frustrating object, that is, to become assaultive. If this outward-directed aggression is forbidden or punished, then the aggression is blocked and turned inward onto the self, resulting in depression and self-destructive behavior (Henry and Short, 1954).

However, in the later version of his theory, Freud proposed two major motivations for humans, the life and death instincts, Eros and Thanatos, fueled respectively by libido and destrudo. In this latter theory, adopted by Menninger (1938) in his theorizing about suicide, self-destructive behavior becomes a basic pattern which, in order to survive, we must control. In this view, suicidal behavior is an innate pattern of behavior, a fixed-action pattern in ethological terms.

If suicidal behavior can be viewed as a fixed action pattern, two questions arise. First, what is the innate releasing mechanism that elicits this behavior? At the most general level, stressors could be seen as the stimuli which elicit the behavior, but research has shown that the stressors which most commonly precipitate suicidal behavior vary with age, gender, and other personal characteristics (Lester, 1992).

⁴ It may be argued that suicidal individuals may think that they are a burden to the earth, but only to significant others. However, the Gaia hypothesis does not necessarily assume that people have to be cognitively aware of Gaia and whether or not they are living (or dying) in accordance with Gaia.

⁵ For such appeals to work, they must elicit altruistic or caregiving behavior in the significant others, but the lack of such

behavior does not negate the ethological analogy.

⁶ For an extended version of this analogy, see Lester and Goldney (1997).

More interestingly for an ethological perspective is the possibility that interpersonal stimuli are critical in eliciting suicidal behavior, a possibility most clearly illustrated in Richman's (1986) focus on the role of the family in both eliciting and reducing the occurrence of suicidal behavior. If this is the case, then we have sequencing, in which the behavior of one person releases the suicidal behavior pattern in another, which in turn releases care-giving behavior in the first person. Much more abstract analysis has been conducted on the dynamic interchange between the murderer and the victim (e.g., Luckenbill, 1977) than has been conducted on the interchange between the suicidal individual and his/her significant others, and this lacuna needs to remedied in future research on suicidal behavior.

The second question is, if suicidal behavior is a fixed action pattern, what will happen when no innate releasing mechanism appears? According to ethology, fixed action patterns must be expressed from time to time. As time passes without the occurrence of the fixed action pattern, the stimuli required to release the pattern become weaker and weaker, until the pattern can occur without any releasing stimulus, resulting vacuum behavior.

writing about outward-directed In aggression, Lorenz (1966) addressed this problem by suggesting that socially acceptable outlets must be provided for the outward expression of aggression, outlets such as contact sports and paramilitary organizations. The same may, therefore, be true for suicidal behavior. The society must provide socially acceptable ways for self-destructive impulses to be safely discharged, for example, in death-risking activities such as mountain climbing or in chronic and focal suicidal activities, to use Menninger's (1938) terminology, such as drug use and selfmutilation. Just as the dog shakes a slipper rather than breaking the neck of its captured prey, perhaps people can abuse alcohol and other drugs rather than commit suicide with overdoses. From this perspective, therefore, drug abuse may be a means of preventing suicide!

These considerations lead to the third question:

Question 3: Can suicide be an instinctive behavior?

Evolution And Suicide

It has long been noticed that animal populations adjust to the size and abundance of nutrients in the environment. When resources are abundant, the population grows; when resources are scarce the population shrinks. Does the human animal fit this pattern? Many human practices can be viewed as serving to achieve population regulation. Infanticide, geronticide, and murder in general can be seen as reducing the population in times of scarce resources. Social regulations on marriage, taboos on child spacing, abortion and homosexuality can also be seen as ways of controlling population size.

Addressing the problem of drug addiction, Jonas and Jonas (1980) noted that, although addiction to drugs initially seems gratifying to the individual, the addict eventually suffers from declining health and a disrupted social adjustment. The fertility of the addict is impaired, and his genes are typically removed from the gene pool. (Natural selection involves the survival of the genes of individuals who are fit while those of less fit individuals are weeded out over time.)

Jonas and Jonas speculated that the genes of the addict (and perhaps of those with psychiatric illnesses) predispose them to be sensitive to external stimuli and group pressures. These tendencies may have been adaptive when societies were smaller and when people had to be acutely sensitive to danger from the environment in order to survive. But in modern society, this sensitivity leads to discomfort which can sometimes be alleviated, for example, by people blunting their perception by means of drugs.

Jonas and Jonas saw addicts today as forming an available pool of individuals readily amenable to a reduction in the population. (The large increase in stress diseases can also be seen as ways of reducing the population.) Jonas and Jonas noted that self-eliminatory behaviors have adaptive significance for the species. Addiction and similar behaviors are pathways along which some people move toward removing their genes from the gene pool. As the sociobiologists have noted (see below), suicidal behavior fits well into this process. Suicide clearly removes the genes of those individuals from the gene pool and reduces the size of the population.

Furthermore, when we look at the kinds of individuals who complete suicide, we find that, typically, suicide rates are highest in those who are older and past child-bearing age, except in the poorest nations of the world where suicide rates are higher among the young and fertile female members of the society (15 to 24 year-olds) than among the older women (Lester, 1982). Thus, it seems that when resources are scarce, as in the poorest nations, it is the fertile who kill themselves at the highest rate, thereby reducing the potential for growth in the population. The fact that suicide rates are much higher in those who are psychiatrically disturbed (Lester, 1992) can also be seen as genetically useful, for the suicide of these people removes their (possibly defective) genes from the gene pool in the society.

The existence of fatalistic suicide (Durkheim, 1897), in which people kill themselves in conformity to societal pressures, may also be seen as fitting the type of suicide necessary for this evolutionary view better than the suicides of the isolates and the alienated of the society (egoistic and anomic suicides). The ritualistic suicides, for example, sati in Indian widows and seppuku in

Japan, are suicides committed in response to social pressures. Mass suicide too can be seen as satisfying this evolutionary need.

Sociobiology And Suicide

Sociobiology is an "amalgamation of behavioral biology, modern population ecology, and evolutionary theory...Its central concern is to understand how and why animal social behavior has evolved" (Wittenberger, 1981, p. 6). Animal behavior orients the species toward maintaining and advancing its biological fitness, maintaining its existence and promoting its reproduction (DeCatanzaro, 1981).

DeCatanzaro (1980, 1981) noted that suicide appears to act contrary to this trend by removing the individual's genes from the population gene pool. However, DeCatanzaro noted that suicide occurs primarily in those who are under stress which reduces their biological fitness and who have a reduced capacity to promote their genes in future generations. Suicide has been more common in those who are older, who have no children, who are divorced, widowed and single, and in those who are psychiatrically disturbed, factors that reduce the capacity and ability to have children and pass on genes to future generations. There were many criticisms of DeCatanzaro's thesis, including that it is tautological (Carr, 1908) and not amenable to a priori hypothesis testing (Anisman, 1980).

Since suicide is related to decreased reproductive status, it does not necessarily remove genes from the population gene pool. Furthermore, the suicidal individual may, by committing suicide, support related individuals in their quest for survival and reproduction, individuals who share some of their genes because they are members of the same family by descent. For example, the suicide of the elderly in primitive societies removes a burden on the remaining members of the society who no longer have to feed the aged and infirm and whose migration is no longer hindered by the weak elderly.

Perhaps this made sense in 1981 when DeCatanzaro wrote his book. However, the rising youth suicide rate in the 1980s and 1990s in most nations of the world seems to argue against this point of view. The youths who are committing suicide would in all probability have children later had they not killed themselves. Furthermore, DeCatanzaro is very selective in his presentation of suicide statistics. For example, he notes that the high suicide rates in the widowed and divorced fits with his theory (since these individuals are presumably less likely to reproduce than married people), but he ignores phenomena such as the reduced suicide rate in women after they pass their period of childbearing. Furthermore, the sociobiological perspective on suicidal behavior ignores nonfatal suicidal behavior. The sociobiological hypothesis

about suicidal behavior thus seems to explain only some aspects of fatal suicidal behavior at some points in time and in some nations of the world. These considerations lead to the fourth question:

*Question 4: Does suicide benefit the society?*⁷

Can Animals Commit Suicide?

If the Gaia Hypothesis views suicide as a useful mechanism for achieving the equilibrium of the Earth, it is relevant to ask whether suicide appears in animals other than humans. Biologists often use the word "suicide" to describe the behavior of animals which leads to their self-destruction, animals such as the pink bollworm moth (Bariola, 1978), butterflies (Trail, 1980), pea aphids (McAllister and Roitberg, 1987), birds (O'Connor, 1978) and bacteria such as motil aeromonads (Namdari and Cabelli, 1989). Muller and Schmid-Hempel (1992) described a behavior that resembles suicide as a result of not wanting to be a burden! Bumblebee workers who become infected with parasites remain outside of the hive, thereby dying sooner and avoiding infecting others in the hive.

The phenomenon of apoptosis involves programmed cell death in multicellular organisms that is sometimes described as suicide (Martin, 1993). Scholars such as Menninger (1938) use the term "suicide" in a broad sense which permits nonconscious intent and mildly self-destructive behavior to be included in the category. The behavior of higher animals has often in the past been viewed as suicidal, and Ramsden and Wilson (2010) reviewed historical views on whether this was possible or not and presented historical descriptions of supposedly suicidal behavior in animals such as dogs and cats. Today, animal behavior is occasionally viewed as suicidal, especially in animals such as dolphins (Amory, 1970; Nobel, 2010).

Preti (2005, 2007, 2011) has reviewed the evidence that animals can commit suicide. In his first article on the topic, Preti (2005) examined clues from folklore and noted that they involved anthropomorphizing, but he was able to locate reports of suicide in animals from as far back as the 2nd Century AD. Preti (2007) then reviewed modern commentaries and found that there was some resemblance between self-endangering and selfdestructive behavior in animals and suicidal behavior in humans, particularly among animals held in captivity (who sometimes self-mutilate and refuse to eat) and those under population pressures

⁷ Yang and Lester (2007) argued that suicide provides an economic benefit for the society. Yang and Lester estimated that the savings from the roughly 31,000 suicides in the United States each year from the reduced costs of health care, pensions, medical and psychiatric treatment, and nursing home care for these suicidal individuals outweighs the lost productivity by about \$5 billion dollars each year, but there may be other possible non-economic benefits.



brought on by environmental factors such as droughts and diminished food supply.

However, is it possible to prove that an animal can commit suicide? There has been one approach to this problem that has potential for theory and research. Schaefer (1967) first identified the basic issues involved in deciding whether an animal can commit suicide. (1) Can the animal discriminate between life and death or, to be more specific, between a live animal and a dead animal? (2) Can an animal discriminate between a lethal and a nonlethal environment? (3) Under what circumstances will an animal choose to enter a lethal environment?

Schaefer demonstrated how these questions might be answered. To demonstrate that an animal can discriminate a dead animal from a live one, Schaefer used an operant conditioning technique in which one lever in a Skinner box produced food when a live mouse was the stimulus and a second level produced food when a dead mouse was the stimulus. Schaefer's mice learned this discrimination.

To demonstrate that mice can discriminate between a lethal chamber and a nonlethal chamber, Schaefer allowed mice to choose to enter one of two chambers. In one chamber they were electrocuted, while in the other they were allowed to live. The behavior of these mice was the stimulus for other mice. As long as the observed mouse was alive, one lever produced food. When the observed mouse was dead, a second lever produced food. The observing mice learned this discrimination. After learning the discrimination, the observing mice were allowed to enter the chambers. On test trials, the mice entered only the nonlethal chamber. If these demonstrations can be replicated (no-one has pursued Schaefer's ideas in recent years), it would be possible to investigate under what circumstances an animal might choose to enter the lethal chamber.

In his demonstrations, however, Schaefer failed to include controls for several factors. For example, are the mice learning to discriminate between a dead and a live stimulus mouse or merely a non-moving and a moving mouse? Would the observer mouse respond differently if instead of observing mice killed, he observed mice waking from sleep. Perhaps it is the change in the state of the mice that led the observer mouse to avoid the lethal chamber rather than mice being killed? Many other methodological problems can be raised about these demonstrations. However, all of these problems could be overcome, and Schaefer's formulation of the problem enables us to plan a set of studies to explore whether an animal could commit suicide.

These considerations lead to the fifth question:

Question 5: Is suicide found in animals other than humans?

Conclusion

Although the Gaia Hypothesis is probably a metaphor rather than a scientific theory (and perhaps it is better construed as a religious or philosophical system), consideration of the hypothesis can be seen to be provocative, raising questions that, although they have been raised before in suicidology, perhaps merit further thought and study.

One final point (and two questions). One reviewer, whom I would like to thank for his or her challenging comments and who did not like the questions that I proposed as raised by the Gaia hypothesis, raised one that he or she thought relevant. The reviewer noted that we seemed to have failed to have a major impact on the suicide rate. To be sure, in some countries, the suicide rate has fallen (hopefully not merely as the result of misclassifying suicidal deaths [Lester, 2002]), but in other countries it has risen or stayed stable (as in the United States over the last few decades). The reviewer suggested that suicide may be one of many self-regulating systems to reduce the negative impact of humans on the Earth, and our theories or perspectives for interpreting or understanding these suicides are irrelevant.

These considerations lead to a sixth question.

Question 6: Why have we failed to have a major impact on the suicide rate despite all of our efforts and will we ever have an impact?

Related to this is the concept raised by Yang and Lester (2009). Yang, an economist, and Lester, a psychologist, noted that, in economic theory, the unemployment rate can never be zero. People are always leaving jobs and getting fired, and they take time to locate new jobs. The resulting level of unemployment is called the natural unemployment rate. Yang and Lester wondered whether there was a natural suicide rate. To illustrate this, they used time-series and ecological regression analyses of the suicide rates in several nations to predict these suicide rates based on social risk factors such as divorce and unemployment. When they set these risk factors to zero, the predicted suicide rates were always positive - never zero or negative. Yang and Lester argued that there was indeed a natural suicide rate

These considerations lead to the final question.

Question 7: Is there a natural suicide rate?

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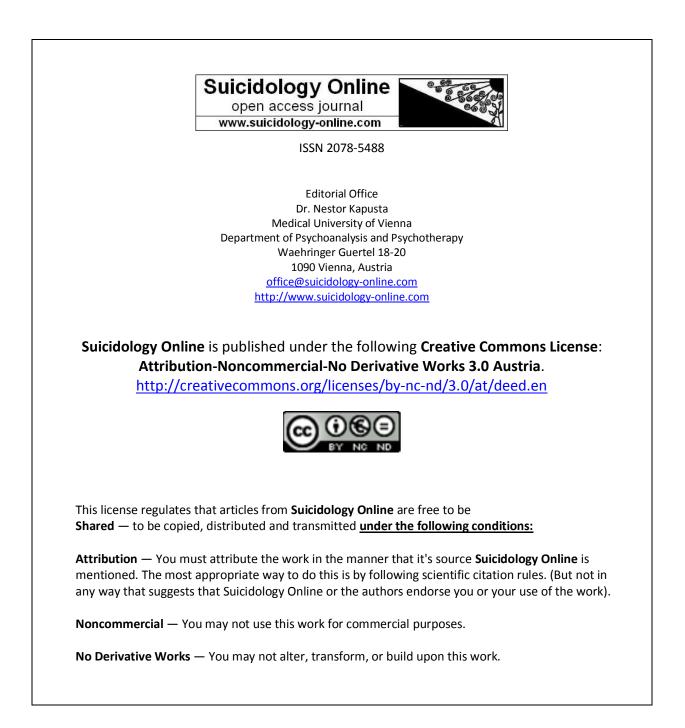


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Short Report Job Stress and Suicidal Ideation in Irish Female General Practitioners

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Abstract: A survey of 379 Irish female GPs identified several sources of stress for these GPs. Their suicidality was predicted by having had psychiatric problems in the prior year and by scores on the General Health Questionnaire. Although suicidality was associated with the level of job stress, this association was weak.

Keywords: Suicide, General Practitioners, Job Stress

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It has been documented that physicians have a higher suicide rate than the general population. For example, Lindeman, et al. (1996) reviewed research on this and reported that, overall, male doctors have a suicide rate 1.1 to 3.4 times higher than men in the general population and female doctors a suicide rate 2.5 to 5.7 times higher than women in the general population. The same increased suicide rate for all doctors and the relatively higher rate in female doctors was found when doctors were compared to men and women in other professions.

Lindeman, et al. (1997) in Finland and Schlicht, et al. (1990) in Australia found that male physicians had an average suicide rate, whereas female physicians in both countries had a higher suicide rate than other women. Overall for male physicians, some specialities (such as psychiatry) are characterized by a higher suicide rate, but this is counterbalanced by other specialties having a lower suicide rate than expected. For female physicians,

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however, specialty does not play a major role and, in fact, professional women in many occupations (such as psychology [Mausner & Steppacher, 1973]) are found to have a suicide rate comparable to men in the same professions.

In one of better studies on completed suicide in physicians, Stack (2004) examined 143,885 deaths in the United States in 1990 using a multiple regression analysis, controlling for marital status, age, sex, race and urban-rural location, and found that physicians were 2.45 times more likely to die by suicide than other members of the general population. However, Stack did not examine the risk for male and female physicians separately.

Studies on the mental health of female and male doctors conflict. Wall, et al. (1997) found a higher prevalence of minor psychiatric disorders in English female doctors, while Rout (1999) found higher levels of mental well-being in English female doctors. A survey of psychiatrists in Wessex, England found that female doctors reported higher levels of stress than male doctors (Rathod, et al., 2000), and Kirkcaldy, et al. (2002) found that female doctors in Germany reported higher levels of job stress than male doctors.



	% yes
Difficulty in finding a suitable post	9.1%
Lack of peer support in isolated single-handed practices	14.2%
Excessive work load	63.6%
Shortage of time to see patients	62.2%
Conflict with colleague	18.7%
Difficulty with other services	50.1%
Litigation	8.6%
The threat of litigation	24.2%
Problems arising from media coverage of health issues	26.8%
Problems arising from increased public expectation of health care	58.1%
Difficulty in attending CME courses or meetings	55.3%
Problems with locum cover	45.6%

Table 1: Sources of stress for Irish female GPs according to the question "Have you experienced any of the following work-related problems in the past year?"

Heim (1991) claimed that the specific role strain of female doctors leads to an alarming lower life expectancy as compared to women in the general population of roughly ten years. Sonneck and Wagner (1996) documented the existence of role-strain between job demands and family and child-care responsibilities, while Schernhammer (2005) focused on the sexual harassment that female doctors experience. The tendency of physicians to selfmedicate and the availability of lethal medications (Lindeman, et al., 1998) increase the risk of suicide in this profession.

Since few female physicians complete or attempt suicide, and since completed suicides are, obviously no longer available for questioning, the present study focused on the impact of work stress on suicidal ideation in female general practitioners.

Method

All female General Practitioners listed on the Irish Medical Register were mailed a questionnaire (described below), and respondents returned the questionnaires in an unmarked envelope, permitting anonymity. The final sample consisted of 379 female general practitioners from the 1,000 who were contacted, giving a response rate of about 38%. Follow-up of those not responding was not attempted since there was no way of distinguishing those who responded from those who did not respond.

Those responding to the questionnaire had a mean age was 42.4 years (SD = 9.6; range 26-74). The average year of qualification was 1980 (SD = 9) and they had a mean of 13.6 years in practice (SD = 9.8). Seventy-four percent were married, 20% single and

6% divorced or widowed. Seventy-one percent had children, and those who did have children had a mean of 3.1 children (SD = 1.5). Sixty-three percent were in a group practice (and 37% in a single practice). Seventy-two percent were full-time, 21% part-time, 4% job-sharing and 4% locums.

The questions about work-related problems experienced in the past year included: (i) difficulty in finding a suitable post; (ii) lack of peer support in isolated single-handed practices; (iii) excessive work load; (iv) shortage of time to see patients; (v) conflict with colleagues, (vi) difficulty with other services; (vii) litigation; (viii) the threat of litigation; (ix) problems arising from media coverage of health issues; (x) problems arising from increased public expectation of health care; (xi) difficulty in attending CME courses or meetings; and (xii) problems with locum cover. "Yes" responses to these questions were summed to give a total STRESS score, with a possible range of scores of 0-12. The mean score was 4.11 (SD = 2.34). The proportion of female GPs checking each source of stress is shown in Table 1.

Five items were related to suicidality: (i) in the last year have you at any time felt that life is not worth living; (ii) in the last year have you had a positive death wish; (iii) in the last year have you had suicidal thoughts; (iv) in the last year have you thought of a method of ending your life; and (v) in the last year have you made any plans to end your life. They were also asked if they had attempted suicide in the past year, and none had done so. "Yes" answers to these questions were summed to give a total SUICIDALITY scores, with a possible range of scores of 0-5. The mean score was 0.26 (SD = 0.77).



The questionnaire included the 12-item General Health Questionnaire (GHQ-12: Goldberg, Gater, Sartorius, Ustin, Piccinelli, Gureje & Rutter, 1997). This is a self-administered screening instrument to detect the presence of a psychiatric disorder, developed from the original 60-item scale. Although the GHQ-12 has an adequate internal consistency, it does appear to be multidimensional (Gao, Luo, Thumboo, Fones, Li & Cheung, 2004). The range of possible scores is 0-36, and the mean score of the sample was 11.41 (SD = 4.80).

The GPs were also asked additional questions, including whether there was a family history of psychiatric illness, whether they had suffered from a significant physical illness in the past year, whether they considered themselves to have mental health problems at present or at any time in the last year, and whether they considered themselves to have substance and alcohol abuse at present or at any time in the last year, all questions answered using a "yes" versus "no" format.

Results

Frequency of Suicidal Ideation

In the last year 14.1% of the sample felt that life was not worth living, 4.4% had a positive death wish, 5.3% had suicidal thoughts, 2.9% thought of a method for ending their lives, and 0.3% made plans to end their lives. None had attempted suicide.

Correlates of Suicidal Ideation

SUICIDALITY scores were positively associated with the GHQ score (Pearson r = 0.48, twotailed p < .001) and the STRESS score (r = 0.12, p = .04). In a multiple regression, SUICIDALITY was predicted by the GHQ scores, and STRESS did not play a significant role. STRESS and GHQ scores were positively associated (r = -0.36, p < .001), suggesting that the role played by stress in suicidality is via its impact on general mental health.

SUICIDALITY scores were not associated with age, year in which they qualified, number of years in practice, having children, the number of children, the age of the youngest child, the age of the oldest child, or the age range of the children. SUICIDALITY scores were associated with having physical and mental problems in the previous year and a family history of psychiatric illness (r = 0.18, 0.37 and 0.11, respectively), but not with substance abuse in the previous year. In a multiple regression, only GHQ scores (beta = -0.38, p < .001) and mental problems in the last year (beta = 0.22, p < .001) contributed significantly to the prediction of SUICIDALITY scores. The multiple R was 0.51.

Discussion

The results of the present study have shown that suicidal ideation in this sample of female GPs was most strongly predicted by psychological and psychiatric problems in the previous year. Once these variables were taken into account, job stress added no significant amounts to the prediction of suicidality. This result suggests the next steps in a research program on this issue. Although psychological and psychiatric problems predicted suicidality, these problems could have been pre-existing and caused the job stress experienced by these GPs or they could have resulted from the job stress. What is required is a longitudinal study, assessing and following-up GPs, beginning during training or residency with a longterm follow-up. It would also be of interest to distinguish more clearly the roles played by the stress created for women from often having dual roles (career and family, especially child-rearing duties), stress from being a career women (sexual harassment and discrimination), and stress specific to the work of being a GP. To accomplish this, it would be useful to devise scales to measure each of these sources of stress quantitatively, thereby permitting regression analyses.

The present study had several limitations, in particular the relatively low response rate, but low response rates are common for questionnaires mailed by post. The study also focused on non-lethal suicidal behavior rather than completed suicide because, of course, completed suicide is rare (making sample sizes very small) and because those engaging in lethal suicidal behavior are not available to answer questionnaires. It would be interesting in future research to include a sample of male GPs for comparison purposes, and it would be of interest to investigate whether work-related stress predicts future completed suicide in female (and male) physicians.

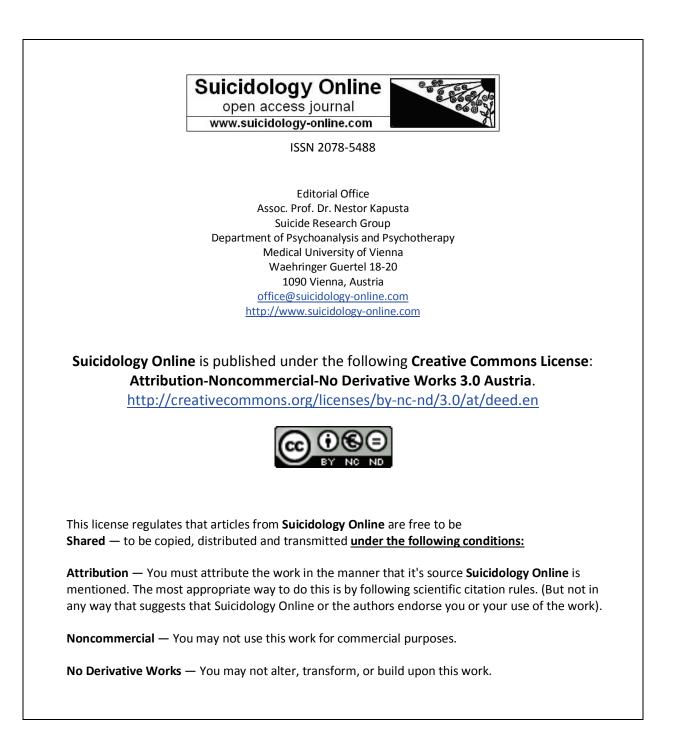
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Essay Efforts to Decriminalize Suicide in Ghana, India and Singapore

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Abstract: In recent years, many nations have decriminalized suicide and attempted suicide, including Canada, Ireland and Sri Lanka. The present paper discusses three countries that are moving toward decriminalizing suicidal behavior (India, Ghana and Singapore) and notes the different pressures for this change – in India from the Supreme Court, in Ghana from NGOs and healthcare professionals, and in Singapore from the legislature.

Keywords: Decriminalization, Suicide, India, Ghana, Sigapore

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"Suicide has been denounced as a great sin by some and eloquently defended as a natural right of man." (Wright, 1975, p. 156)

In early 2009, Davinder Singh was injured in a serious accident and could not afford proper medical care. After the accident, he was having a difficult time supporting his family and could not afford vital surgery on his right leg. To obtain money for his operation, he took out a loan from his younger brother and was paying installments. One morning, he got into a heated argument with his brother regarding the loan, which resulted in a physical altercation. Upon leaving his brother's home, Singh obtained a canister of diesel fuel and a box of matches. Later, when police found and arrested Singh, they found the box of matches and realized he was doused in diesel fuel and in the midst of committing suicide. Singh was soon taken into custody where he would await sentencing for

attempted suicide.¹ Singh's arrest is not all that rare. In some countries today, attempting suicide is still prosecuted and treated as a criminal offense. Why have these countries not revised their statute books? This article addresses why countries should repeal their anti-suicide laws and analyzes methods to promote social change.

Harsh treatment of suicide offenders has been a common trend throughout history and is still prevalent today (Murray, 2000). Much recent legal attention has been given to assisted suicide and euthanasia, but suicidal individuals are still persecuted in some parts of the world.² Historically, suicide has been treated as a crime with legal consequences that were enforceable against the socalled "perpetrator," such as prohibition of burial in church graveyards (Bailey, 1988) and forfeiture of the deceased's property (Marks, 2003). But criminalizing and punishing people who have hurt themselves,

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¹ Reported in the Ludhiana Tribune, August 30, 2009: www.tribuneindia.com/2009/20090830/ldh1.htm (accessed 8/12/2011).

² Gormally, L. (1997). Euthanasia and assisted suicide: seven reasons why they should not le legalized. http://www.linacre.org/newsle~1.htm (accessed 8/12/2011).

perhaps as a "cry for help" (Farberow & Shneidman, 1961), may not necessarily serve as deterrent.

However, in order to reform these laws, more is involved than just changing words in a statute book. Reform requires a long and arduous process of social evolution and change. In recent years, some countries have repealed laws with disproportionate penalties, such as death by stoning for adulterous acts and the criminalization of homosexuality. These behaviors should not be criminal issues, but rather social and psychological issues. For example, the modern trend is for nations to abolish capital punishment, a trend that is encouraged by the United Nations, regardless of whether capital punishment is a deterrent or not and regardless of whether the majority in the nation support capital punishment or not (Lester, 1998).

In recent years, many countries have decriminalized suicide.³ Although these countries still discourage suicide, they also promote an understanding of the act, and they try to control the social and environmental causes of suicide, rather than punishing individuals who attempt suicide. As previously discussed, effacing a law criminalizing suicide from a statute book appears to be a simple legal solution, but there is much more that is needed to make a successful transition. After all, revising a Criminal or Penal code can only do so much when the real problem lies in a country's societal norms and beliefs.

This paper will examine the methods being used to achieve change in countries that still criminalize suicide. The three countries discussed (India, Ghana, and Singapore) all have some movement or discourse toward the possibility of repealing their respective laws. For example, in India, the Supreme Court has been vocal in discussing a move toward decriminalizing suicide. In Ghana, NGOs (Non-Government Organizations) and health care professionals have been vocal in aiding Ghana in decriminalization. Finally, in Singapore, the country's legislature has made efforts to change the legal practices regarding suicide.

The Experience of Countries that have Decriminalized Suicide

Today, only a handful of countries still criminalize suicide,⁴ and Neeleman (1996) has

reviewed the timing and nature of decriminalization in fourteen countries. Lester (2002) examined the impact of decriminalization of suicide in seven nations (Canada, England and Wales, Finland, Hong Kong, Ireland, New Zealand, and Sweden) and found that suicide rates were higher in the five years after decriminalization than in the five years before. The average rate in these seven nations rose from 9.66 per 100,000 per year to 11.24. However, this may not indicate that the actual suicide rate increased. It may mean that coroners and medical examiners were more likely to certify suicidal deaths accurately (and not disguise them by labeling them as accidental or undetermined). It is not possible at the present time to decide which of these possibilities is valid. Lester's study also failed to take into account other socioeconomic changes that occurred during the periods of decriminalization.

Canada

Canada repealed its laws criminalizing suicide about 35 years ago.⁴ The offense of attempted suicide was listed in Canada's original *Code* at s.238 and continued unaltered until its repeal in 1972 by the Criminal Law Amendment Act (1972 c.13, s.16) (Young, 1998). The Minister of Justice explained that Canada had removed the offense of attempted suicide because of the belief that suicide is not a matter that requires a legal remedy and that deterrence based on the legal system is unnecessary.

Lester (1992) examined suicide rates for the ten years prior to decriminalization and for the ten years afterwards and reported that the mean annual Canadian suicide rate from 1962 to 1971 was 9.3 suicides per 100,000 people per year, but from 1973 to 1982 the mean rate was 13.6, which was significantly higher. One simple explanation for this increase in the official suicide rate after decriminalization is that coroners and medical examiners may certify suicidal deaths more accurately. Suicides that were perhaps "covered up" and classified as accidental death or as open verdicts (or undetermined), to spare the surviving family members stigma, may now be classified (and counted). However, Cantor, et al. (1996) found no evidence that there were changes in reporting practices in Canada during the period 1960 to 1989 (although they did find evidence of under-reporting of suicides in Ireland).

³ For example, England and Wales 1961, New Zealand 1961, Hong Kong 1967, Canada 1972, and Ireland 1993 (Lester 2002).

⁴ Law Commission of India, (2008). *Humanization and decriminalization of attempt to suicide*

http://lawcommissionofindia.nic.in/reports/report210.pdf (accessed 8/12/2011).

⁴ Mental Health Division, Health Canada, (1994). *Suicide in Canada: Update of the report of the task force on suicide in Canada* www.phac-aspc.gc.ca/mh-sm/pdf/suicid_e.pdf (accessed 8/12/2011).



Lester (1992) noted, however, that the suicide rate in Canada was increasing during the period of 1962-1982, and he found that the rate of increase was less after the decriminalization of suicide in 1972. This suggests that socio-economic factors were influencing the Canadian suicide rate during this period, and that decriminalizing suicide did not worsen the impact of these socio-economic changes.

Ireland

In 1993, Ireland became the last country in Western Europe to decriminalize suicide (Walker, 2008), passing the *Criminal Law Suicide Act of 1993*, which abolished the 1871 law that made suicide an offense and amended the statute to enforce only being an accomplice to suicide as an offense. Today, section 2(1) of the *Criminal Law Suicide Act of 1993* reads, "Suicide shall cease to be a crime."

Directly following the change in law, Ireland made changes to promote public awareness of suicide and prevention strategies (Walker, 2008). Ireland coordinated suicide prevention initiatives across the country to provide information for more local support, creating two-day workshops that trained people on how to perform emergency suicide intervention. Even with the aforementioned developments, the number of suicides in Ireland doubled between 1987 and 1998 (Corcoran, et al., 2006). However, Cantor, et al. (1996) found evidence that at least part of this increase was a result of more accurate recording and counting of suicidal deaths.

Sri Lanka

Although attempted suicide was a crime in Sri Lanka,⁵ the suicide rate in Sri Lanka increased sixfold between 1950 and 1985, and a Presidential committee was established in 1997 to address the high rate of suicide. The committee recommended the removal of the crime of suicide from the statute book. Besides decriminalization of the attempted suicide law, the committee also recommended an increase in medical services (including those for the management of serious mental illness) and discouraged widespread media reporting of the prevalence of suicide incidents. In May 1998, the Parliament implemented an act to repeal the country's strict laws on taking one's own life.

Sri Lanka also reduced the ready access to materials (especially pesticides) used to commit

suicide (Gunnell, et al., 2007). Implementation of all of these tactics in Sri Lanka during this time seemed to be successful because they were accompanied by a decrease in suicide rates. From 8,514 suicides in 1995, the number declined to 5,412 in 2000 (Hawton, 2005). Because several tactics were employed to address the high suicide rate, it is, of course, difficult to determine which tactics were the most effective, and no study has appeared to examine the role of social and economic changes on the suicide rate in Sri Lanka.

Countries Moving toward Change

India, Ghana, and Singapore have each made individual efforts towards a revision of their respective criminal and penal codes. However, the stigma associated with suicide still remains deeply rooted in each country's culture and traditions, and so these countries have found it difficult to change the law and attitudes of the population. In each of the respective countries, attempted suicide is still regarded as a criminal offense.

India

In India, more than one hundred thousand lives are lost to suicide every year (Vijaykumar, 2007). In the last two decades, the suicide rate has increased from 7.9 per 100,000 per year to 10.3. An estimated one in 60 people in India are affected by suicide if we include those who have attempted suicide and those who have been affected by suicide of a close family member or friend. Thus, suicidal behavior is a major public health and mental health problem that demands urgent action.

One reason why Indians view suicide with disapproval is its characterization as a crime in the Indian Penal Code itself. The Indian Penal Code was formulated by the British during the British Raj Regime of 1860 and is founded primarily on English law, with modifications and adaptations to Indian conditions (Keeton, 1970). Great Britain once criminalized suicide also (Neeleman, 1996) and, through colonization and adoption of British customs, India in turn also adopted the law regulating suicide. India's suicide law is based on the principle that the State is the protector of the lives of the people and the State is under an obligation to prevent people from taking their own lives just as it prevents citizens from taking the lives of others (Gaur, 2004).

Aside from the fact that suicide is criminalized in India, some of the censure that accompanies suicide is also caused by Indian culture itself. Indian culture (whether Hindu, Islamic or other cultural system) imposes strong degree of social regulation on its members. Survivors of attempted

⁵ World Health Organization, *Suicide prevention: Emerging from darkness*

www.searo.who.int/en/Section1174/Section1199/Section1 567/Section1824_8089.htm (accessed 8/12/2011).

suicide are viewed as tainted members of society (Mojica & Murrell, 1991). In addition, because of the strictness of the Penal Code and the cultural shame of follow-up police visits, it results in gross underreporting, refusal to help the affected person, and fear of notifying the proper authorities (Joseph, et al., 2003). In turn, individuals and their families conceal the facts involved in the attempt, and as a result, the affected person does not receive proper medical or psychiatric help. Additionally, the social structure of the culture impacts the primary motives for suicide in India which often involve friction with parents, in-laws and spouses (Lester, Agarwal & Natarajan, 1999).

In India, the Supreme Court has begun moving towards decriminalizing attempted suicide. Currently, there has been heavy debate regarding the humanitarian aspect of this law and the courts have continually commented on the constitutionality and desirability of this provision,⁶ but judicial opinion on suicide has been varied and contradictory. The Supreme Court of India at one point even declared Section 309 unconstitutional on the grounds that it amounted to punishing the accused victim twice.⁷

In the 1994 case, *P. Rathinam v. Union of India*, the Supreme Court held that Section 309 of the Penal Code should be effaced from the statute book in order to humanize Indian penal laws because it is a "cruel and irrational provision" and is against religion, morality, public policy, and has "no beneficial effect on society."⁸ The Supreme Court in *Rathinam* argued that Section 309 of the penal code does not violate Article 14 (equal protection of the law), but does violate Article 21 of the Indian Constitution, which protects life and personal liberty. The Court argued that the "right to die" is implied in Article 21.

Although the court made several valid points in *Rathinam*, the case was overturned in 1996. In *Smt*. *Gian Kaur v. State of Punjab*, the Supreme Court of India reversed its previous judgment, stating that Section 309 is constitutionally valid but is not desirable nor is it serving any purpose.⁹ The opinion stated that Section 309 does not violate Article 14 nor Article 21 of the Indian Constitution, and one of the reasons the Court gave is that, in practice, the accused has been dealt with compassion under Section 562 of the Code of Criminal Procedure (where an offender can be released on probation only before he is sentenced to any punishment). Whether the previous assertion of compassion is true, the court also argued that Article 21 cannot be construed to include the "right to die" as a part of a fundamentally guaranteed right.

Since 1996, the Indian Supreme Court has not heard any other cases involving Section 309, although the 210th Law Commission of India Report has recommended an elimination of Section 309.¹⁰ Although ultimately the Indian Supreme Court has not decriminalized attempted suicide at the present time, the fact that it did decriminalize the law briefly in 1994 is progress nonetheless.

Ghana

Suicide has recently been recognized as a major public health problem in Ghana.¹¹ GhanaWeb recently estimated that about 1,800 Ghanaians died from suicide each year¹² which, based on a population of 25 million, is equivalent to an annual suicide rate of 7.3 per 100,000. There has been especial concern on a rising incidence of suicide in young people in Ghana.¹³For a small country with the goal of reaching a middle-class status by 2015, this statistic is a disappointment.¹⁴ Human development is indexed in part by adequate mental health services, and suicide prevention is an important task for Ghana.

The Ghana Criminal Code originated from British common law imposed when the British gained possession of the Gold Coast in 1872.¹⁵ After revisions, in 1960 Ghana codified their Criminal Code, and Clause 2 of Section 57, which discusses the crime of suicide, was officially enforced (Read, 1962). Since then, the Ghanaian Supreme Court has not ruled on Section 57 of the Criminal Code.

⁶ S. Vishven, *Analysis of anti-suicide law in India.*

http://ssrn.com/abstract=1305022 (accessed 8/12/2011). ⁷ ExpressIndia.com, Agencies, *Why punish those who attempt suicide?t* http://www.expressindia.com/latestnews/Why-punish-those-who-attempt-suicide/323047/ (accessed 8/12/2011).

⁸ *P. Rathinam vs. Union of India* (1994) 3 S.C.C. 394 (India) http://www.indiankanoon.org/doc/542988/ (accessed 8/12/2011).

⁹ Smt. Gian Kaur v. State of Punjab (1996) 3 S.C.C.339 (India)

http://www.rishabhdara.com/sc/view.php?case=13922 (accessed 8/12/2011).

¹⁰ See footnote 6 above.

¹¹ R. Ollenu, (2010). *Ghana: Suicide rate hits alarming proportions.*

http://allafrica.com/stories/201001181271.html (accessed 8/12/2011).

¹² www.ghanaweb/com, May 22, 2012, accessed January 1, 2013.

¹³ allafrica.com/stories/201209060756.html accessed January 1, 2013.

¹⁴ B. P. Yaro, (2010). *Ghana: Reflections on the mental health situation in Ghana.*

http://allafrica.com/stories/201002081541.htm. (accessed 8/12/2011).

¹⁵ V. Essen, (2005). *Researching Ghanaian law.* http://www.nyulawglobal.org/globalex/Ghana.htm. (accessed 8/12/2011).



In traditional Ghanaian culture, if someone had committed suicide, the community's ancestors would not admit his spirit to the "land of the dead" (Schott, 1987). It is believed that the ancestors would drive his spirit back to Earth, and he would wander around as a ghost, threatening his surviving relatives. In ancient times, those who committed suicide would receive the same burial treatment as thieves, adulterers, and witches. According to Justice Ocran of the Ghanaian Supreme Court (2006), in ancient times, suicide was considered to be a serious offense with serious consequences such as decapitation and confiscation of all personal private property. Thus, the stigma of committing suicide is deeply rooted in traditional Ghanaian culture. Rattray (1969) has noted that, in the past, the Ashanti ethnic group saw suicides as seeking to evade punishment for crimes or sins that they had committed, and so they tried the corpses and administered punishments such as decapitation.

In Ghana, NGOs are trying to have the suicide law effaced from the Ghanaian Criminal Code. The Network for Anti-Suicide and Crisis Intervention (NACI), an internationally recognized NGO, has called on the Ghanaian legislature, the Attorney General and the Minister of Justice to repeal clause 2, section 57 of the 1960 Criminal Code.¹⁶ NACI's petition made three suggestions: (1) Ghana should have a close look at what is done in other jurisdictions in decriminalizing suicide and attempted suicide; (2) Ghana should speed up the passage of the new Mental Health Bill to improve on the nation's mental health system and help eliminate the high level of stigma attached to mental illness; and (3) Ghana should take measures to make the nation's hospitals distinguish suicide attempts and suicide deaths from other injuries and deaths in order to help track the number of suicide attempts in the country.¹⁷ NACI has also sent a similar petition to the President of Ghana. However, neither the President nor the legislature has responded to NACI's petition, and no plans have been made for negotiating a solution.

Osafo, Knizek, Akotia and Hjelmeland (2012) found that psychologists in Ghana tend to see suicide as a mental health issue, but nurses tend to hold a moralistic view and view suicide as a crime. Nonetheless, NACI and the International Association for Suicide Prevention (IASP, a scholarly organization) celebrate *World Suicide Prevention Day* in Ghana each year.¹⁸ On this day the NGOs publicize suicide and suicide prevention and ask for immunity for the people who are serving sentences in Ghanaian prisons for attempting suicide. They also use this day to ask for support from local, national, international organizations and philanthropists to fund research, intervention programs, school suicide prevention plans, and training for the media on how to report suicide. Although NACI has been unsuccessful in its efforts so far, the organization continues to work to create change in Ghana.

The NACI noted that health care is affected by the law on suicide is because "hospitals refuse to admit [individuals] who have attempted suicide, unless [they] produce a police report," even if the patient is admitted for unrelated reasons.¹⁹ Adinkrah (in press) studied 21 cases where attempted suicides had been prosecuted. Of these five were given prison sentences ranging from 3 to 36 months, one was fined the equivalent of \$10,000, one given two years on probation, and two were referred to the psychiatric authorities. (The outcome for the other 12 defendants was unknown.) Some attempted suicides feel that they deserve punishment because of the stigma and shame of attempting suicide in a country where it is still a taboo subject.²⁰ Patients are often too ashamed to admit that they have suicidal thoughts and, when patients cannot share their feelings of depression, it is difficult for the medical community to know how serious the problem of depression and suicide is in Ghana.

Singapore

Unlike India and Ghana, there is a great deal of published epidemiological research on suicide in Singapore. Chia and Chia (2008) reported a suicide rate of 12.5 per 100,000 per year for men in Singapore and 6.4 for women, similar to the rates in India. Suicide is responsible for 2.4% of all deaths in Singapore, and this percentage is highest for those 20-29 years of age. The suicide rate has remained steady between 1993 and 2003.

The Singapore Penal Code was established in 1871 and is essentially the Indian Penal Code of 1860, which originated from the modified codification of

¹⁶ Staff, (2007). *Be soft on suicide*.

http://www.modernghana.com/newsthread/146947/5/287 63 (accessed 8/12/2011).

¹⁷ Staff, (2010). *Ghana: Anti-suicide body advocates reform of criminal code.*

http://allafrica.com/stories/201002011570.html (accessed 8/12/2011).

¹⁸ See footnote 12.

¹⁹ Staff, *Repeal criminal law on suicide*.

http://www.ghanaweb.com/CrusadingGuide/article.php?ID =7819 (accessed 8/12/2011).

²⁰ S. Hayward, (2010). *Alternative medicine in Ghana: part three: the crime of killing yourself.*

http://www.jhr.ca/blog/2010/10/alternative-medicine-inghana-part-three-the-crime-of-killing-yourself/ (accessed 8/12/2011).

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English common law.²¹ Therefore, similar to India and Ghana, Singapore adopted its suicide law as a result of British colonization.

Singapore's culture is very diverse. Singapore is a "melting pot," consisting of Chinese, Malays, and Indians, who observe different religions and cultural practices (Kok, 1988). Those who are Buddhists have no strong beliefs against taking one's life, while the Muslims (who are primarily Malays) strongly condemn suicidal behavior. The Indian residents are mostly Hindus, and they believe in reincarnation and rebirth, and suicide is not forbidden. The Malays have the lowest suicide rate and the Chinese have the highest suicide rate, especially among the elderly (Chia & Chia, 2008).

Although Singapore has not repealed its suicide law, the country's administration has humanized enforcement practices. The Singapore legislature deals with attempted suicide incidents very differently compared to India and Ghana. Although attempted suicide still remains a criminal offense under the law, the state only presses charges in three circumstances: (1) when the person repeatedly tries to kill himself; (2) when resources are wasted in preventing him from taking his life; or (3) where the person trying to kill himself has committed other offenses in the process, such as injuring another person.²² In these more serious cases, offenders can be jailed up to a year or fined \$10,000 or both. In addition, the police may also encourage the individual to seek counseling or refer them to the Institute of Mental Health for treatment. Patients admitted to a government hospital for treatment for attempting suicide have to be reported to the police so that law enforcement can document and keep records (Chia & Tsoi, 1974). Most individuals who attempt suicide are arrested, but in 2007 only 11 individuals were charged in court.²³ Therefore, Singapore's implementation of the attempted suicide law is very different than India's and Ghana's.

An example of how this practice is implemented is illustrated by a Singaporean "Community Court" case. In this case, a 50-year-old woman climbed onto the railing of the Benjamin Sheares Bridge near the Changi Airport at 5:45 pm.²⁴ The barefooted woman gestured furiously several times during a two-hour standoff, resulting in a massive traffic jam and delayed flights as the Police Coast Guard and the Singapore Civil Defense Force tried to talk her into coming down. At about 8 pm, the woman relented and was pulled to safety. She was later arrested for attempted suicide. In this case, the courts would be able to charge the woman with violating Penal Code Section 309 because her suicide attempt satisfies exception two of the law ("when a lot of resources are wasted in preventing the individual from taking his life"). The woman could be sentenced to time in prison, a fine, or both. However, the police regularly refer individuals to counseling or mental health treatment, and so she might be able to obtain help.²⁵ Thus, although Singapore has not repealed the law against attempted suicide from its Penal Code, it has taken steps in the right direction by charging individuals only in limited circumstances.

The Possibilities for Change

In order to move toward effective suicide prevention, there are several steps needed. First, each country's legislature should repeal the nation's laws that criminalize suicide. The next challenge is to change the cultural values held toward suicide. Cultural changes do not just occur overnight, and leaders in each country must educate their citizens to understand that suicide is not a crime but is more appropriately viewed as a public health problem that must be addressed (e.g., Rockett, 2010). This education needs to be customized to fit with a country's diverse resources and population.

Epidemiological studies increase information about the extent of suicidal behavior, both fatal (completed suicide) and non-fatal (attempted suicide). This information is useful in identifying highrisk groups and changes in their suicidal behavior over time and in providing baseline data for testing the outcomes associated with specific intervention and prevention programs. Governments should provide funding for these studies and other research into suicide. The media should also be encouraged to adhere to media guidelines for responsible reporting of suicidal behavior (Pirkis, et al., 2006) since media reporting affects the incidence of suicide and the methods used. For example, in Hong Kong, after the media reported that charcoal burning was a novel method of suicide, this method became increasingly common (Pan, et al., 2010). Media reports often romanticize death, resulting in more people killing themselves. Instead, traditional media outlets (such

²¹ Celebrating the 150th Birthday of Singapore's penal code law.nus.edu.sg/about_us/news/2010/newsPenalCodeSymp osium.pdf (accessed 8/12/2011).

²² M. Toh, (2008). *When all hope is lost*

http://www.asiaone.com/Health/News/Story/A1Story2008 0811-81770.html (accessed 8/12/2011).

²³ See footnote 21.

²⁴ Staff, (2008). Woman arrested for attempted suicide at Benjamin Sheares Bridge.

http://www.mummysg.com/forums/f65/woman-arrested-

attempted-suicide-benjamin-sheares-bridge-3522/ (accessed 8/12/2011).

²⁵ see footnote 21.

as newspapers) and new media outlets (such as the Internet) can disseminate information about suicidal behavior and its prevention.

Prevention services already exist in many countries, such as the Samaritan-sponsored telephone suicide prevention services,²⁶ and information on these and other suicide prevention services should be disseminated to the general public. Efforts to restrict access to lethal methods for suicide should also be implemented, such as fencing in places from which people jump to their death and restricting access to poisons such as pesticides (Lester, 2009).

India

India has already begun widespread studies on suicide (Vijaykumar, 2010). From 1958 to 2009, 54 articles on suicide were published in the *Indian Journal of Psychiatry*. These articles have studied the incidence and prevalence of suicide, risk factors for suicide, suicides in specific communities, and suicide prevention strategies.

Taking a localized approach to prevention could be a problem for India. This is because there are many rural communities in India where the ability to obtain funding and find educated individuals to spread awareness may be problematic. India may not have the resources available at this point in time to accommodate all of the small rural villages, but it can certainly strive to do so. Perhaps this can be made possible with the help of the World Health Organization, which has already taken interest in helping India decriminalize suicide (Vijaykumar, 2010).

India is aware that ingestion of toxic chemicals is a common method for committing suicide (Vijaykumar, 2010) and that there is a need to control the availability of toxic chemicals. India has considered the methods employed in Sri Lanka to decrease ingestion suicides. These methods including encouraging organic farming, reducing the level of toxicity of pesticides, providing compounds that cannot be readily absorbed in humans, and adding emetics and other agents to make the liquids repulsive.²⁶ However, progress has been slow (Vasavi, 2010).

Discouraging the Indian media from publicizing suicide will most likely not be a difficult task. The Indian government is aware of the problem that the media presents since wide exposure of certain suicides have led to recognizable suicide clusters. The Indian media tends to glamorize suicide, which provokes copycat suicides. This phenomenon has occurred on many occasions, but especially after the death of a celebrity. This is a serious problem in India where film stars wield enormous influence, especially over the young who often look up to them as role models.

Ghana

It appears that the decriminalization of suicide will be more difficult to achieve in Ghana than in India. Epidemiological studies are difficult because of the costs involved. Ghana does not have a free national health service and employs a so-called "cash and carry" system where one pays for health care only at the time that it is needed (Avevor, 2007). As a result, some facilities have huge volumes of patients, and there is inadequate training of health care workers in the assessment and treatment of self-harm. In addition, most physicians are underpaid, and Ghana has difficulty finding qualified individuals who are willing to spend the time and money to invest in researching suicide.

In order to take a localized approach to increasing awareness, Ghana will need continued help from NGOs and other non-profit agencies. The Network for Anti-Suicide and Crisis International (NACI) and IASP have been trying to spread awareness in Ghana about suicide prevention for years.²⁷ The NACI has called on the Ghanaian Legislature to repeal the suicide law, and the organization will continue to assist in local awareness and prevention. Likewise, the IASP believes that suicide prevention is one of the most urgent social issues facing Ghana and has urged that it should be given greater priority.

There has been little work done to reduce the use of pesticides and other farming agents for suicide. Since only citizens in southern Ghana use poisons to any great extent for suicide,²⁸ Ghana may chose to concentrate its prevention resources elsewhere. Finally, the role of the media in suicide contagion seems to be quite limited in Ghana.

Singapore

Singapore has already supported sound epidemiological studies of suicide, and so research is quite advanced (Chia & Chia, 2008). However, the population in Singapore has diverse social, cultural, and economic backgrounds, and there has been a

²⁶ A list of centers in these countries can be found at www.befrienders.org (accessed 8/12/2011).

²⁶ S. Mishra, (2006). *Suicide of farmers in Maharashtra.* mdmu.maharashtra.gov.in/pdf/FinalReport_SFM_IGIDR_26 Jan06.pdf (accessed 8/12/2011).

²⁷ Staff, *Ghana: 1,556 Suicides in 2008.*

http://allafrica.com/stories/200909141234.html (accessed 8/12/2011).

²⁸ See footnote 11.

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lack of research with the Indian and Malaysian populations. The Samaritan telephone crisis service in Singapore²⁹ has worked to increase the public's awareness of the country's suicide problem and provide telephone-based crisis intervention.

Reducing the availability of methods for suicide is difficult in Singapore since Singapore has a large number of high-rise buildings and jumping is one of the most popular methods for committing suicide (Lester, 1994). Furthermore, the use of medications for suicide is a common problem where psychiatric services are available and psychiatric medications are prescribed. Public health officials in Singapore are well aware of the role of the media in glamorizing suicide, but getting media to adhere to recommended guidelines is difficult.

Discussion

This paper has raised several issues which require further research in suicidology. We have good documentation of the role of the media and the values held by the citizens of countries in affecting the suicide rate (e.g., Stack, 2003; Stack & Kposowa, 2011), but we have very little research on the impact of laws on suicide. As noted above, Lester (2002) and a few others (e.g., Neeleman, 1996) have examined the impact of the decriminalization of suicide on suicide rates in a few nations, and Lester (1988) studied the association of state laws on suicidal behavior on the state suicide rates in the United States, but much more research is warranted on this important issue. In particular the role of laws, the media and cultural values on barriers to providing services for suicide prevention and on the willingness of suicidal individuals to seek help has not been studied, either in Western nations where most suicide research is conducted or in other nations.

By employing and customizing these methods for social change, India, Ghana, and Singapore can begin to move toward decriminalizing suicide. As this note has argued, the law criminalizing suicide does not further any of the three theories of criminal punishment - deterrence, reformation, and retribution.

India, Ghana and Singapore can no longer justify the reasons for continuing to enforce the criminalization of suicide. Each country's creation of the law began with British colonization, but the United Kingdom itself has decriminalized suicide. Today, many countries recognize that those who are suicidal require psychiatric services, social support and compassion, rather than handcuffs or a jail cell. Change may occur soon in India and Singapore, but will likely face problems in Ghana. Ghana lacks specific resources (which, at the present time, only NGOs can provide) and has a diverse population of many ethnicities. Because tactics are successful in one country does not mean that these tactics will be successful in other countries. Customization is necessary to modify tactics taking into account cultural and subcultural differences.

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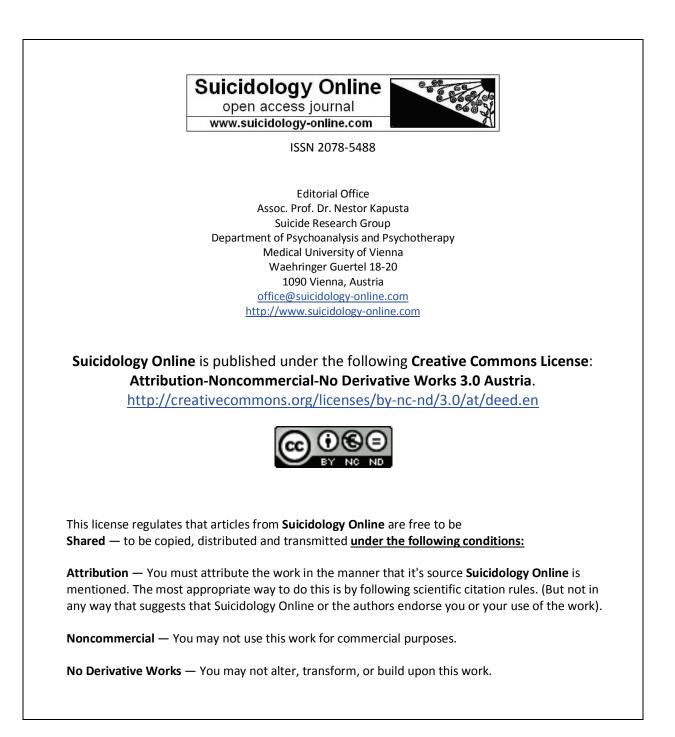
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²⁹ www.samaritans.org.sg

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Essay An Essay on Loss of Self versus Escape from Self in Suicide: Illustrative Cases from Diaries left by those who died by Suicide

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Abstract: Michael Chandler (1994) has described how suicide can result from a loss of a sense of self, while Roy Baumeister (1990) has described how suicide can be an attempt to escape from the self. Their published theories are presented in a very abstract manner, and the present essay presents examples from two individuals who died by suicide who expressed these themes in their diaries. Loss of a sense of self is illustrated by the diary of an 18-year-old, and escape from self is illustrated by the diary of a professor, both of whom died by suicide.

Keywords: Loss of Self, Suicide, Case Study

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It is difficult to understand why individuals take their own life. There are risk factors and warning signs, but none of these appear to be necessary or sufficient conditions for suicide to occur. In an effort to *understand* suicide rather than *explain* it, I have been fortunate to obtain the diaries of individuals who have died by suicide. For example, in one case, I recruited colleagues to read the diary of a young woman who died by suicide and to present their insights gained from the diary (Lester, 2004). I have found that diaries provide a rich source of

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Distinguished Professor of Psychology The Richard Stockton College of New Jersey Galloway, NJ 08205-9441 USA Tel: +1 609-652-4254 Email: David.Lester@stockton.edu information about the person that goes far beyond the brief suicide notes that some leave.

The present essay was stimulated by two competing ideas, namely that suicide can result from a loss of self or as an escape from the self, and I realized that two of the diaries in my possession illustrated these two themes. The articles (by Michael Chandler [1994] and by Roy Baumeister [1990]) describing these two themes present the ideas in a very abstract manner, and the reader is left wondering how the themes manifest themselves in suicidal people. The following cases provide concrete examples of these abstract ideas.

Loss of Self

In a series of essays, Chandler has proposed that suicide, especially in adolescents, can occur as a result of the loss of self (Chandler, 1994; Ball & Chandler, 1989; Chandler & Proulx, 2006). At the most abstract level, Chandler noted that, when selforganizing systems try to restructure themselves, typically as an upgrade to a higher and more differentiated level or organization, there can be a system failure. The individuals find themselves bereft of their previous construction of their self as persistent and continuous through time. They lose ownership of their past and any commitment to their own future. At that point, self-destructive behavior loses personal significance and becomes more available as a solution to current problems. If one is stripped of a persistent sense of identity, then one has no investment in one's future well-being.

Chandler noted two tasks involved in achieving a stable sense to selfhood. First, from a cross-sectional perspective, one task is to understanding how the different competing facets of oneself that are often in conflict, are part of a "unified self." Second, the sequential dimension requires that one view the current self as a development of previous selves so that one has a sense of continuity over time.

Chandler described five possibilities:

- 1. For the pre-adolescent, the self is viewed as a figural collection of mosaic of parts, and change is discounted. The events in one life are seen as isolated, and the person turns a blind eye to change.
- 2. For the 12-16 year-old, the self is viewed a multifaceted topologic structure, and change is denied. There may be a good side and a bad side to the individual, or a shy side and a more forward side, but any conflict here is denied.
- 3. Later, the person adopts the view that there is an essential unchanging core to the self, and change is trivialized or finessed. However, this core self may be viewed as unknowable and comes to be treated as a "kind of indwelling spirit or ghost in the machine" (p. 382).
- 4. Then, functional and narrative strategies stitch together the multiple episodes of one's life (p. 382). In this functional strategy, the individual realizes that earlier events caused the present state. In the narrative strategy, the person rereads and re-edits the past in the light of present circumstances. Both of these provide a sense of continuity for the self over time.
- 5. The self is regarded as a theoretical construct like the center of gravity. One's self is an autobiographical story in which one is the actor.

There are three problems that can arise in this development. (i) Movement from one stage to the next can be delayed or the person can become

fixated at one stage. (ii) Regression from a later stage to an earlier stage can occur. (iii) The person may be "thrown into a complete structural tail spin, or otherwise [suffer] a kind of total systems "crash" that left them without any kind of workable means for preserving a sense of identity in the face of change" (p. 383-384).

Suicide becomes an option, according to Chandler, when individuals have lost a sense of connectedness to their own futures. In this state and when confronted with hardships that make life seem intolerable, suicide becomes a possibility.

In a study of 40 hospitalized adolescent psychiatric patients and 41 non-patient controls, Chandler found that all of the controls functioned with one of the five levels of self-continuity described above, and none had no sense of self-continuity.¹ In contrast, 13% of the psychiatric patients at low risk of suicide had no sense of self-continuity and 82% of those at high risk of suicide had no sense of continuity.

Chandler did not provide a case study of suicide in this state of mind. The following case is based on the diary of a young man, 18 years old, who died by suicide.² Alan had a history of depression, starting when he was twelve years old. In high school, he used drugs and he engaged in casual sex. He had a network of friends who had a similar life style. In the days before he died, there were two stressors in his life. An attempt to move out from his parents' home into an apartment looked increasingly unlikely, and he was anticipating problems from a suspected burglary that he may have been involved in. Alan wrote a brief journal in the last five months of his life, with seven entries. The following are abstracts that illustrate his feeling of loss of self.

4-27

Well, since I know I'll forget my whole existence in a year, I will give a brief update on my life at this point in time. My life is a haze of pot smoke, fights with my parents, school, and some crazy things I've been up to. Happy one day, despairing the next. I'm high 90% of the time I'm awake. Now including ... I hate a lot, I love a lot, I'm suicidal. I'm happy. I'm fighting myself. I can't think clearly.

4-30

My life seems like the lyrics to a DMX song. "I'm slipping, I'm falling, I can't get up, get me back on

¹ This was assessed using structured interviews concerning how fictional characters went on being themselves despite dramatic changes in their lives, followed by questions about their own continuity in life.

² I am indebted to Alan's parents for sharing his diary with me and allowing me to use it in my scholarly work.

my feet so I can tear shit up."... I've been thinking a lot about my destiny. Is it even there? ... I've decided that I will take walks more now. To think. I never get to think. Things can be a lot easier and smoother if you give yourself time to think. I want to be able to think clearly. I want a clearer level of consciousness. Maybe one day. I need sleep. Sleep.

5-30

One month later. ... I'm depressed. Confused. Hopeless, maybe I'll end it all. Sometimes I wonder what keeps me alive.

8-12

Depression sets in, slowly, subtle fog that creeps up when I already cannot see, wraps around me, constricts, consumes, leaves me bare. I almost lost my job. I still cannot get my act together ... Not enough of me exists or works right for me to rely on myself completely ... I am growing my hair out. I think long hair means something. It conveys depth of soul. I took a walk tonight in the bad air and the darkness and I looked all around me. North, East, South, Southwest to where my past life was, west. And I see the trees silhouette against the gray and blue night sky, black twisted groping masses just existing. And I thought, what is all this? I have - yet to find the answer, Rain, RAIN!!! Wash me down! Take me with you! Let me drown. My body and mind desire rest so why do I live? WHY THE FUCK DO I LIVE? The force that keeps me alive will soon seduce me. Separate me, make me live joyously, only to be brought together. Brought down again and revealed ... I would like to change this distress. End this slow, changing madness Kill this pressing, living pain, this returning deadly insight. Or do I. Can I. Will I. Not now though.

8-23

The latest big thing has been the apt. Instead of going in - on it with Sara; I'm going in on it with TK ... Can't wait. So many uncertainties though. Money is our main problem. But as of now we seem to have it covered. Will all these major changes make me a different person?

9-26

I am writing this to clear some things up and possibly make some things easier. I have decided to kill myself. My life has led to a dead end. I can only be tied to the mast for so long, and instead of ending, the storm has just gotten worse. I had a lot to look forward to, but what I have or had to dread was far, far more. There is no one to blame, because this destructive element that I possess has been with me and growing since the beginning of my existence. ... Now it's four days before the 3rd and last deadline I have for moving out of my parent's house. And I will accomplish this and meet the deadline. But I am scared. I am scared to leave and I am not sure that I have the strength of mind and body to do this. I don't know what's happening to me. Except that there is no other option.

There is a lack of temporal continuity and competing subselves (Lester, 2010). *Happy one day, despairing the next ... I'm fighting myself.* There is a sense that his existence is fragile. *I'm slipping, I'm falling, I can't get up, get me back on my feet so I can tear shit up ... Not enough of me exists or works right for me to rely on myself completely.* There is doubt about an existence in the future. *I've been thinking a lot about my destiny. Is it even there?* There is a search to be a new person. *Will all these major changes make me a different person?*

Chandler noted that this loss of self can arise as an individual moves from one stage to another in the search for selfhood and when, at the same time, they are facing stressors. Clearly there are other suicidal risk factors here, including depression, hopelessness, and psychological pain (psychache [Shneidman, 1996]), but Alan illustrates the role of a loss of self as proposed by Chandler.

Escape from Self

The proposal that some suicides engage in self-destructive behavior to escape from their self was formulated most clearly by Baumeister (1990). Baumeister noted that the idea of suicide as an escape had been formulated by others. Baechler (1979) proposed a taxonomy of suicide types which included flight-escape as one type. Indeed, we might note that, many years earlier, Menninger (1938) proposed escape ("to die") as one of the three motivations for suicide.³ Reynolds and Berman (1995) examined ten typologies that had been proposed for suicide and had judges classify 404 suicides into these typologies. Twenty-eight percent fell into Menninger's to die type and 64% into Baechler's escapist type. Reynolds and Berman carried out a cluster analysis to see how many clusters of suicide types could be identifies, and they found five. The escape cluster included 90 of the 404 cases (22%). This cluster included Menninger's (1938) wish to die, Henderson and Williams's (1978) avoidance factor, Baechler's (1979) escapist type, Shneidman's (1968) harm avoidance type and Mintz's (1968) desire to escape from real or anticipated pain type.

³ The others were to kill (anger) and to be killed (depression).

Baumeister proposed a formal description of this type, providing six main steps.

- 1. There is a severe experience that current outcomes fall below the standards one has set for oneself (realistic or not).
- 2. This setback is attributed to one's own failure so that one blames oneself.
- An aversive state of self-awareness, seeing oneself as inadequate, incompetent, unattractive or guilty.
- 4. Negative emotions develop from this awareness.
- 5. The person tries to escape, unsuccessfully, from meaningful thought into a relatively numb state of cognitive deconstruction.
- 6. Inhibitions are reduced increasing the ability to engage in suicidal behavior.

There are several cognitive-affective processes that can create a state of mind from which people desire to escape, including perfectionism and shame. The following case is a professor, newly hired by a good university in the mid-west in the 1930s. He suffered from chronic anxiety and began psychoanalytic psychotherapy. Unfortunately, this led to the conviction that he was recapitulating his Oedipal complex (competing with his brother for the love of his mother) with his wife (competing with his son for the love of his wife) and with his academic department (competing for the admiration of the department chairperson with his fellow faculty members). This was a frequent obsession in his diary.

In other words, I was never mother-weaned. I am fixated at an early stage of development. And I continue to react in infantile ways based on infantile emotions ... I don't want to, but I am going to force myself to say that today I felt ugly and dirty and ashamed. Recognizing, or beginning to recognize my incest (I can't even write it right) tendencies brings down on my Ego the Super-ego wrath (i.e., feelings of dirtiness, filth, scumminess, unworthiness...)

... I can never really please her [his wife] really, that she sneers at me behind my back, that she views me as a feminine and weak and helpless character, that she laughs when I fail, and laughs when I succeed because she thinks I'm kidding about my successes, that "again" she tolerates me, that she is "putting up" with me 'til something better comes along, that I'm no good really and I can't prove to her (or anyone else) that I am, that I'm a poor schnook in her eyes, that I'm to be pitied ... Equally important to understanding his mental state was his conviction that he was a fraud and did not deserve any of the accolades that he received. He expected, at any moment, to be exposed as an incompetent – by his students and by those who listened to his presentations at conferences. When he gives a talk at a conference that is received well by his audience, he is reassured, but only temporarily.

This experience has left me with less of the feeling that I am a useless cog in society, that I don't count, that no one cares what I do, that my actions are fruitless, that I'm stupid and incapable, that I should have entered another profession, that my case is hopeless... that I'm not a blot on the societal world, a misfit, a cancer, a sponger, a misnomer, etc... If you tell me in whatever way that I am not worthless, you are fooling me – you are kidding – you don't really mean it.

... I was brought to [the university] as a joke ... A great joke, he's nothing but a small town jerk. And it's time he found it out.

Paranoid distrust of his wife and his colleagues often appears in his thinking.

... she wants intercourse, she wants me to kowtow, to take advantage of me, so that she can laugh behind my back at my ineptitude ... And, best of all, she wants to humiliate me, to make me appear ridiculous ... And so I'll have to be circumspect and very careful – else ... she will report my ludicrous behavior to "him" – others – and they will have gay sport over it.

In the final entry, he reports that he is still having panic attacks and that he has a foreboding that disaster is just around the corner. He is afraid of his wife and his colleagues. He is spending hours in bed, smoking, and drinking. He mentions that he is on his fourth quart at the time of writing this entry. He looks at his hands, and the last words in his diary are:

They are currently non-productive. This is just about as discouraging to me as my "idea" malproductions! Ambition is present – with no real outlet. Please give me, guide me to the outlet!!!

He killed himself six weeks later.

His diary expresses powerfully the psychological torment he was experiencing, almost continually throughout the 76 entries spread over the five years of the diary. Psychotherapy and, eventually, medication did little if anything to ameliorate this torment. He experienced feelings of



dirtiness, filth, scumminess, unworthiness and viewed himself as a *misfit, a cancer, a sponger*. There was nothing about his self that he could admire or even like. Suicide provided an escape from this self. As with Alan, his psychache (Shneidman, 1996) was intense.

Comment

Theories of suicide are typically phrased in abstract terms, and the interpretation of the motives of individual cases often relies on the personal opinions of the clinician. It is rare to find diaries left by those who died by suicide, but these diaries enable us to see the individuals in their own eyes. What is going through their minds as they get closer to the point at which they will take their own lives? The two diaries that are the basis for the present essay illustrate the role that the self can play in the decision to die by suicide. Michael Chandler focused on the loss of self in adolescents while Roy Baumeister focused on the desire to escape from the self. Although a complete understanding of the two individuals presented here requires a more complex analysis than the presence of single themes, their diaries illustrate the role that loss of self and escape from self played in their decisions.

An argument could be made that Alan, the 18-year-old discussed as illustrating loss of self, might also have chosen to die by suicide to escape from a painful self-awareness. Motives for suicide may not always (or even usually) be one versus another. There may be several motives involved. For example, as noted above, Menninger (1938) described three motives for suicide: (i) to die (escape), (ii) to kill (anger directed outwards), and (iii) to be killed (depression, guilt and self-punishment). Studies of suicide notes typically find two or more of these motives in any single note. Thus, Alan's suicide may be construed in more than one way. However, Alan clearly shows a loss of a sense of self as proposed by Chandler.

A study such as this has the limitation of all case studies in that the individuals may not be representative of suicides in general or even a subgroup of suicidal individuals. Samples of suicide diaries are much more difficult to collect than, for example, suicide notes and psychological autopsies of those who have died by suicide. I have collected only three unpublished diaries and four published diaries so far in my research. In contrast, I have published analyses of a sample of 261 suicide notes. However, analyses of diaries may provide hypothesis for future quantitative research and, as argued here, may illustrate the ideas proposed in abstract theories. If the collection of diaries produces a sufficient number, it may become possible to apply historiometric techniques of analysis as Simonton has done for the study of geniuses (Simonton, 1984).

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Essay

Those who jumped from the Twin Towers on 9/11: Suicides or not?

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Abstract: On September 11, 2001, after the attack on the World Trade Center in New York City, some 200 people jumped from the upper floors of the towers to their death. This essay considers whether any were suicides and how we might explore the states of mind of those who jumped.

Keywords: September 11th, 9/11, Terror, World Trade Center,

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On September 11, 2001, terrorists flew two hijacked airplanes into the World Trade Center (WTC) in New York City. The two towers eventually collapsed. As of August 16, 2002, 2,726 death certificates had been filed related to the attack (Schwartz & Berenson, 2002). Of these, 2,713 died on September 11, and 13 died later; 2,103 (77%) were male and 623 female; the median age was 39, range 2-85. However, it is estimated that 2,819 people died in these attacks, a number which includes passengers on the airplanes, people in the towers, and people on the ground, but not including the 10 terrorists. All the deaths were classified as homicides by the medical examiner. Leonard (2011) noted that the Medical Examiner's office describes these individuals as *fallers* rather than *jumpers*.

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Among those deaths were some by suicide - those who jumped from the WTC and these deaths in particular raise interesting issues for those of us who study suicide. This essay will discuss these issues. The first issue concerns whether we should even study these deaths. As Flynn and Dwyer (2004) asked, would studying these deaths simply result in more pain to those who were traumatized by this attack? Is asking questions mere morbid curiosity? Yet, on the other hand, Leonard (2011) labeled these deaths as "the 9/11 victims America wants to forget." Air-brushing these deaths out of our memory is a disservice to our commitment to scientific inquiry. Leonard suggested that the avoidance of discussing these individuals is because Americans want to focus on patriotism and courage, and those who chose to jump do not epitomize this. Furthermore, many in America consider suicide to be a sin, a shameful act that will condemn you to Hell.

This dilemma is epitomized by the photograph taken by Richard Drew that was

published that day of a man falling vertically, one knee bent, with the striped pattern of the towers in the background. Publication of this picture, as well as live video of the falling bodies, aroused such outrage in America that the live video was stopped and the picture removed from newspaper websites, leaving it only available in other countries and in the unauthorized Internet. Yet the sight of these falling bodies saved lives. Those in the south tower saw the people falling from the north tower, and the sight of the falling people propelled them to flee even before the second airplane hit their building.

The Numbers

Rosenthal (2013) has provided data for the attacks:

WTC1

Struck at 8:46 a.m. between floors 93 and 99 1,355 civilians on floors 92-110 had no means of escape; all perished.

7,545 people below floor 92 began to evacuate; all but 107 escaped.

WTC1 Collapsed at 10: 28 a.m.

WTC2

Struck at 9:02 a.m. between floors 77 and 85 At time of impact, 3,200 of the 8,600 occupants (37%) had already evacuated the building.

WTC2 collapsed at 9:59 a.m.

By 9:59 a.m. 8,000 had evacuated the building.

4,800 were below the impact floors, and all but 11 had evacuated.

637 people were at or above the impact floors (77 to 110); 18 escaped, 619 perished.

How many jumped? The *New York Times* conservatively estimated 50 and *USA Today* 200. The official report counted those caught by cameras - 104 individuals. All but three jumped from the first tower that was hit by a plane (WTC1) (Leonard, 2011). The first jump was recorded at 8:51 a.m., four minutes after the airplane hit WTC1 and was from the 93^{rd} floor.

The Falling Man

Let me begin this essay with Richard Drew's picture. Drew's picture has become one of the enduring images of 9/11. Commentators have argued whether it is iconic (Kroes, 2011) or an existential symbol (Orvell, 2011), but Kroes suggested that the picture was like the flashbulb memories that we often acquire from sights that we have personally seen. Kroes noted that other artists have used that image as the stimulus for their creations, such as Don DeLillo's (2007) novel Falling Man, Art Spiegleman's (2004) In the Shadow of the Towers and Eric Fischi's bronze sculpture called Tumbling Woman which was removed after a week from the Rockefeller Center following protest and bomb threats.

Drew's picture is, in fact, atypical. His falling man seems calm, poised, in control, as if he is diving like a swimmer off the high board. It was not so. Drew took a sequence of photographs of him, and in the others he is like the other jumpers, flailing, twisting and turning.¹ Their shoes fly off, their clothes are ripped away, and those who tried to use drapes and table-cloths as parachutes have them torn out of their hands. One woman was observed modestly holding down her skirt for a brief period of time.

Why were the videos of people falling and this picture censored? Were the images too gruesome and too confrontational, or was it to protect the dignity of the jumpers and minimize the pain of the families of the jumpers? Although there is merit in the latter explanation, the horror of the imagination of those who viewed the pictures and videos is possibly the reason for the censorship in America. At

¹ There have been attempts to identify the man in Drew's picture, so far without a conclusive identification.

the scene, however, the trauma experienced by those who saw the twin towers collapse is outweighed by the trauma of those next to the towers as the bodies fell.

...the loud thud of bodies hitting the ground – "it was raining bodies," as one firefighter wailed in shock once he was safely back at his station (Kroes, p. 4).

In videos of the scene, voices can be heard screaming "My God, Oh, .my God." The fallers were silent, but those watching them screamed. Leonard (2011) has described the falls. The fall took about ten seconds, and the velocity perhaps 125 mph, but it could reach as high as 200 mph. One hit a fireman and killed him. Leonard says that "their bodies were not so much broken as obliterated." One fire-fighter he talked to told him that she and others could not bear to watch. They turned away and faced a wall, but they could still hear the awful noise.

Kroes and Orvell contrasted the censorship in America of Drew's photograph with the lack of censorship of Eddie Adams's photograph of Nguyen Ngoc Loan firing a pistol shot into the head of a Vietcong operative (Nguyen Van Lem) and Nick Ut's photograph of a young girl running naked after a napalm attack, both taken during the Vietnam War. But those photographs are of murder, not suicide, they come from a war that was very unpopular in America, and they are of Vietnamese in Vietnam, not Americans in America. Drew's photograph of the falling man is much closer to home.

Are They Suicides?

It can be argued, of course, that these jumpers were not suicides. They were trying to survive. All of the jumpers were at or above the level at which the airplanes hit the towers. Their fate was to die in the inferno that was about to engulf them. We know now that some chose certain death by jumping rather than certain death by staying, but was suicide their intent? Those who tried to fashion parachutes out of cloth available were obviously trying to survive the jump. Others were perhaps struggling to breathe fresh air.

On the other hand, a death by fire is perhaps a manner of death we fear most. Many of us have experienced minor burns, and the pain is excruciating. The temperature in the burning towers is estimated to have reached 1,000 degrees Centigrade. The anticipation of major burns is, to me, unimaginable. Might some have jumped, knowing they would die as a result, in order to choose a less painful method death, just as some choose to take a lethal overdose rather than die from a painful, terminal illness.

Firefighters told Leonard (2011) that people rarely jump from burning buildings until they have exhausted all other options. They also told Leonard that some individuals may have been blown out of the building while others were pushed as everyone rushed toward the windows desperate for cool fresh air.

Leonard noted that some fell within seconds of one another, nine in six seconds from five adjacent windows in one case and two simultaneously from the same window in another. This suggests a role of imitation. At least four individuals were trying to climb from one window to another and lost their grip. These individuals were perhaps trying to escape, and their deaths may more accurately be classified as accidental. Leonard interviewed people in WTC2 who watched some of those who jumped. Some seemed to be blinded by smoke and unable to breathe. They would walk to the edge and fall out. Some held hands as they jumped (Flynn & Dwyer, 2004). Many hit the ground, but a few crashed onto the awning covering the circular VIP driveway, and 30 to 40 fell of the roof of the 22-floor Marriott Hotel (Cauchon & Moore, 2002). Many of those

who evacuated the towers had to walk past the shattered bodies. Eventually, in order to protect the evacuees, firefighters and police led them into an underground shopping center and under the plaza where the bodies were falling.

The transcripts of many of the calls made those in the towers before they died have been stored but, when released and made public, the statements by those about to die have been redacted and only the person they were calling (typically the dispatcher) available. Three partial transcripts from people in the tower are available (Rosenthal, 2013) because they were used in the trial of Moussaoui in 2006 to demonstrate the suffering of the victims. However, these transcripts do not go to the end of the call. For example, one transcript covers only the first five minutes of a 15minute call.

The Survivors

Some survivors were outraged at the suggestion that their family member might have jumped from the building. For example, when Drew's Falling Man was thought to have been identified, his family rejected the idea, saying that jumping would have been a betrayal. They were sure that he would have tried to come home to them, and jumping would have made that impossible. People commenting on the Internet sometimes reinforced this view by saying that those who jumped, would go to Hell (Junod, 2009). Eventually, the search for the individual in Drew's photograph turned elsewhere, but his identify remains unknown.

Others were not as upset. One man whose wife called him from the burning tower told him how scared she was. Her remains were found in the street. Her husband is not convinced that she jumped, but he is angry at those who think that jumping was a cop-out. That his wife might have jumped consoles her husband because she exercised some control over her life and death (Leonard, 2011). Another man whose fiancé might have jumped found photographs in Richard Drew's collection that he thought was her. "It made me feel she didn't suffer and that she chose death on her terms rather than letting them burn her up" (Leonard, 2011). He did not have a body to bury, but the photograph helped him move on.

Discussion

The informal censorship of the images of those who jumped from the World Trade Center towers and the outrage that the images aroused in Americans toward those filming and displaying the images is interesting. Eric Steel captured people jumping to their death from the Golden Gate Bridge in his movie The Bridge released in 2006. There was little outcry about his movie, but those suicides were personal tragedies and did not occur in the context of an attack on America. The magnitude of the slaughter at the World Trade Center was vast compared to twenty suicides each year from the Golden Gate Bridge. Furthermore, America had never been attacked by an enemy for over a hundred years. The shock of the attack and the fear that it generated in Americans was great. Removing the images of the attack helped Americans avoid confronting the reality of the attack. Yet images of the towers collapsing have not been as completely removed as those of the falling people.

At some point, a study of the complete calls made from those in the towers would be of great interest, both caller and dispatcher statements. How do people confront impending death, and how many had each of the different coping styles? Were some of them suicides, similar to those of people with terminal illnesses? Should we call them suicides? We label the dying individuals who choose to die by suicide "rational suicides," but those choices



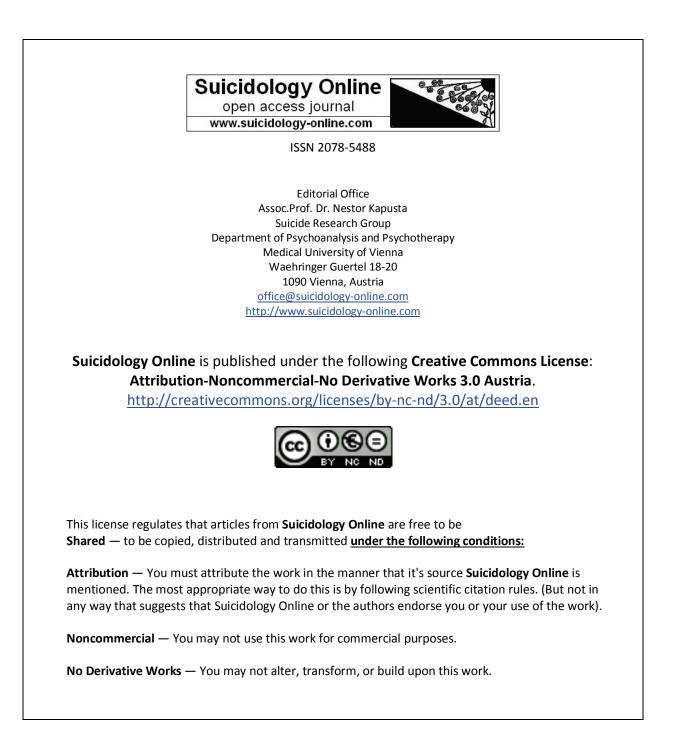
are made over a long period of deliberation. Should we apply the same label to impulsive decisions made to acute impending-death crises?

But let not air-brush these people from our memory.

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Essay Oppression and Suicide David Lester [⊠]

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Abstract: Of the four types of suicide described by Durkheim in his classic book on suicide, suicidologists have neglected fatalistic suicide, which Durkheim himself relegated to a single footnote in his book. This essay explores this neglected type of suicide. It discusses the role of oppression in suicide, ranging from the self-immolation of Tibetan monks protesting the oppression of Tibetans by China, suicides in slaves in early America, suicide in oppressed women around the world, suicide in homosexuals and other stigmatized groups (such as Gypsies), to oppression by peers and family members. Suicide prevention strategies should include political action, freeing individuals and groups from over-regulation and helping empower the oppressed.

Keywords: Suicide, oppression

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In Durkheim's (1897) classic sociological theory of suicide, fatalistic suicide is relegated to a single footnote, where he defines it as the type of suicide committed by those overly regulated by society, that is, "those whose futures are pitilessly blocked and passions violently choked by oppressive discipline" (Durkheim, 1951, p. 276). Later, Johnson (1965) claimed that fatalistic suicide was so rare in modern society that it could be ignored.

This paper is about that footnote.

Fatalistic Suicide

Durkheim argued that the social suicide rate was determined by two broad social characteristics: the degree of social integration (that is, the extent to which the members of the society are bound together in social networks) and the degree of social

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Distinguished Professor of Psychology The Richard Stockton College of New Jersey 101 Vera King Farris Drive Galloway, NJ 08205-9441 USA Email lesterd@stockton.edu regulation (that is, the degree to which the emotions, desires and behaviors of people are governed by the norms and customs of the society). Suicide rates will be higher when the level of social integration is too high (leading to altruistic suicide) or too low (leading to egoistic suicide) and when the level of social regulation is too high (leading to fatalistic suicide) or too low (leading to nomic suicide).

Van Hoesel (1983) gave the following an example of fatalistic suicide. A 27-year-old black male was found hanging from the top of his cell door in a state penitentiary. A week before his death he had received a 40-year sentence for his involvement in several armed robberies. According to Van Hoesel, this man was in a situation where he had very little free choice. He was "choked by oppressive discipline" and had no freedom.

The word fatalistic indicates that people are overwhelmed by their fate and suggests, therefore, either that a socially-determined fate requires their suicide or that suicide is an escape from too severe social regulation. The first type might be illustrated by the mass suicides of Americans in Guyana who were

followers of Jim Jones (Kilduff & Javers, 1979) while the second type might be illustrated by the Jews in Austria who killed themselves rather than be sent away by the Nazis to concentration camps (Kwiet, 1984).

Protest by Self-Immolation

Recently, Tibetan monks and lay people have protested the treatment of Tibetans and Tibet by the Chinese government with a spate, almost an epidemic, of self-immolations. The October 13th, 2012, issue of *The Economist* reported 54 selfimmolations in Tibet "since last year." The name of Jamphel Yeshi, who set fire to himself on March 26, 2012, and died in Delhi, India, to protest the persecution of Tibetans, may not be remembered, but the picture of his death, published worldwide, will live on in our memories.¹

Protesting tyranny has a long history, but modern protests begin with that of Thich Quang Duc, a Buddhist monk who set fire to himself in South Vietnam on June 11, 1963, at the age of 66, to protest the persecution of Buddhists by the President, Ngo Dinh Diem. Another notable protest self-immolation is that of Norman Morrison, 31 years old, on November 2, 1965, outside the Pentagon office of Robert McNamara (Secretary of Defense) to protest the Vietnam War. Morrison took his one-year old daughter, Emily, with him, and gave her to a bystander (or set her down) before he set fire to himself. Jan Palach, a 20 year-old Czech student, set fire to himself in Prague on January 16 1969, to protest the Soviet invasion of Czechoslovakia.

These self-immolations stirred the world but had no immediate impact. In contrast, the selfimmolation of Mohamed Bouazizi on December 17, 2010, in Ben Arous, a town in Tunisia, to protest his harassment by the local government as he tried to support himself as a vendor on the streets, had a tremendous impact. Protests began within hours, and the President of Tunisia, Ben Ali, fled on January 14, 2011, the first victory of the *Arab Spring*, which led people in many Arab nations to rise up and attempt to overthrow their governments, some successfully.

Park and Lester (2009) studied protest suicides by people in South Korea and found that they fell into two groups: workers protesting the repression of workers and their unions by companies, and students protesting the government's policies in cooperating with the United States in their confrontation with North Korea.² These acts were not impulsive since the suicides often wrote suicide notes several days in advance of their action. They showed a great deal of reflection and soul-searching, and the individuals did not appear to have psychiatric disorders. Park (2004) felt that these suicides were altruistic in nature since the people were trying to change the society.

It is the oppressed who protest in this way, of course – not the oppressors – and, if we wanted to stop these suicides, then we need to engage in their political struggles. The oppressors typically murder scores of people, but many of the oppressed also kill themselves. A few do so in a public manner as a protest, but many simply desire to escape the oppression.

Suicide in Slaves

The one example that Durkheim gave of fatalistic suicide was in slaves. The National Civil Rights Museum in Memphis, Tennessee, noted in the exhibit for 1619 that, "Many African Americans fought against bondage by stealing from their owners, escape, arson, even homicide. They broke tools, injured work animals, and pretended to be ill in the field or on the auction block. As a last resort, some committed suicide."

Lester (1998) explored suicide in slaves, and documented cases in those newly arrived and those on the plantations, and discovered examples of slaves committing suicide after being brutally punished by slave owners and after attempts at organized rebellion. Accurate data for the early years is, of course, impossible to obtain, but Lester found data from the 1850 United States Census from which he was able to calculate suicide rates for that year: whites 2.37 per 100,000 per year, slaves 0.72, and free slaves 1.15. However, Lester noted that slave owners often branded slaves who killed themselves as criminals, and they tried to convince slaves that committing suicide would mean that they would never be able to return home to Africa after death. Suicides by slaves were often covered up and labeled as accidents so as to prevent imitation by other slaves.

Suicide in the Concentration Camps

Lester (2005) endeavored to collect information on suicide in Jews in Germany and German-controlled Europe before and during the Second World War. There were mass suicides as the Germans, Austrians, and other national groups rounded up Jews in order to deport them to the concentration camps, but accurate counts are

¹ Many protesters around the world die by self-immolation, including those in Telangana in India agitating for an independent state (Anon, 2013) and, since the year 2000, in countries ranging from Algeria, Australia, Bulgaria, China, Ethiopia, Greece, Israel, Mauritania, Mexico, South Korea to the United Kingdom (en.wikipedia.org/wiki/List_of_political_self-immolations).

² These suicides used several other methods besides selfimmolation.

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impossible to obtain. For many years, however, it was always claimed that suicide was rare in the concentration camps (e.g., Bronisch, 1996), and commentators provided explanations for this seemingly odd "fact" (e.g., Lester, 1997).

Later, Krysinska and Lester (2002; Lester, 2005) were able to calculate the suicide rate in the Lodz ghetto in Poland from 1941-1944 when the ghetto was closed and the inmates sent to the extermination camps. The inmates carried out accurate counts and wrote the results in records which were buried and recovered after the war ended. The rate was 44.3 per 100,000 per year, much higher than the suicide rates prior to persecution of Jews. (Lester found an estimated suicide rate for Jews in Lodz in 1927 of 13.)

Lester (2005) used reports of inmates of the concentration camps to estimate suicide rates and reported rates as high as 25,000 per 100,000 per year. For example, in the extermination camp at Treblinka, with about 1,000 inmates, one survivor (Arad, 1987) noted that they found that *at least* one inmate had hung himself every morning when they awoke, and that suicide was a daily occurrence. At one suicide per day, the suicide rate is, therefore, 36,500 per 100,000 per year.

Lester concluded that when some survivors of the concentration camps concluded that suicide was rare, they were not using the word *rare* in the dictionary sense of the word. Rather they were saying that it was surprising that even more inmates did not commit suicide.

Suicide and the Cultural Oppression of Women

Suicides by women are often given explanations by men in their culture that provide a "rational" view of the acts. Here I will cast them as the results of oppression by the society and, more explicitly, by men, focusing on sati and female suicide bombers. Detailed case studies of such suicides are rare and not carried out by unbiased expert suicidologists. Therefore, this section relies on detailed discussions of two cases provided by journalists.

Sati in India

Sheth (1994) and Vijayakumar (2009) have both noted that suicide committed as a personal act motivated by emotions such as pride, frustration and anger is censured in Hinduism. In contrast, other forms of voluntary self-termination of life are not considered to be suicide and, therefore, not condemned. Self-sacrifice for the general good is admired, as is self-sacrifice to expiate sins (such as incest). Ascetics are allowed to choose death by voluntary starvation, committed deliberately and without passion. For example, *mahaprasthana* (great journey) involves the individual going on a continuous walk after giving up all attachments and possessions and subsisting only on air and water. *Sati* is also a form of suicide that permitted. As Weinberger-Thomas (1999) pointed out, *sati* refers to the woman who commits this act and signifies "a chaste and faithful virtuous wife (p. 20), but the term is typically used, erroneously, to refer to the act itself.

It should be noted that the sacrifice (voluntarily or otherwise) of survivors of a deceased individual was not uncommon in India and other countries in historical times. It was thought in many cultures that a deceased emperor or warrior would need to have the same kinds of possessions and services in the after-life, and so possessions were buried along with the deceased and, sometimes, servants were also sacrificed. Sati is one of the few cultural customs where a survivor of a low-ranking individual was expected to sacrifice herself.

Sati³, which means virtuous woman in Sanskrit, has a long history. Although best documented in India, it occurred in China, Mesopotamia, and Iran. It was practiced by kings, whose queens were expected to die with them. Rajput queens in India sometimes committed suicide by self-immolation even when their husbands were killed in battle far away. The first memorial to sati was found in Madhya Pradesh in India in 510 AD (Baig, 1988), but the earliest historical instance is of the wife of General Keteus who died in 316 B.C. (Vijayakumar, 2004). Sati is named after Sati, the consort of the god Shiva. Shiva and Sati's father (Daksha) had an argument, and Sati was so angry at her father that the fire of her anger destroyed her. Shiva retaliated by sending a monster to destroy Daksha's head but later relented and allowed Daksha to be fitted with a goat's head. The higher castes (Brahmans, Kshatriyas and Vaishyas) have interpreted this myth as indicating the way a widow should join her dead husband on his death - by immolating herself (Freed & Freed, 1989).

The Vedas, the most important of the Hindu texts, does not demand that women commit sati, although there is disagreement over one word. Some argue that it is the word for "go forth" while others argue that it is the word for "to the fire" (Yang, 1989). Most now think the Vedas encourages widows to get on with their lives and even remarry.⁴ The British banned sati in 1829 (Mehta, 1966), but about forty cases have been documented since independence in 1947, the majority in the region of Rajasthan (Weinberger-Thomas, 1999).

There are two types of sati. *Sahamaran*a (or sahagamana) is where the widow ascends the funeral pyre and is burnt along with the body of her dead

³ Sati is also spelled as suttee and sutty

⁴ Lower castes see marriage with the deceased husband's younger brother as quite acceptable (Weinberger-Thomas, 1999).

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husband. In *Anumarana* the widow commits suicide (usually on a funeral pyre, after the cremation of her husband (Yang, 1989), usually with his ashes or some memento of him, such as a piece of his clothing. Stein (1978) noted cases in the 18th and 19th Centuries in which women died on the funeral pyre of an important person, mothers died on a son's funeral pyre, and sisters died on their brother's funeral pyre. Weinberger-Thomas (1999) noted that pregnant women, women with infants, adulterous wives, prepubertal girls, women who were menstruating, women who had amenorrhea, and "disobedient" wives were not allowed to commit sati since they were considered to be impure at this stage.

A debate has raged over whether widows went voluntarily or were forced (at knife point, sometimes bound and gagged) or drugged. To prevent widows changing their minds and trying to escape from the fire, exits from the fire were sometimes blocked, and roofs of wood were designed to collapse on the widow's head (Stein, 1978). This debate continues today in discussions of modern cases of sati. Daly (1978) observed that Indian men sometimes married children under the age of ten, and Narasimhan (1994) noted that eyewitnesses in the 19th Century reported that child widows aged eight and ten were sometimes forced onto the funeral pyre, bound hand and foot if they tried to escape. Some widows were drugged with opium. On the other hand, some widows asked to be bound and to be thrown on the pyre to prevent them fleeing and escaping their duty (Vijayakumar, 2004).

One case has become extraordinarily famous, the sati of Roop Kanwar who committed sati in Deorala, Rajasthan, on September 4, 1987 (Ali, 1987). Thousands watched her sati, yet the "facts" of the case are far from clear (Hawley, 1994). Roop Kanwar was a well-educated 18 year-old woman from the Rajput caste who was married for only eight months. Her 24 year-old husband died from gastroenteritis, appendicitis or a suicidal overdose. He had recently failed an exam required for entry into medical school. Dressed in bridal finery, she was watched by a crowd of about 4,000 as she died (Narasimhan, 1994). Although the government tried to prevent a celebration of this, some 250,00 people came to the village for a glorification ceremony. Money (estimates were as high as \$250,000) was donated to build a temple in her memory. Roop Kanwar's brother-in-law and father-in-law were arrested but released without charges being filed. Roop Kanwar became a sati-mata, a deified woman with miraculous powers to grant favors (Narasimhan, 1994).

There were rumors that she was forced into sati and may have been drugged (Kumar, 1995). She was escorted to the pyre by young men carrying swords who might well have stabbed her had she tried to flee (Narasimhan, 1994). She may have fallen from the pyre and needed assistance in mounting it (Hawley, 1994). Observers saw her flail her hands in the air as the flames touched her (Narasimhan, 1994), but one official claimed that she was blessing the crowd by this action. Others claimed that she cried out to her father for help (Hawley, 1994). There were rumors that she had had been unfaithful (Hawley, 1994). As a result of this sati, Parilla (1999) noted that both women and men in Rajashan rallied to support the right to commit sati, while other groups fought to ban it (Kumar, 1995).⁶ Although there are other modern cases of sati, the case of Roop Kanwar has become the focus of much of the discussion. Hawley (1994) edited a book in which the only modern case discussed at length is that of Roop Kanwar.

There is an economic rationale for sati. Under the law of inheritance in Bengal (*dayabhaga*), widows inherit their husband's estate, over-ruling the claims of his relatives. Sati, therefore, keeps the man's assets in his family. Vijayakumar (2004) noted that sati is rare in Kerala where matriarchy prevails, unlike Bengal where wives are entitled to half of their husbands' property, leaving his relatives eager to be rid of them. Abraham (2005) noted that the women in Rajasthan (where sati has been common) are extremely subjugated. Their illiteracy rate is among the highest in India.

Women are oppressed throughout the world. As Johnson and Johnson (2001) have noted: *"Today, in every corner of the globe,* some women are denied basic human rights, beaten, raped, and killed by men" (p. 1051). It has been noted that women have particularly low status in India where female feticide (the selective abortion of female fetuses), female infanticide, murder, dowry murder and suicide are forces that decrease the female population relative to the male population (Freed & Freed, 1989)⁷. Freed and Freed quote a man in the village in which they stayed in 1958: "You have been here long enough to know that it is a small thing to kill a woman in an Indian village (pp. 144-145).

Dowry deaths are those of women within seven years of their marriage who are murdered or driven to suicide by harassment and torture by their husband and his family in an effort to extort an increased dowry. Mohanty, Sen and Sahu (2013)

⁶ The role of pressure is illustrated by the case of Gayatri in 1983 where the village elders refused to cremate her husband unless she agreed to become a sati. The police watched her death along with thousands on onlookers (Narasimhan, 1990).

⁵ A practice that in the West would be viewed as pedophilia.

⁷ Supplemented by maternal mortality as a result of unhygienic lying-in and postpartum conditions.



studied 140 women who were the victims of dowry deaths in India. They were aged between 18 and 26 (83%), childless (66%), illiterate (74%) and from rural regions (88%). The most common methods were hanging (31%), burning (30%) and poisoning (29%). The deaths were classified as suicide (57%) and murder (43%). Pridmore and Walter (2013) have documented suicides in Asia in women after a forced marriage.

In some countries, abandoned woman are social outcasts. In India, widows are treated very harshly. An article in The Economist (Anon, 2007) described 1,300 widows at an ashram in Vrindavan in Uttar Pradesh, who pray for three hours each day in return for a token which they can exchange for three rupees (seven cents) and a handful of uncooked lentils and rice. They are entitled to a state pension of \$3.70 a month and the food ration that is given to poor Indians, but only about one quarter of the widows receive these. The article noted that widows are "unwanted baggage." In the past they were encouraged to die on their husband's funeral pyre, and those who did not were forbidden to remarry. Today, the law gives them better protection, but remarriage is still discouraged. Two-fifths of the widows were married before they were twelve years old and a third were widowed by the age of 24. Those widows interviewed said that they preferred to live in the ashram than go home where their treatment would be even worse. In some places, widows are permitted only one meal a day, sometimes no fish (because fish are a symbol of fertility) and must shave their heads.

Daly (1978) has documented the oppression and gynocide of women throughout the centuries and across cultures, including sati, Chinese foot-binding, genital mutilation, witch burnings, and even She gynecological practices. noted several components to what she called these sado-rituals: (1) an obsession with female purity, (2) a total erasure of responsibility on the part of the men for the atrocities performed in these rituals, (3) the tendency of the gynocidal rituals to catch on and spread, (4) the use of women as scapegoats and token torturers (such as blaming mothers-in-law for the widows' suffering), (5) a compulsive orderliness, obsessive repetitiveness and fixation on minute details to divert attention from the horror, (6) behavior unacceptable in other contexts becoming acceptable and normative as a result of conditioning, and (7) legitimization of the ritual by "objective" scholarship, especially by stressing the role of cultural norms and customs in order to "understand" the ritual.

The Case of Roop Kanwar

What of Roop Kanwar, the case mentioned above, the 18-year-old widow of Mala Singh whose

sati on September 4, 1987, caused such a great debate in India? Only one journalist seems to have made an effort to find out some "facts" about the case. Mala Sen (2002), an Indian working in London, England, traveled on several occasions to India and, during her visits, became friends with Roop Kanwar's father-in-law, Sumer Singh. She also tracked down the first police officer to arrive at Deorala and who interviewed people in the village. What did she find out?⁸

The marriage had been arranged when Roop Kanwar was about five or six and Maal Singh was nine or ten. The contract was finalized in 1981, and they were married on January 17, 1987, in Jaipur. She was a city girl, and her father-in-law said that she was homesick in Deorala and so spent most of the marriage back in Jaipur with her parents. Her husband was studying for his exams at this time. The low caste servants in the village who were, therefore, afraid to talk of the sati for fear of upsetting their employers, did tell Mala Sen's taxi driver that there was crying and shouting in the house during the time Roop Kanwar returned to her in-laws a few days prior to Maal Singh's death.

When the police officer, Ram Rathi, arrived on the scene, only the remains of the pyre were left. He visited the village several times afterwards and spoke both to the rich and the poor in the village. He found out that Roop Kanwar had not loved her husband. In fact, she had a childhood sweetheart whom she was not allowed to marry⁹, and she had been having an affair with him after her marriage in her home town of Jaipur, to which her lover had moved from Ranchi. When her parents found out, they were horrified and ordered her to return to her husband. She had become pregnant as a result of affair, but hid this from her parents. On returning to her husband, she tried to persuade her husband that the child was his. However, their marriage had never been consummated because her husband was impotent and had "mental problems," as did his mother.¹⁰ Although he had a B.Sc. degree, Maal Singh was unemployed. Roop Kanwar had lived with her husband for only three weeks of their seven month marriage, a brief period after the marriage ceremony and a for a few days before his death. After Roop Kanwar came back to him, he tried to kill himself by swallowing a large quantity of fertilizer. His family tried to cover up his suicide attempt, and a doctor took him to a distant hospital where he died on

⁸ One element, modeling, seems to be ruled out. Roop Kanwar's father-in-law said that there were no previous satis in his or his daughter-in-law's family.

⁹ He was from a different caste

¹⁰ Her husband told Mala Sen that his wife suffered from depression.

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September 4, 1987.¹¹ His body was rushed back to Deorala for a quick cremation in order to prevent an autopsy.

The police officer was of the opinion that Roop Kanwar was "encouraged" to commit suicide. Although myths quickly grew surrounding her death (that her eyes glowed red and her body generated an immense heat as she walked to her death), the children in the village told Ram Rathi that she seemed unsteady on her feet, as if drunk or drugged, and stumbled several times on the way to the funeral pyre. She was surrounded by several youths armed with swords, and her eldest brother-in-law (who was fourteen years old) lit the funeral pyre.¹² Reports that she waved her arms as she burned and called out have been interpreted as agony and pain, but supporters of sati argue that it was joy being expressed.

Wives are thought in this region of India to be responsible for illnesses and events that befall their husbands. If the husband dies or is killed, then she is responsible. In this case, the wife had been unfaithful to her husband and conceived a child by another man. In many families, Roop Kanwar would have been murdered for these behaviors. Whereas there are occasional modern cases where the parents of the bride saved her from committing sati, Roop Kanwar's parents disapproved of her true love and had moved from Ranchi to Jaipur to put an end to the affair, to no avail. They, like her in-laws, celebrated her sati because now they were the parents of a new goddess and not simply business people who ran trucks between Ranchi and Jaipur.¹³

A Chechnyan Female Suicide Bomber: Zarema Muzhikhoyeva

There have been many suicide bombers in recent years, but they have rarely been studied intensively by psychologists. Journalists, on the whole, provide the only information about these individuals. For the men, journalists have focused on the training process but, for female suicide bombers, journalists have, on rare occasions, ferreted out and reported some of the details of their lives. The best such report is from Bullough (2010) – the case of Zarema Muzhikhoyeva - a potential suicide bomber, who lost the will to die and surrendered, deliberately botching her attempt to blow herself up at a café in Moscow in July, 2003.

According to articles in the *New York Times* (Myers, 2003, 2004), Zarema Muzhikhoyeva (aged 22) said that she had been recruited to terrorism out of shame and debt. Her husband had been murdered in a business dispute in one account and in a car accident in another account. She may have had an infant daughter. On the day of the bombing, she was given orange juice that made her dizzy and disoriented. The information given in article in the *New York Times* is limited and apparently false.

Bullough (2010) has written a book about the Caucasus region in Russia, and he uncovered details of the life of Zarema Muzhikhoyeva. According to Bullough, Zarema was 23 when she was sent to Moscow to blow herself up. Her mother abandoned her when she was ten months old, and her father died while working as a laborer in Siberia, seven years later. She lived with her father's parents. She had a loveless childhood, followed by a loveless marriage (in 1999) to a man who kidnapped her from her home, the tradition in Chechnya, and who was twenty years older then she was. She quickly became pregnant, but two months later her husband was shot, leaving her with his family whom she hardly knew. Burdened with this daughter-in-law, her inlaws gave her daughter to one of their other sons, and sent Zarema back to her grandparents, again a common practice in Chechnya.

Zarema visited her daughter from time to time, bringing toys and clothes, but her daughter called her adopted parents "Mommy" and "Daddy," and this broke her heart. She stole some jewelry from her grandmother and sold it with the plan of buying plane tickets and kidnapping her daughter. She reached the airport with her daughter, but she had left a note for her grandmother telling her about the plan, and her aunts stopped her at the airport. She was taken home, and her daughter was sent back to her adoptive parents.

Zarema was beaten by her grandparents, both for the theft and for bringing disgrace to the family. Her aunts told her that they wished she was dead. Eventually they refused even to acknowledge her. She felt completely worthless. She then volunteered to become a suicide bomber, thinking that to do so would obtain \$1,000 for her relatives, a way of paying back the debt from the theft. She was sent on one mission, but her nerve failed her. She lied about the reasons for her failure, but she felt more disgraced. Then she was sent on the mission to Moscow where she surrendered.

Lester (2008, 2010; Lester, et al., 2004), using reports from the Internet, suggested several factors that are common in female suicide bombers. First, it seems likely that the women have posttraumatic stress disorder after experiencing severe trauma. In war zones (Chechnya, Iraq and Palestine),

¹¹ After the sati, the doctor, Magan Singh, fled and was not found for many months. After he was found and charged, he was no longer allowed to practice medicine.

¹² Her father-in-law claimed to have been in a hospital many miles from Deorala after collapsing and becoming unconscious when his son, Mala Singh, was brought to Deorala.

¹³ Other reports say that Roop Kanwar's father was a school teacher.

all of the citizens have witnessed brutality and death from childhood on, not only at the hands of the dominant power's military, but also from their own ethnic group. For example, in Chechnya, the kidnapping and rape of women by fellow Chechnyans is common and tolerated by the women's family (Bullough, 2010). In Iraq, the Muslim militias often tortured and executed those fellow Iraqis whom they believed had cooperated with the American military.

Lester also noted the development of feelings of burdensomeness in some female suicide bombers. Divorced or thrown out by their husbands, they become a burden to their families who have to take them in, with little prospect of finding a new husband, especially if part of the reason for the divorce was a failure to bear children. Burdensomeness has been proposed as a common component in the decision to commit suicide in the theory of suicide proposed by Joiner (2005)

The result is that some women in these countries develop feelings of depression, hopelessness and purposelessness in life. Suicide is seen as a way of escape from this psychological pain, and dying as a martyr is not only an escape, but also as a way of transforming their image. The acts of martyrdom often make the female suicide bombers heroines in their community.

Discussion

Sati is often cast as a noble sacrifice by a loving wife who cannot bear to survive after the death of her husband. Suicide bombers are often portrayed as heroic individuals who sacrifice themselves for a political cause. I have endeavored to show that this is only a superficial façade for these cases of suicide. It is extremely hard to find detailed biographies of the women involved in these acts, and none by expert suicidologists. But the two examples discussed in this essay (which are based on the only detailed accounts available to date) clearly indicate that these women have been severely traumatized and see no other way out of their horrendous circumstances. Roop Kanwar had a choice of being murdered or of committing sati - which is really no choice at all, except that the latter served to transform her image in the community. Zarema Muzhikhoyeva was beaten by her family, had lost her husband and had her children taken away from her. Her life had become unbearable. She felt worthless and ashamed. She became a suicide bomber to escape the pain imposed upon her by her society and to redeem herself a little by earning a reward to pay her debts, hoping to change her image in her family.

We need to ignore the superficial descriptions and explanations of these acts presented in news reports and seek the real reasons for and causes of these acts by oppressed women. In these

societies, the vast majority of women do not commit sati or become suicide bombers. It is likely that the few who do engage in these behaviors are suffering from extreme oppression and enormous distress.

Driven to Suicide: Suicide and the McCarthy Hearings

A lawyer by training, Joseph McCarthy¹⁴ served in the Marine Corps during World War II and was elected from Wisconsin to the United States Senate in 1946. In 1950, he claimed that he had a list of communists who were employed in the State Department, the Voice of America, President Truman's administration and the Army. In 1954, he led a series of hearings in the Senate known as the Army-McCarthy hearings. He was never able to substantiate his claims, and late in 1954 the Senate voted to censure him. He died in 1957 at the age of 48 from hepatitis brought on by alcoholism. There are still admire McCarthy those who (e.g., www.senatormccarthy.com) and who see him as driven by persecution to "alcoholic suicide."

The careers of many individuals from all walks of life were destroyed, some temporarily and some permanently, by being called to testify before McCarthy's committee. Some writers and actors working in the movie industry were blacklisted, while others cooperated with the committee to besmirch the names of their colleagues and friends.¹⁵ There have been rumors of individuals driven to suicide by this unjustified persecution. It is not easy to track down these suicides.

When McCarthy ran for the Senate, he defeated Senator Robert La Follette in the primary for the Republican candidate. Six years later, La Follette committed suicide, convinced he was about to be caught up in the McCarthy hearings. La Follette's biographer, Patrick Maney, has changed his mind several times about the veracity of this, but, in his latest opinion, McCarthy was planning to subpoena La Follette over the possibility that La Follette's Senate aides had communist ties.¹⁶ La Follette had a history of depression and anxiety and this stress may have led to his decision.

In 1953, Reed Harris, an administrator at the Voice of America (VOA), was harassed during days of testimony before McCarthy's committee. On the last day of Harris's testimony (March 5th, 1953), Raymond Kaplan, an engineer at VOA, threw himself under a truck in Boston rather than face questioning (Scates, 2006). He left a suicide note which read,

¹⁵ When Elia Kazan was awarded an Oscar in 2008 for his life-time achievements as a movie director, many in the audience refused to applaud because he had collaborated with the committee.
¹⁶ Steve Schultz: La Follette suicide linked to fear of McCarthy,

¹⁴ Born November 14, 1908; died May 2, 1957.

Milwaukee Journal-Sentinel, May 17, 2003.

I have not done anything in my job which I did not think was in the best interest of the country, or of which I am ashamed. And the interest of my country is to fight Communisim hard. I am much too upset to go into the details of the decision which led to the selection of the Washington [State] and North Carolina sites [for VOA transmitters]....My deepest love to all. (Scates, 2006, p. 75)

McCarthy thought the placing of the transmitters at sites which some claimed were not the best for transmitting to communist nations was a deliberate plot to sabotage their usefulness.¹⁷

Scates (2006) also relates an incident in 1954 when the son of Senator Lester Hunt, the senator from Wyoming, was arrested for soliciting a homosexual act from an undercover police officer. Hunt received word that, if he promised not seek reelection to the Senate, his son would not be prosecuted. Hunt decided to step down, but his son was found guilty and fined \$100. Hunt killed himself soon after, on June 19th 1954, in his Senate office with a rifle. McCarthy wanted to have a Republican senator elected in place of Hunt, a Democrat, to minimize the chances that he, McCarthy, would be censured. McCarthy also had accused Hunt of defrauding the Wyoming state government.

The Oppression of Homosexuals and Other Groups

Governments and individuals have long stigmatized and persecuted homosexual individuals. Alan Turing (1912-1954) was a brilliant and eccentric English mathematician. In the 1930s, Turing published a paper that proposed the hypothetical existence of computers. These machines were called *Turing Machines*, and he foresaw how they would work, even down to the binary input of data. During the Second World War, he worked on codes and ciphers and participated in the team that cracked the codes used by the German plans. After the war, Turing moved to the University of Manchester where he worked with the team that built one of the first actual computers.

Turing was gay, and a friend of his lover robbed Turing's house. When the police were called, they discovered that Turing was a homosexual, which at the time was illegal in England. They ignored the burglary and arrested Turing instead. He was found guilty and forced to undergo estrogen treatment. About a year after the treatment ended, Turing killed himself with cyanide. Homosexuality was decriminalized in England in 1967, too late for Alan Turing.

Unfortunately, gays and lesbians are still today the subject of prejudice and violence. In 2010, Tyler Clementi, a gay student at Rutgers University, New Jersey, had a sexual interaction with a lover in his dormitory room which, unbeknownst to him, was recorded on a webcam by his roommate, Dharun Ravi, and shown to others. Three days later Clementi jumped to his death from the George Washington Bridge connecting New York and New Jersey. Several similar incidents occurred around this time of high school students killing themselves after being taunted and bullied for their homosexuality.

There are other groups, religious, ethnic or chosen life-style, who are also oppressed and who sometimes have high suicide rates such as gypsies and other nomadic groups (Lester, 2014). For example, Walker (2008) has documented a high rate of suicide among Travellers in Ireland, a nomadic group that is persecuted by local governments who dislike their encampments. For the period 2000-2006, she calculated their suicide rate to be 37 per 100,000 per year, three times the Irish national suicide rate of 12.

Van Bergen, Smit, van Balkom and Saharso (2009) discussed the plight of young immigrant women of South Asian, Turkish and Moroccan descent living in the Netherlands. These women lack self-autonomy, and their behavior is over-regulated. They become suicidal in reaction to being forced into unwanted marriages, prostitution, abortions, and giving up their education. Any threat to living a chaste life and maintaining their reputation can result in them being made outcasts. Van Bergen and her colleagues concluded that traditional risk factors for suicidal behavior (such as psychiatric disorders) do not apply to these young women, but rather their suicidal behavior is fatalistic, a reaction to the oppression from their families.

Oppression in the Workplace and Suicide

The impact of oppression in the workplace has been illustrated by two recent examples. The first involved suicides at the Foxconn factories in Shenzhen, China, where nine workers committed suicide. There was an outcry, and the companies that had their products assembled there, including Apple, Hewlett Packard, Dell and Nokia, launched investigations into the conditions of the workers there. Chris Satullo, in an editorial on WHYY (National Public Radio) on January 23, 2012, accused Apple of using "abusive sweatshops" in China, resulting in a moral dilemma for him since he loved his Mac.¹⁸

¹⁷ Supporters of McCarthy claim that Kaplan's death was an accident (www.renewamerica.com).

¹⁸ www.newsworks.org/index.php/blogs/centresquare/item/32968-of-iphones-predators-poultry-and-evil

Conditions were improved: more time off was allowed, a 24-hour hotline was set up, some efforts were made to improve the social life, and wages were increased. One result, however, as reported by the *Financial Times*, was that some companies, including Apple, moved their production to Foxconn factories elsewhere in China where the salaries (and, therefore, the costs) remained low.¹⁹ Conditions remain poor at Foxconn factories. In Wuhan in 2012, workers at the Foxconn factory making Microsoft's Xbox game systems threatened a mass suicide.²⁰ In January 2012, a petition circulated urging Apple to treat the workers in China better.²¹

In the second case, more than 24 suicides (and perhaps as many as 40) occurred among workers of France Télécom beginning in 2008, a company that employs about 100,000 workers in France. The suicides and attempted suicides were attributed to work-related problems.²² As a result, the company halted involuntary transfers and permitted working from home. Many of the suicides occurred at home or in public places (such as a bridge over a highway), often leaving suicide notes blaming the company, but others jumped from the company building itself. There were demands for a parliamentary inquiry, and the deputy chief executive, Louis-Pierre Wenes, the architect of a drive to modernize the former state monopoly, resigned on October 2009.²³

Mercy Killings and Assisted Suicide

There has often been concern that mercy killings and assisted suicide are not simply choices made by individuals who wish to die, but rather that more subtle sexist forces are operating. Canetto and Hollenshead (1999-2000) noted that, of 75 individuals who Kevorkian assisted to die, 72% were women. Canetto and Hollenshead noted that Kevorkian's cases may not be representative of physician-assisted suicides in general, and there are no data on the persons who requested Kevorkian's help but whom he turned down. Perhaps women are more likely to have the conditions that are common in Kevorkian's cases (that is, chronic, incurable and debilitating diseases). It is possible that women are more likely to face their own deaths and that they are more concerned about self-determination in death. It may be that women 's choices for care are limited by their disadvantaged social and economic conditions; that

¹⁹ www.ft.com/cms/s/2/2429f498-82fd-11df-8b15-

women more often view their selves as undeserving of care and as having a duty to be altruistic and not burden others; that women's lives are devalued; that assisted suicide may be perceived as a more feminine choice (as compared to killing oneself which is seen as a masculine behavior); or that this is a case of a male "physician" and female patients acting out "gender scripts of subordination and domination" (Cannetto & Hollenshead, 1999-2000, p. 192).

The sex difference in Kevorkian's cases parallel data on mercy killings. Canetto and Hollenshead (2000-2001) reported on 112 cases of mercy killings in the United States between 1960 and 1993. The majority involved men (usually husbands) killing physically-ill older women.²⁴

Oppression in the Home by Husbands

Couple suicide pacts are not very common. For example, according to a survey conducted in Dade County. Florida (Fishbain and Aldrich, 1985) suicide pacts constitute only 0.007 percent of the suicides. The most common pacts involved married couples, with young lovers next most common. Based on a survey of the United States from 1980 to 1987, Wickett (1989) documented 97 couples involving the suicide of one or both partners. Two-thirds of these cases involved mercy killings followed by suicide, while one-third were double suicides. In the typical case, the wife or both partners were ill, and the husband initiated the plan. The couple often left evidence indicating that they felt exhausted and hopeless, and they feared parting or being institutionalized. In the mercy killing cases, the husband could not bear his wife's suffering or life without her.

Rosenbaum (1983) studied cases of double suicide in which one partner survived. The instigator, usually a man with a history of attempted suicide, did not survive the suicidal action. The surviving partner was typically a woman who did not appear to be emotionally disturbed or to have a history of nonfatal suicidal behavior. The instigators had characteristics similar to those of murderers and murder-suicides.

For double suicides (rather than mercy killings), these studies suggest the role of a domineering and dominating husband who decides that both partners must commit suicide. Insight into double suicide maybe obtained from the biographies of famous double suicides. Two famous incidences involve Stefan Zweig and his wife Lotte (Allday, 1972; Prater, 1972) and Arthur Koestler and his wife Cynthia (Levene, 1984).

⁰⁰¹⁴⁴feabdco.html accessed 1/12/2012

²⁰ www.cnn.com/2012/2/01/11/wolrd/asia/china-microsoftfactory/index.html accessed 1/12/2012

²¹ www.change.org/petitions

²² www.nytimes.com/2010/04/10/busineszs/global/10ftel.html, accessed 1/18/2012

²³

www.telegraph.co.uk/finance/newsbysector/mediatechnologyandt elecoms/6262591/... accessed 1/24/2012

²⁴ Canetto and Hollenshead found that, in cases of a parent killing a child, women predominated as the killer.

Charlotte Altman and Stefan Zweig

Stefan Zweig's family was upper middle class, Jewish and Viennese, with successful industrialists, bankers, and professional men among his relatives (Allday, 1972: Prater, 1972). Stefan's father had established a large successful weaving mill in Czechoslovakia. His mother was from Italy and also Jewish. Stefan was born the second and last child on November 28th 1881. As a child, he wanted for nothing. He was spoiled by his family, relatives and servants, but also severely disciplined. He was less obedient than his older brother, given to temper tantrums and often in conflict with his mother.

His older brother was expected to go into the father's business and agreed to do so. This left Stefan free to pursue his own interests, and Stefan chose an academic life. After eight grim years in a Gymnasium (a rigorous version of an extended American high school), he attended the University of Vienna and very quickly found that his interests lay in theater and literature. He had poems published when he was 16, and he was soon writing for some of the best periodicals in Vienna. Almost everything he wrote was published, his first book when he was 19.

Despite his success, Stefan did not think highly of his writing. Thus, he decided to translate famous foreign authors rather than concentrate on his original composition. One of the first poets that Stefan translated was the Emile Vehaeren, a Belgian, and this early translation work prepared Stefan for the role he played in European literature, the interpreter and introducer of foreign writers and their work to German audiences.

After his first marriage ended, Zweig took up with his assistant, Charlotte Altman. The growing anti-Semitism in Germany and Austria affected him profoundly.²⁵ Unlike many Jews in those nations, Stefan accurately forecast the outcome. He knew that he had to escape, and so he began to spend longer amounts of time outside of Austria and eventually moved to England in 1938 after the German occupation of Austria. Charlotte Altman became his secretary in 1933. Lotte was physically frail and suffered from asthma. Stefan's biographers suggest that his sexual relationship with her was probably unsatisfactory. Friends of Stefan remarked that one hardly noticed Lotte. She seemed non-existent. Certainly Stefan's biographers have little to say of her. Yet her passionate devotion to Stefan is clear in her decision to commit suicide with him.

Stefan and Lotte bought a house in Bath, England, where Stefan managed to continue his

productive work. After his divorce, they were married in September 1939, three days after Chamberlain's declaration of war with Germany. Stefan was 57, Lotte 31. Stefan was convinced that England would fall to Hitler. By June of 1940. Denmark and Norway had fallen, followed by Belgium, the Netherlands and France. Stefan received invitations to lecture in the United States and South America, and he took this opportunity to escape from what he saw as the certain defeat of England. Stefan and Lotte went first to the United States and then to Brazil.

He and Lotte leased a house outside of Rio in Petropolis, where he completed his autobiography and wrote his last works of fiction. His reception in Brazil was cool, in contrast to the adulation on his tours there in the 1930s and, once they were installed in their home, few friends visited. Although he had complained of never having time to himself for his work, he now had all the time he needed but felt acutely isolated. The solace he had sought oppressed him.

He went to Rio for the Carnival, but on Shrove Tuesday (February 17th) the news arrived of the fall of Singapore to the Japanese. Stefan immediately left with Lotte for Petropolis. The decision was made. Stefan spent the rest of the week writing letters and making final arrangements. He called friends, and on Saturday evening invited a neighboring couple to dinner. On Sunday afternoon, he and Lotte both took massive doses of veronal and died.

Stefan's suicide note spoke only of his lack of desire to begin completely afresh in his 60th year. He spoke of being exhausted by long years of homeless wandering and his desire to avoid my future humiliation from loss of freedom and an inability to continue his intellectual work.

It remains a puzzle why Lotte died with him. He most certainly urged her to do so. But we learn so little about her from his biographers that we do not know why she submitted to such a suggestion. Clearly, Zweig's first wife, Friderike, did not and would not have died with him. Friderike was a writer too, had two children by her first husband and had learnt to live apart from Stefan since he traveled so extensively during their marriage. After the war, Friderike became an academic, one of the scholarly experts on Stefan Zweig. Lotte died with Stefan; Friderike built a career on him.

Cynthia Jeffries and Arthur Koestler

Arthur Koestler was born on September 5th, 1905, in Budapest, the only child of Henrik and Adela Koestler. After studying science and engineering, he worked as a newspaper correspondent, in Palestine, and then in Germany and France. He joined the Communist Party, made three trips to Spain during

²⁵ Of course, many suicides have occurred as a result of antisemitism, most notably during the oppression and genocide of Jews by the Germans and other Europeans during World War Two. For documentation of suicides during the Holocaust, see Lester (2005).

the Civil War and was arrested as a spy and imprisoned for three months by Franco's Nationalists. He was sentenced to death but freed after British protests. Disillusioned now with Communism, he resigned from the Communist Party. He was detained and imprisoned in both England and France, but after the publication of his novel, "Darkness at Noon," was released and worked for the Ministry of Information in England during the war. After the war, the cause of Zionism again captured his attention, and he traveled to the Middle East and both reported on events and wrote novels around his experiences. He settled in England in 1952 and became a British citizen, and he continued to work for and write about political issues. His writings, including novels, essays and biographies, always exploring the important social issues of the times, and his work has been compared to that of George Orwell's in its impact on the times.

His third and final marriage was to Cynthia Jeffries in 1965, his secretary since 1950. Cynthia Jeffries was 22 when she started working for Koestler. She was from South Africa and moved to Paris with the aim of working for a writer. There had been stress in her life – her father committed suicide when she was 13 and there was a brief, unsuccessful marriage. From the time that she joined him, her life was rarely distinct from his. One of the causes for which Koestler worked was euthanasia. As he grew older, he developed Parkinson's disease and then leukemia. When the effects of these illnesses worsened, he decided to commit suicide, and Cynthia decided that she could not live without him.

Interestingly, all his wives remained in some way attached and, for some, devoted to and dependent on him. Dorothy Asher helped free Koestler from prison in Spain. Mamaine Paget, who suffered from his drunken rages, wrote that she would do anything, even leave him, if it were necessary to help him fulfill his destiny. Cynthia went further. On March 3rd 1983, she committed suicide with him in their London home.

There was some outcry after the double suicide of the Koestlers. Mikes (1984) noted that Arthur Koestler treated Cynthia abominably. She had to be on duty to serve Arthur 24 hours a day, and she had to be perfect in everything she did. She was secretary, lover, wife, nurse, housekeeper, cook, mother, daughter and inseparable companion. Mikes gives an example of Arthur criticizing Cynthia's cooking early in their relationship and sending her to cooking school to improve. In the 1970s, Arthur became Cynthia's prisoner, and she seemed more relaxed, and she teased Arthur more.

Blue (1983) argued that Cynthia should not have killed herself. She was in good health, energetic and able. She had a home, many friends and financial security. But Cynthia had come to live entirely for Arthur and through him. As she added to Arthur's suicide note, 'I cannot face life without Arthur.' As Arthur sickened, Cynthia's attachment to him became less pathological but no less intense. His sickness, by making him more dependent upon her, gave her a little more power. But he obviously made no effort to prepare her for his death by encouraging her to have interests outside of his life by encouraging her independence.

Although the deaths of Charlotte Zweig and Cynthia Koestler were technically suicides, their deaths have the quality of murder, murder by selfcentered, power-seeking husbands who gave little or no thought for the quality of life for their wives.

Suicide in Indigenous Women

Suicide in indigenous women is often a result of oppression, and the suicide functions as a political act (affecting power relationships) or as an escape. In her account of suicide among females in Papua-New Guinea, Counts (1980) has illustrated the way in which female suicide can be a culturally-recognized way of imposing social sanctions. Suicide holds political implications for the surviving kin and for those held responsible for the events leading women to commit suicide. In one such instance, the suicide of a rejected fiancée led to sanctions being imposed on the family which had rejected her. Counts described this woman's suicide as a political act which symbolically transformed her from a position of powerlessness to one of power.

Meng (2002) reported the case of Fang who killed herself by drowning at the age of 32 in a rural area of China.. Her marriage was a love marriage which is the basis of only about 13% of marriages in rural China, and her parents-in-law never accepted her. Although Fang was the wife of a first-born son, her parents-in-law gave preference to the wife of a younger son. Fang tried but failed to please her parents-in-law. After the birth of two sons, the couple moved to their own house in the family compound, and Fang became more hostile and confronted her parents-in-law more often. Fang's husband supported his parents and hit and punished Fang for insulting his parents. Fang was socially isolated in the village, having come from a distant village, and she remained an outsider. Fang coped by seeking spiritual assistance, making friends outside of the family, converting to Christianity and running away. After one last fight with her parents-in-law and punishment from her husband, Fang slipped away and killed herself.

The precipitating events for this suicide were quarrels with her in-laws and domestic violence. Fang's in-laws viewed her suicide as " a foolish act" for it cost the family a great deal in terms of cost and reputation. Fang's parents saw Fang's suicide as a



"forced decision." They blamed Fang's in-laws, destroyed furniture in the in-laws' house and demanded a very expensive funeral and headstone for Fang in her in-laws burial plot. The villagers gave Fang's suicide a mystical interpretation, believing that she was taken by a ghost, which served to avoid blaming Fang or her in-laws and to escape from a sense of responsibility themselves for Fang's suicide. Only Fang's husband truly mourned his wife.

Meng, however, viewed Fang's suicide as changing Fang's social status in the community. After her suicide, Fang's parents-in-law had to bow to her memory and mourn for her, that is, to accept her and treat her as they never had during her life. Thus, her suicide could be viewed as a form of symbolic revenge on her in-laws for their mistreatment of her.

Kizza, Knizek, Kinyanda and Hjelmeland (2012) discussed three cases of suicide in Acholi women in post-conflict northern Uganda which has endured 20 years of horrific war between the government and rebels. Two million people have been displaced and reside in "protected villages." These camps are densely populated, and the people depend on humanitarian aid and fear rebel attacks. The violence, rapes, and other inhuman behavior resulted in despair, depression have and hopelessness in the people. The women are the only ones able to earn a little money from brewing alcohol and cultivating a few crops, while the men drink alcohol, gamble and have sexual affairs. Taking a second wife is an established cultural custom in the Acholi, and the men maintain control over the family finances despite the fact that they do not earn any money. Thus, the women are forced to give their hard-earned money to their husbands who then spend it on alcohol, gambling and other women. Mothers are supposed to take care of their daughterin-laws, but in the camps, the first wife, often only in her 20s or 30s, has to take care of any co-wife and her children that her husband brings home. Compounding the problem was the high incidence of HIV and AIDS which wives feared their husbands would infect them with from their sexual affairs and co-wives.

Kizza et al. conducted a psychological autopsy studied of three women who died by suicide and identified two main themes: no control in life and no care. No control was present in the reversed roles of husbands and wives combined with the power still residing with the husbands. The wives had no right to fight and, in cases of disputes with co-wives, the elders always sided with the husbands. Rebellion by the wife was met with physical violence from the husband, and married life had become unbearable for the wives. No care was present from the infidelity and polygamy of their husbands and the breakdown in inter-generational care in the camps. Kizza et al. entitled their article on these suicides "An escape from agony."

Oppression by the Family and Peers

As we have seen, society can be oppressive, resulting in suicidal behavior in those oppressed .But oppression also occurs at the one-on-one level. Meerloo (1962) described the phenomenon of *psychic homicide*, in which an individual "murders" another by getting the person to commit suicide.

An engineer who had struggled all his life with a harsh, domineering and alcoholic father gave his father a bottle of barbiturates to "cure" his addiction. He was very well aware of what he expected his father to do. When two days later, the telegram came announcing the death of his father, he drove home at reckless speed, without however, killing himself. (p. 94).

Richman (1986) documented hostile behavior by parents toward their children who had just attempted suicide, words that were said in front of the attending psychiatrist.

One mother's first statement after seeing here 24year-old son in the hospital was, "Next time pick a higher bridge." A depressed man in his seventies said to his wife, "If I had a gun I'd shoot myself." She replied, "I'll buy you a gun".....A mother said to her 29-year-old daughter, "I'll do anything to show my love for you; I'll open the window so you can jump." (p. 80)

More generally, the association between the experience of physical and sexual abuse and of bullying with subsequent suicidal behavior has been well-documented (Klomet, Sourand & Gould, 2010; Maniglio, 2011). For example, Fisher, Moffitt, Houts, Belsky, Arseneault and Caspi (2012) interviewed a sample of over 2,000 British children when they were aged 7, 10 and 12 years old. The mothers reported that 16.5% of the children had been bullied before age 10, and 11.2% of the children reported themselves as having been bullied a lot before age 12. Self-harm or attempted suicide by the child was 3.53 times more likely if the mothers reported bullying and 3.33 times more likely if the child reported bullying. This increased risk of self-harm was found even after controls for maltreatment of the child by the parents,²⁶ pre-morbid mental health problems, and intelligence. This study was of twins and, therefore, the impact of the general home environment could be ruled out. Of the 162 twin pairs discordant for bullying, the bullied twin was 4.3 times more likely to self-harm than the non-bullied twin.

²⁶ Bullying plus maltreatment by parents increased the risk of selfharm even more.



It has been argued that, regardless of maltreatment by parents and bullying by peers, even parental pressure can lead to suicide in their children. Vicki Abeles, a former Wall Street lawyer, has made a documentary about the pressures placed on adolescents by their parents and the American educational system to excel, a documentary prompted by the suicide of a high achieving teenager in her community (Katz, 2012).

Comment

The people described in this essay who took their own lives do not typically have a psychiatric disorder, and they do not have need of a prescribed psychotropic medication. They need freedom from oppression, and they need empowerment. That requires a political movement and, for the rest of us, support for their struggles against the oppression.

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Original Research **Predicting the natural suicide rate in Belgium** Karl Andriessen^{1⊠}, Karolina Krysinska¹ & David Lester²

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Abstract: This paper presents results of a time series (1950-1997) and an ecological study of suicide and homicide in Belgium and its ten provinces. Study 1 was based on Durkheim's classic theory of suicide and Henry and Short's model of suicide and homicide. Study 2 calculated the 'natural suicide rate', i.e. suicide rate if the social conditions are made 'ideal' (zero divorce and unemployment rates). Study 1 found that the rates of suicide in Belgium over time were positively associated with unemployment and divorce rates, and negatively correlated with marriage and birth rates. On the level of provinces only population density and ethnicity correlated with suicide. Contrary to Henry and Short's theory, the homicide and suicide rates showed similar associations with social indicators. The natural suicide rate in Belgium was 12.1 per 100,000 (time series study) and 10.9 per 100,000 (ecological study). The studies supported the assumptions that the association between social variables and suicide differs depending on the aggregation level and even if the socio-economic conditions were made 'ideal' from the sociological point of view, the suicide rate in Belgium would still be positive and nonzero.

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Belgium is a Western European country with a relatively high suicide rate and significant differences in the incidence of suicide among its three geographical and administrative regions: the northern Flemish region, the southern Walloon region, and the capital region of Brussels. The Belgian suicide rate rose from 12.9 per 100,000 per year in 1950 to 23.8 in 1984 before dropping to 18.0 in 1991 (Lester & Yang, 1998). In 2011 the suicide rate in Belgium was 19.0 per 100,000 with 2,084 self-inflicted deaths recorded, and the regional suicide rates for Flanders, Brussels, and Wallonia were 18.1 per 100,000, 13.0 per 100,000 and 22.6 per 100,000, respectively (Statistics Belgium, 2014). Two questions regarding the epidemiology of suicide in Belgium arise: which social indicators may be associated with the yearly suicide rate and could the suicide rate ever be zero?

Durkheim's (1897) classic theory of suicide proposed that decreases in social integration and social regulation would increase suicide rates. Based on Durkheim's theory it can be expected that high rates of divorce in a country will be associated with increases in the suicide rate since divorce decreases social integration and indicates a lack of social regulation. On the other hand, high rates of marriage and births would be associated with lower rates of suicide as they are related to higher social integration. Lester and Yang (1998) examined these associations by analyzing in a time-series study the suicide rate of a sample of 29 nations from 1950 to 1985. They found that divorce rates were a much more consistent correlate of suicide rates than were birth or marriage rates. Divorce rates were positively correlated with suicide rates for 22 of the 29 nations. Marriage rates were negatively correlated with suicide rates for 20 of these 29 nations, and the correlations between suicide and birth rates were also inconsistent: 12 of the correlations were positive and 17 correlations were negative. In case of Belgium, Lester and Yang (1998) found a significant positive correlation between suicide rates and divorce rates, while the correlation between suicide and marriage rates, and suicide and birth rates, was not significant. Other cross-sectional and longitudinal studies also demonstrated a positive correlation between divorce and suicide, indicating that the suicide rates of divorced people are often higher than the suicide rates of married people, and the higher the divorce rate, the higher the rate of suicide (Stack, 2000a). Using more recent time-series data, Lester and Yang (2013) also found that the unemployment rates in nations were accompanied by higher suicide rates, a

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result frequently reported in cross-sectional and longitudinal studies (Platt, 2011).

Although Durkheim's theory did not consider homicide, Henry and Short (1954) argued that homicide would show opposite associations to those for suicide. According to Henry and Short (1954), societies where external restraints and pressures on the citizens were strong would have higher homicide rates and lower suicide rates. Conversely, societies where external restraints and pressures were weak would have higher suicide rates and lower homicide rates. Lester (1989, 1995) explored the theories and empirical work suggesting that suicide and homicide may be generated by similar etiological factors differing only in the direction of aggression and concluded that there may be some merit in the suggestion.

According to Durkheim (1897), suicide rates are higher at very high and at very low levels of social integration and regulation. However, his theory did not stipulate that the suicide rate would be zero at intermediate levels of social integration and social regulation. Moreover, Maris (1981) speculated that the suicide rate could never be zero however ideal the socio-economic conditions were. Yang and Lester (1991, 2009) empirically explored the notion that the suicide rate of a society could never be zero (i.e., a 'natural suicide rate'), even if the social and economic conditions were made 'ideal' from the point of view of suicide, i.e., the country had no divorce and no unemployment (two well-established suicide risk factors). In a demonstration with thirteen nations, Yang and Lester (2009) showed, that, if divorce and unemployment rates were entered into a linear regression equation to predict the suicide rate over time, and then if these rates were set to zero, the regression equations still predicted a positive suicide rate for the nations¹.

Although the epidemiology of suicide in Belgium was studied extensively up to the 1990s (Linkowski, Martin, & De Maertelaer, 1992; Maes, Cosyns, Meltzer, De Meyer, & Peeters, 1993; Moens, Loysh, Honggokoesoemo, & van de Voorde, 1989; Moens, Loysch, & van de Voorde, 1988; Moens, van Oortmarssen, Honggokoesoemo, & van de Voorde, 1987), since 1997 no annual mortality data for the whole country have been available (Bossuyt & Van Casteren, 2007), and suicide mortality data have become available only for a few recent years, including 2005 (Statistics Belgium, 2014). The current study aims to fill in the gap in the literature and

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¹ It should be noted that this type of analysis is based on the assumption that the unemployment and divorce rates in the 'ideal' society would be zero. Other social indicators, such as birth or marriage rates, are not included in the estimation of the natural suicide rates as it is not possible to know what their values would be in an 'ideal' society, i.e., one which minimizes its suicide rate.

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provide insights into the associations between social indicators and suicide (and homicide) in Belgium.

The present paper reports two studies. Study 1 explores the associations between the social indicators and suicide and homicide rates in Belgium (time series analysis over 1950-1997) and between the social indicators and the suicide rates in the ten provinces of the country (ecological study data for 2005). Based on the same data, Study 2 calculates the natural suicide rate for Belgium over 1950-1997 and for the ten provinces in 2005. Many sociological theories and models of suicide have been proposed since Durkheim's classic theory (Pescosolido & Rubin, 2000; Stack 2000a, 2000b) and Durkheim's theory itself has been a subject of scientific scrutiny and critique (Wray, Cohen, & Pescosolido, 2011). Nonetheless, in line with previous work (Lester & Yang, 1998; 2013), we have decided to apply the original concepts as developed by Durkheim (1897) and Henry and Short (1954). The present study focuses on both suicide and homicide rates in Belgium in order to explore the question whether the correlates of suicide rates are the same as or different from those of homicide rates.

Method

The suicide rates for Belgium in the time series study were obtained from <u>www.who.int</u> and from Lester and Yang (1998) for the period 1950 to 1997, the latest year for which the WHO data base had suicide rates for Belgium. Divorce, marriage and birth rates were obtained from the United Nations *Demographic Yearbook* (annual) and unemployment rates from the International Labour Office's Yearbook of Labour Statistics (annual).

In the ecological study the population and area of each province was obtained for the ten provinces of Belgium² (statoids.com/ube.html) for January 1, 2005. The number of unemployed for December 31, 2005, marriages and divorces for 2005, and suicide rates of the provinces for 2005 were obtained from Statistics Belgium (2014).

Analysis

SPSS 18.0 was used to calculate Pearson correlations between the variables and to run stepwise regressions. T-test was used to compare the suicide rates and social indicators between provinces in Flanders and in Wallonia. The study derived regression equations predicting the suicide rate of Belgium and of the ten provinces from the divorce and unemployment rates. Once the divorce and unemployment rates were set to zero the constant term provided an estimate of the natural suicide rate.

Study 1: The Durkheimian Analysis

Results

The associations between the social indicators and suicide rates over time (time series) are shown in Table 1.

Table 1: Correlations over time (1950-1997)between social indicators and the suicide rate

	Year Suicide rate		ite	Homicide	
		Total	Male	Female	rate Total
Correlations					
Unemployment	0.67*	0.80*	0.87*	0.60*	0.82*
Divorce rate	0.94*	0.83*	0.89*	0.65*	0.88*
Birth rates	-0.93*	-0.88*	-0.85*	-0.83*	-0.86*
Marriage rate	-0.87*	-0.78*	-0.86*	-0.58*	-0.80*
Year	-	0.85*	0.87*	0.74*	0.87*
* p < .001					

It can be seen that all four social indicators were strongly associated with the suicide rate in the expected way. Years with higher divorce and unemployment rates had higher suicide rates, while years with higher marriage and birth rates had lower suicide rates. These associations are consistent with Durkheim's theory of suicide since marriage and birth rates would be predicted to increase the degree of social integration and regulation while divorce and unemployment would be predicted to decrease the level of social integration and regulation. The associations between the homicide rates and the social indicators were similar to those for the suicide rate, opposite to the prediction of Henry and Short (1954) that the associations would be reversed for homicide rates.

The suicide rates of the ten Belgium provinces (ecological study) differ considerably, ranging from 15.6 in Limburg to 26.6 in Luxembourg (Table 2). The correlations between the suicide rates of the provinces and the social variables are shown in Table 3.

The suicide rate was significantly associated with the population density (negatively), but not with the other social variables. A comparison between the five Flemish provinces and the five Wallonian provinces indicated that they differed significantly in population density and unemployment rate, as well as in their suicide rate. The mean suicide rate for the Flemish provinces was 18.5 per 100,000 per year (SD = 2.67) and for the Wallonian provinces 22.5 (SD = 2.50) (t = 2.43, df = 8, two-tailed p = .04).

²Antwerp, East Flanders, Flemish Brabant, Hainaut, Liège, Limburg, Luxembourg, Namur, West Flanders and Walloon Brabant, (Brussels excluded).

 Table 2: Suicide rates in the ten provinces of

 Belgium in 2005 per 100,000 (Statistics Belgium, 2014)

	Flanders
Antwerp	16.7
East Flanders	19.9
Flemish Brabant	18.0
Limburg	15.6
West Flanders	22.3

	Wallonia	
Hainaut	20.9	
Liège	23.1	
Luxembourg	26.6	
Namur	21.5	
Walloon Brabant	20.3	

Table 3: Correlations over the ten provinces between social indicators and the suicide rate

	Correlations	Regression (betas shown)
Population density	-0.74*	-1.08#
Population	-0.47	0.83
Marriage rate	0.61	-0.19
Divorce rate Unemployment rate Flemish provinces	0.32	0.54
	0.29	-1.29
	-0.65*	-1.21
Multiple R		0.92

* p < .05

#significant in backward multiple regression

Study 2: The Natural Suicide Rate

Results

The regression equations for predicting suicide and homicide rates in the times series study from divorce and unemployment rates were:

Total suicide rate = 12.06 + 2.34*(divorce rate) + 0.32*(unemployment rate)

Male suicide rate = 16.65 + 3.12*(divorce rate) + 0.51*(unemployment rate)

Female suicide rate =7.50 + 1.66*(divorce rate) + 0.14*(unemployment rate)

Total homicide rate = 0.39 + 0.38*(divorce rate) + 0.04*(unemployment rate)

Setting the divorce rate and unemployment rate to zero gives natural suicide rates of 12.06, 16.65 and 7.50 for the total, male and female suicide rates, respectively and 0.39 for the homicide rate. Thus, in an ideal Belgium (sociologically), the suicide rate might be close to 12 per 100,000 per year and the homicide rate close to 0.4.

Using the same technique, the following equation estimated the natural suicide rate for the ten provinces:

Total suicide rate = 10.91 + 3.39*(divorce rate) + 0.14*(unemployment rate)

Thus, if there were no divorce and no unemployment in the provinces, the estimated natural suicide rate based on the ecological study in Belgium would be 10.91.

Discussion

The time-series analysis (Study 1) found that suicide rates in Belgium were positively associated with indices of social disintegration and weakened regulation as predicted by Durkheim's (1897) classic theory of suicide. This association was found both in males and in females and for the total suicide rates. However, in our study homicide rates showed similar associations with these social indicators as those for suicide, the opposite of the prediction made by Henry and Short (1954). Apparently, homicide and suicide require different theoretical explanations (Lester, 1995).

Study 1 found few correlates of the provincial suicide rate in Belgium. Only population density and the ethnicity of the provinces (i.e., Flemish versus Wallonian) were significantly associated with the suicide rate in the ecological study. A negative correlation between suicide mortality and population density has also been reported in the study of community-level correlates of suicide mortality in Flanders (Hooghe & Vanhoutte, 2011). Earlier studies on the regional differences in epidemiology of suicide in Belgium (Moens et al., 1988; Reynders et al., 2011) found higher suicide rates in the French-speaking provinces of Wallonia than in Dutch-speaking Flanders, a phenomenon possibly related to differences in availability of suicide methods, socio-economic factors and cultural differences between these two parts of Belgium. Contrary to results of the time-series analysis, marriage, divorce and unemployment rates did not yield significant results. This disparity between the results of the two components of Study 1 might be explained in relation to the different level of analysis:



the time series study used aggregated data for the whole of Belgium while the ecological study focused on data for the ten provinces. The associations between socio-economic characteristic and suicide might depend on the size of areal units, and the impact of variables related to social integration and regulation may vary on different levels of social organization (Rehkopf & Buka, 2005). The present study did not allow testing these assumptions; however, smaller units may be more homogenous sociologically and better reflect the socio-economic position of an individual, and some contextual processes related to social cohesion or networks might work differently on smaller levels of aggregation (Rehkopf & Buka, 2005).

Study 2 showed that if divorce and unemployment rates in Belgium and in the ten provinces were zero, there would still be positive and nonzero suicide and homicide rates. The estimated natural rate based on a time-series analysis was 12.1 per 100,000 for suicide (and 0.4 per 100,000 for homicide), not far different from an estimate of 10.9 per 100,000 in the ecological study and 10.3 per 100,000 over 1950-1985 reported earlier by Yang and Lester (2009). Such positive, nonzero natural suicide rates have also been found in other countries in Europe, as well as in North America, Asia and in Australia (Yang & Lester, 2009). Of interest, the estimates of the natural suicide rate differ considerably among countries, ranging from 2.9 per 100,000 in Norway and 5.0 per 100,000 in the Netherlands to 19.3 per 100,000 in Sweden and 25.0 per 100,000 in Japan. A number of explanations have been proposed regarding the question why natural suicide rates differ between nations (Yang & Lester, 2009). Genetically caused, physiologically based factors, such as the Finno-Ugrian gene, found primarily in Finnish and Hungarian people (Voracek, Fisher, & Marusic, 2003) and the distribution of blood types associated with psychiatric disorder and suicide (Lester, 2004), have been proposed as factors determining the differential natural suicide rates of different nations. Nonetheless these explanations remain speculative and require further studies.

The present study has several limitations. All of the measures used in the present study (suicide and homicide rates and social indicators) increased over time during the period studied. Thus, there was a high degree of inter-correlations between all of the variables. Furthermore, many social indicators might be examined for their association with suicide and homicide rates. However, in order to estimate the natural suicide and homicide rates, it is necessary to have variables that can be set to an 'ideal' level, and so it is appropriate to use social indicators (such as unemployment) than can be set to zero. Nonetheless, choosing other social indicators for the regression equation might give different estimates of the natural suicide and homicide rates. The present study is also limited by the absence of data for the suicide rate in Belgium for recent years and by the small sample size for the regional study. Future research should update the time-series study as more recent data become available and expand the regional study to smaller communities, for example, at the district (arrondissement) level, so that the sample size for the regions is larger, thereby permitting a more reliable analysis.

Conclusions

The time series study provided support for the Durkheim's (1897) theory of suicide, as indicators of social integration correlated with suicide rates in Belgium in the expected direction. The ecological study found a different set of correlates than the time series study suggesting that the impact of socioeconomic variables might differ depending on the aggregation level. Our results did not support an assumption that suicide and homicide may be generated by similar etiological factors, the only difference being the direction of the expressed aggression. The estimations of natural suicide rate found for Belgium and the provinces supported the proposition that, even if the socio-economic conditions were made 'ideal', the suicide rate in the country would still be positive and nonzero.

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Original Research Thwarted Needs And Suicidality: A Comparison Of Two Theoretical Models

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Abstract: The aim of the present study is to compare the needs proposed by the interpersonal-psychological theory of suicide (IPTS) and the suicide as psychache (SAP) theory in their ability to predict lethal suicidal behavior. Utilizing a sample of 38 suicide notes from both fatal and non-fatal suicides, graduate student raters examined the presence of the thwarted needs proposed by both theories. None of the needs proposed by SAP, nor their average, were significantly related to suicide lethality. The needs proposed by the IPTS (i.e., perceived burdensomeness and thwarted belongingness) were marginally predictive of suicide lethality.

Keywords: suicide, suicide notes, thwarted needs, lethality

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In 2014, suicide claimed 42,773 lives in the US, making it the 10th leading cause of death overall and the third leading cause of death in the young (Drapeau & McIntosh, 2015). Estimates also indicate that over one million suicide attempts are made annually in the United States. With these numbers in mind, it is crucial that research continues to explore the motivations and emotions associated with suicide. Multiple theories have already been developed in an attempt to explain suicidal behavior. However, this study will focus its attention on two such theories: the Interpersonal-Psychological Theory of Suicide (IPTS; Joiner, 2005; Van Orden, et al., 2010) and Shneidman's Suicide as Psychache (SAP) theory (Shneidman, 1996; 1999; 2005). Although the IPTS and SAP are both prominent in the field of suicide research, neither study has ever been compared for their ability to predict suicidal behavior.

The IPTS, developed by Joiner and his colleagues (Joiner, 2005; Van Orden et al., 2010), proposes that suicidal behavior occurs when three elements are present: thwarted belonging, perceived burdensomeness, and the acquired capability for suicide. Thwarted belonging is a perceived, or actual, lack of strong social ties, feelings of loneliness, and feeling as though one does not belong. Perceived burdensomeness is a feeling as though one is a burden on those around them and feeling that others would be better off without them. Finally, the acquired capability for suicide is the ability to enact lethal self-harm. Self-injury is hard, especially fatal self-injury, and only through exposure to pain does one become habituated to the fear of that pain and of death. Once habituated, a person is at increased risk of suicide. Only when these three elements are present is a person at increased risk of death by suicide.

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However, the IPTS is not the only theory of suicide that discusses the role of thwarted needs. The SAP, which preceded the development of the IPTS, was put forth by Shneidman (1996; 1999; 2005) and based on Murray's (1938) theory of personality. The SAP stipulates that suicidal behavior, at least in Western cultures, is caused by psychological pain, which Shneidman calls psychache. Psychache is caused by the deprivation of vital needs and these needs are drawn directly from Murray's (1938) theory of personality. These needs include the need to be affiliated (similar to the need to belong) and the need aggression. When psychache becomes for unbearable, suicide will occur (Shneidman, 2005).

These theories were chosen for analysis for a number of reasons. These two theories both discuss thwarted or deprived needs, with the SAP theory discussing a large number of potential thwarted needs and the IPTS focused on two specific needs (perceived burdensomeness and thwarted belonging). Furthermore, no study, until now, has compared the effective of the IPTS and SAP in predicting lethal suicidal behavior. Given the importance of having a solid theoretical backing to explain a behavior, it is of vital importance that competing theories be evaluated in an effort to establish which are most helpful in explaining the phenomena of suicide.

The use of suicide notes in studying suicidal behavior has a long history in suicidology (e.g., Shneidman & Farberow, 1957; Osgood & Walker, 1959). In a large sample of suicide victims in Japan, Kuwabara, and colleagues (2006) found a notewriting incidence rate of over 30 percent and found few differences between those who wrote a note and those who did not. Those who lived alone were more likely to be female and use more lethal methods of suicide. In a defense of the use of suicide notes in the study of suicide, Leenaars (2002) discussed the importance of suicide notes in understanding the suicidal mind and getting a glimpse at the motivations behind suicide. While suicide notes have their limitations, they provide a unique glimpse at what motivates a suicide.

In the present study, we aim to determine which theory is more predictive of death by suicide using a sample of suicide notes from attempted and completed suicides. We hypothesize that the IPTS theory will be more predictive of death by suicide than will SAP. The IPTS is explicit in its focus on lethal or near-lethal suicide, while the SAP is a general theory focusing on all suicidal behavior. Given this, it is expected that the IPTS will be better at distinguishing lethal suicide notes from non-lethal notes. This study investigates the elements of the IPTS and SAP through the use of suicide notes, which are commonly employed in suicidology (e.g., Joiner et al., 2002; Pettit et al., 2002; Gunn & Lester, 2012).

Methods

Participants

Suicide Notes' Authors. Forty suicide notes collected by a police officer from a town in Arizona were obtained. Two notes were discarded from the analysis reported in this paper because the writers of these notes made no suicide attempts. Prior research has been published using this sample (e.g. Joiner et al., 2002; Pettit et al., 2002; Handelman & Lester, 2007).

Graduate Student Raters. Two students were selected from the graduate program in psychology at Rutgers, The State University of New Jersey (Camden Campus), to serve as raters. Both raters were recruited via an email sent to the first-year graduate students explaining the opportunity to partake in the study for a small monetary incentive (a \$50 gift-card for each rater). The raters were blind to the purpose of the study and were not familiar with the theories of suicidal behaviors. We felt that the use of graduate students would increase the likelihood of accurate ratings due to more experience with psychological studies. Graduate students have been used as raters for suicide notes in prior research (e.g., Joiner et al., 2002). Raters were blind to the conditions of the study and were not informed which notes were accompanied by completed or attempted suicides. By keeping the raters blind to the specific goals of the study we hoped to limit the likelihood of biasing the ratings. No more than two raters are commonly utilized in research studies involving suicide notes (e.g. Leenaars, DeWilde, Wenckstern, & Kral, 2001; Gunn & Lester, 2012). Raters were Caucasian, one woman (age 23) and one man (age 24).

Materials

Rating Instrument. The rating instrument for this study was adapted from Shneidman's Psychological Pain Assessment Scale (PPAS; Shneidman, 1996; 1999) and the criteria used to and perceived assess thwarted belonging burdensomeness in Gunn and Lester (2012). Leenaars and Lester (2004; 2005) found that the PPAS had high test-retest reliability and modest validity. However, initial pilot testing in our lab of the PPAS section of the rating scale revealed that raters would rate the degree to which the need was present. Because the PPAS is specifically meant to test the degree to which these needs are being thwarted, or unfulfilled, the words "as thwarted" were added to the end of every item. Raters in the pilot test indicated that this made the rating process easier and served as a reminder that scoring was based on the need being thwarted

(the presence of or reference to the need did not meet the rating criteria). This change was therefore made to the wording of the PPAS in order to make the scale better suited to be used for rating the suicide notes.

Procedures

Due to the large number of ratings for each note, the rating process was done over the span of one week (Monday-Friday). Each session was approximately two hours long. The first session was used to train the raters on the rating process and to introduce them the scales. For training, notes were drawn from Leenaars (1988) and were not included in the analysis of the current study. The remaining four sessions were used to rate the notes being examined in this study. Discrepancies in the ratings were discussed and resolved by the raters themselves. The researcher was present and only intervened in discussing these discrepancies when absolutely necessary (i.e., when no agreement could be reached).

During each of the latter four sessions, raters were given copies of ten of the forty suicide notes and a copy of the rating instrument for each. The notes were presented in a randomized order (i.e., nonlethal and lethal notes were drawn at random) that was the same for each rater. Raters were asked to read through the suicide notes carefully and were informed that they could look back at the notes at any time throughout the rating process. This was done to increase the accuracy of the ratings, as raters could rely on the content of the note rather than their memory of it.

Following the rating sessions, inter-rater reliability was assessed using Krippendorf's alpha. While several methods were available for assessing inter-rater reliability, Krippendorf's alpha was chosen because it is effective for use with relatively small sample sizes and because, unlike correlational techniques, it takes as its criterion 1 to 1 agreement not simply relative agreement; it is sensitive to rank order. Table 1 shows the results of the Krippendorf's alpha analyses. As can be seen, across the whole of the questionnaire there was insufficient agreement (as measured against a criterion of alpha = .70 or higher). Due to this, it was necessary to meet again and resolve all discrepancies across the ratings. Both raters and the researcher met again, two weeks after the conclusion of the original rating session, and went through each rating scale on which there was a discrepancy, and its corresponding note, in the same order they had originally rated them, in three twohour sessions. As with the initial training session, raters were asked to discuss their discrepancies amongst themselves and resolve them. The researcher adjudicated disagreements only when no resolution could be reached between both raters. The resolution process typically began with each rater (starting with the one with the highest rating) explaining the rationale for the rating he or she gave. The vast majority of the time, one rater would then concede to the argument of the other, but a few times (7.3% of cases) a longer discussion was needed in which both raters would make their point for why they gave the rating they gave. The majority of the time this happened, one of the raters would concede to the argument of the other, however on several occasions it was necessary for the researcher to adjudicate disagreements (.79%).

Statistical Analysis

All analyses were executed using IBM SPSS Statistics 19. Although SPSS does not have the option to run Krippendorf's alpha, macros were obtained for the purposes of assessing inter-rater reliability from an online source (http://www.afhayes.com/). Several of the analyses involved the removal of predictors that had very high p values. In order to be consistent throughout, the cutoff for the removal of a predictor was if the p value exceeded .35. This cutoff allowed us to remove predictors from the models that were not highly related to suicide lethality, and thereby afforded us the clearest picture of what was predictive of suicide lethality.

Results

The mean age for the sample of 38 authors was 36.9 years (SD = 14.1). Of the 38 authors, 20 completed suicides (M = 37.4 years, SD = 14.3) and 18 attempted suicides (M = 36.3 years, SD = 14.2). There were 18 women and 20 men in the full sample. No data were collected on ethnicity. Of the note-writers, 15 (39.5%) used a gun, 8 (21.1%) took pills, 4 (10.5%) used hanging, 2 (5.3%) used a razor, 1 (2.6%) used car exhaust, 1 (2.6%) drank Drano and cut their wrists, 1 (2.6%) used the smoke from a charcoal fire in an enclosed space, 1 (2.6%) used a car wreck, and 5 (13.2%) were unknown. Table 1 shows the results of our test of inter-rater reliability. Prior to analyses, raters met again and resolved all discrepancies. Final rating agreement was 100 percent.

Agreement Variable Name	α	95	% C.I.
		Lower	Upper
The need to achieve difficult goals as thwarted	.15	19	.48
The need to be loved by another person as thwarted	.70*	.48	.89
The need to belong or to be affiliated as thwarted	.51	.21	.77

The need to overcome opposition as thwarted	.11	21	.39
The need to be free of social confinement as thwarted	02	51	.45
The need to make up for past failures as thwarted	.54	.32	.75
The need to defend the self against others as thwarted	11	46	.23
The need to influence and control others as thwarted	.36	03	.72
The need to receive attention from others as thwarted	.34	02	.65
The need to avoid pain or injury as thwarted	.29	01	.55
The need to avoid shame or humiliation as thwarted	.32	07	.68
The need to protect the author's psychological space as thwarted	.05	29	.37
The need to nurture or take care of another person as thwarted	.32	.03	.58
The need to keep things or ideas in good order as thwarted	.23	10	.54
The need to enjoy sensuous experiences as thwarted	02	53	.44
The need to be taken care of by another person as thwarted	.52	.22	.78
The need to understand certain hows and whys as thwarted	.41	.10	.68
The need to belittle the self as thwarted	21	74	.29
The need to admire, support, or emulate a superior as thwarted	.00	-1.00	.00
The need to act for fun as thwarted	.25	19	.66
The need to exclude, banish, jilt or expel another person as thwarted	.22	42	.75
The author was experiencing a thwarted need to be in a relationship with someone	.74*	.56	.90
The author was experiencing a feeling of being disconnected from others	.43	.14	.67
The author was experiencing a feeling of isolation from other people	.27	06	.59
The author was experiencing a feeling of isolation from other people	.57	.17	.90
The author felt he or she was a burden on others	.78*	.63	.91
He or she felt that others would be better off without the author	.54	.26	.79

*indicates acceptable levels of inter-rater agreement

Cronbach's alpha was utilized to test the internal consistency of the rating scales. The PPAS consisted of 18 items and had acceptable internal consistency ($\alpha = .77$) while the IPTS sub-scale consisted of 6 items and had poor internal consistency ($\alpha = .53$). However, upon closer inspection of the IPTS sub-scale, we found that the IPTS sub-scale's poor internal consistency was a byproduct of it being made up of two theoretically different elements. When the sub-scale was divided into the IPTS's two elements, the

thwarted belonging sub-scale (α = .75) had acceptable internal consistency and the perceived burdensomeness sub-scale (α = .94) had excellent internal consistency.

In order to test the hypothesis that the IPTS needs would be more predictive of fatal suicide than the SAP needs, several logistic regressions were run predicting suicide lethality. In the first logistic regression, the Average Shneidman Need Index (the average rated intensity across all needs) and the IPTS Need Index (the interaction score, calculated by multiplying the thwarted belonging index by the perceived burdensomeness index) were entered into the logistic regression predicting suicide lethality. We averaged the Shneidman needs because under the SAP not all needs must be present for psychache to occur. The deprivation of a single need can lead to psychache, and through psychache to suicide. However, the IPTS scores were made into an interaction score, because IPTS explains suicidal behavior through the presence of both thwarted belonging and perceived burdensomeness. Both must be present for the motivation for suicide to exist. The results of this analysis can be seen in Table 2. The model was not significant, X2 (2, N = 38) = 3.55, p = .17 indicating that the model that included both predictors was unable to distinguish non-lethal suicide notes from lethal suicide notes. However, as can be seen from Table 2, the IPTS Needs Index was marginally significant (p = .08) in predicting suicide lethality and was associated with a 1.72 times increase in the likelihood of the note having been written by a lethal suicide, consistent with our hypotheses.

The second logistic regression examined the ability of thwarted belonging and perceived burdensomeness, two elements of the IPTS, to predict suicide lethality. In this logistic regression the Thwarted Belonging Index (the averaged score across all thwarted belonging items) and the Perceived Burdensomeness Index (the averaged score across all perceived burdensomeness items) were entered into the logistic regression predicting suicide lethality. The results of this logistic regression can be seen in Table 3. The model was not significant, X2 (2, N = 38) = 4.04, p = .13, indicating that the model was not able to distinguish non-lethal suicide notes from lethal suicide notes. However, the Perceived Burdensomeness Index was marginally significant (p = .10), indicating that perceived burdensomeness was associated with a 1.84 times increase in the likelihood that the note was written by a lethal suicide.

The results of the final logistic regression used to test the hypothesis of this study can be seen in Table 4. This model used the IPTS Needs Index and the highest thwarted Shneidman need rating to predict suicide lethality. This model was significant,



X2 (2, N = 38) = 4.92, p = .09, indicating that the model was able to distinguish non-lethal suicide notes from lethal suicide notes. As can be seen, the IPTS Index was marginally significant (p = .06) at predicting suicide lethality and was associated with a

1.78 times increase in the likelihood of the note being written by a lethal suicide. This once again showed partial support for the hypothesis of this study.

Table 2: Logistic Regression Predicting Suicide Lethality with Average Shneidman Needs Index and IPTS Needs Index from Ratings

	В	S.E.	Wald	Df	р	Odds Ratio	95% C.I. fo	r Odds Ratio
-							Lower	Upper
Average Shneidman Needs Index	-1.27	1.38	.85	1	.36	.28	.02	4.19
IPTS Needs Index	.54	.31	3.00	1	.08†	1.72	.93	3.18
†p<.10 *p<.05 **p<.01								

 Table 3: Logistic Regression Predicting Suicide Lethality with Thwarted Belonging Index and Perceived

 Burdensomeness Index from Raters

	В	S.E.	Wald	Df	р	Odds Ratio	95% C.I. fo	r Odds Ratio
-							Lower	Upper
Thwarted Belonging Index	.64	.55	1.31	1	.25	1.89	.64	5.58
Perceived Burdensomeness Index	.61	.38	2.66	1	.10†	1.84	.88	3.84
†p<.10 *p<.05 **p<.01								

Table 4: Logistic Regression Predicting Suicide Lethality with Highest Shneidman Ratings and IPTS Needs Index from Raters

	В	S.E.	Wald	Df	р	Odds Ratio	95% C.I. fo	r Odds Ratio
							Lower	Upper
Computed Shneidman Score Indicating Highest Thwarted Need Rating	53	.37	2.03	1	.15	.59	.9	1.22
IPTS Index	.58	.31	3.50	1	.06†	1.78	.97	3.26
†p<.10 *p<.05 **p<.01								

Discussion

The purpose of this study was to compare two theories about the role of thwarted needs in suicidal behavior. Specifically, we hypothesized that the Interpersonal-Psychological Theory of Suicide would be more predictive of completed suicide than attempted suicide and that it would be more successful in predicting completed suicide than would the SAP.

None of the needs, neither Shneidman's nor Joiner's, were found to be related to lethality based solely on the Pearson correlations. However, the results of the more precise and informative logistic regressions were more promising. There was a trend for the IPTS Needs Index to be associated with an increased likelihood of the note being written by a lethal (rather than nonlethal) suicide. In addition, when the IPTS needs were examined individually, it was found that the Perceived Burdensomeness Index was marginally significant in predicting lethality and was associated with an increased likelihood of the note being written by a lethal suicide. However, given that none of the models were significant, but that the predictors were, we caution interpretations based solely on these results.

What is a potential explanation for why perceived burdensomeness was found to be predictive while thwarted belonging was not? This finding may be a byproduct of using suicide notes to investigate this theory. Suicide notes, written typically to another person, may make the presence of certain themes more common than others. For example, because the notes are typically written to another person, the authors may be more motivated to write about how the other person will be "better off without them." In contrast, explaining to the person they are writing to that they do not feel as though they belong, or that they are lonely may not be as present, because they are in fact writing to another person and not necessarily expressing how they feel in this regard. In a recent essay (Yang & Lester, 2011), it was argued that suicide notes, while potentially giving insight into suicidal behavior, may also represent a way of presenting the self to significant others. Given this argument, perhaps the authors of suicide notes are more prone to portray themselves as doing something beneficial to their significant others rather than portraying themselves as being lonely, or as having poor relationships.

Of particular concern is the finding that one of the perceived burdensomeness items, feeling that others would be better off without them, was not significantly related to lethality, though it was in the predicted direction. This finding contradicts that of Joiner et al. (2002), in authors measured which the perceived burdensomeness by the degree to which each passage implied the idea that "my loved ones I will be better off when I'm gone." On the other hand, one of the perceived burdensomeness items of this study evaluated the degree to which the note implied that (at the time the author wrote the note) he or she felt that others would be better off without the author." While Joiner and colleagues (2002) focused on "loved ones" our wording focused instead on "others." Additionally, while Joiner focused on the idea being implied we focused on specifically at the time the author had written the note. These differences may explain the non-significant relationship of this item and lethality in this study. If we had focused on whether they were a burden solely on their loved ones, and allowed for interpretation about a time other than when the note was being written, perhaps our raters would have replicated the results of Joiner et al. (2002). However, as the IPTS does not stipulate that the perceived burden has to be on a loved one, the wording we used is still a valid, and previously used, means of testing this theory (Gunn, Lester, Haines, & Williams, 2012). It is also important to note, that while ours was not significant, both correlations, that of this study and of Joiner et al., were similar, pr = .26, pr = .33, respectively.

There are several limitations that must be taken into consideration when examining the results of this study. Perhaps the most obvious limitation was the decision to use lethality as our dependent variable. Although previous research has examined some of the variables with lethality as the outcome variable (e.g., Joiner et al., 2002), the use of lethality as an outcome variable may have affected the results of this study. Perhaps the failure of Shneidman's needs to predict suicide lethality can be due to the fact that the needs are present in both fatal and non-fatal suicidal behavior. By using lethality, we fail to address this concern. Additionally, when lethality is used as the dependent variable, there is always the problem of suicidal intent. It is possible that some of those who survived their attempt were in fact highly suicidal, while those who died by theirs were less so. Consider the case of woman A, who takes an overdose of medication at 4:45pm to teach her husband a lesson, fully expecting him to return home at 5:00pm and save her. However, traffic delays his return and she dies as a result. Now, consider the case of a woman B who jumps off the Golden Gate Bridge (a suicide hotspot in the US and a highly fatal drop) but survives, but with significant trauma and damage to her body.

Woman A is a lethal suicide, while woman B is a non-lethal; however the intent to die was much more present in woman B. Due to this, the use of lethality as a dependent variable is often a limitation. Future research should compare both theories outside of the contexts of lethality.

Another limitation of this study was the use of suicide notes, which are not always present with suicidal behaviors. Extant research has found that between 10-30% of those who die by suicide leave a note, with most estimates indicating around 20% (Ho, Yip, Chiu, Halliday 1998). However, regardless of the small percentages of those who leave notes, previous research has shown that those who leave notes are similar to those who do not (Callanan & Davis, 2009) and others have shown some differences in note leaving by sex and age (Heim & Lester, 1990). Suicide notes are often one of the few windows into the suicidal mind that are left to us; however are subject to several limitations. they Furthermore, finding that certain thwarted needs are present does not necessarily mean that the others are not. It could be the case that certain thwarted needs are often themes in suicide notes (e.g., perceived burdensomeness) while other thwarted needs are present in the development of suicidal behavior but are not present in the notes (e.g., thwarted belonging), especially if the notes are in fact written to portray the self in a favorable way (Yang & Lester, 2011). Finally, by examining suicide notes, we lack a control with which to compare them. Future research may be able to utilize such controls to determine if the thwarted needs are a product of suicidal behavior or an accompanying psychopathology. For example, a comparison of the letters of someone who died by suicide with someone who had depression with the absence of suicidal intent would allow us to theorize about what thwarted needs are associated with the suicidal behavior and which are a product of the psychopathology. Given the fact that suicidal behavior is rare, even among those with a diagnosed mental illness, it would be beneficial to learn more about what specific predictors are relevant to suicidal behavior among those with a diagnosed mental illness, so that assessment and prevention can be implemented more effectively. Prospective studies could compare depressed patients with high suicide risk (e.g., determined by psychological assessment of risk factors or physiological measures such as serotonin metabolites in cerebrospinal fluid) with those with low suicide risk (Asberg, Traskman, & Thoren, 1976; Mann, Malone, Sweeney, Brown, Linnoila, Stanley, & Stanley, 1996).

An additional limitation is the relatively small sample of notes. While previous research (e.g., Joiner et al., 2002) has utilized this same sample of notes, the small number of notes (n=38) may have affected the results. In fact, given the number of marginal findings, a larger sample of notes may lead to more robust findings. Inter-rater reliability was also generally poor. After the initial rating sessions, raters had to undergo two additional sessions of disagreement resolution. However, while this may be considered a limitation, it may also be viewed as beneficial to this study. By having both raters meet again and go over the rating scales and the notes in more detail, they were able to reach 100% agreement. Due to this, the dataset that was utilized for the final analyses was the product of a lot of deliberation and discussion on the part of both raters.

Several of the current findings can be discussed in terms of their implications. While the majority of the results regarding the IPTS were only marginally significant, they did implicate the role of these needs in suicidal behavior over those of Shneidman's theory. However, an important caveat of this is that Shneidman's PPAS was developed to assess thwarted needs among suicidal persons and was given to them directly. The raters in the present study described having difficulties getting from the notes whether or not the needs were thwarted. As the scale was developed to be administered to suicidal persons and was adapted to be used by raters, this may not have been an adequate means of testing this theory.

The IPTS results do suggest implications for assessment and treatment. If a clinician is working with a patient who perceives the self to be a burden on those around them (especially loved ones), this may be a sign that individual is at increased risk of suicide and in need of more immediate treatment or intervention. Marginal support was shown for our hypothesis, however we must urge caution in interpretation of these findings as they were only trending towards significance. However, regardless of this the present study represents the first comparison of the IPTS and SAP.

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Original Research The quality of life in the regions of Brazil and suicide and homicide rates Daniel Hideki Bando^{1, 2} & David Lester²

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Abstract: This study examined the associations between two indices of the quality of life and suicide and homicide rates in the 27 Brazilian states and in the 26 Brazilian capital cities. The results indicated a positive association between the quality of life and suicide rates, replicating previous research on nations and on the American states, but homicide rates were not consistently associated with the quality of life in the Brazilian states. No associations were found, however, for the capital cities. *Keywords:* quality of life, suicide, homicide, Brazil

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Henry and Short's (1954) theory of suicide assumes that the basic and primary target of aggression is another person rather than the self. What enables the child to develop so that his primary response to frustration, that of otheroriented aggression, is seen as legitimate, while other children develop in such a way that this primary response is inhibited and self-directed aggression becomes legitimate? Sociologically, Henry and Short proposed that the strength of external restraint was the primary basis for the legitimization of other-oriented aggression. When behavior is required to conform rigidly to the demands and expectations of others, the share of others in the responsibility for the consequences of the behavior increases, thereby legitimizing other-oriented aggression. When external restraints are weak, the self must bear the responsibility for the frustration generated, and other-oriented aggression fails to be legitimized.

However, from Henry and Short's theory, it can be argued that when external conditions are bad, we have a clear source to blame for our own misery, and this makes us outwardly angry rather than inwardly angry or depressed. When times are good, there is no clear external source of blame for our misery, and so we are more likely to become inwardly angry or depressed and less likely to be outwardly angry. Henry and Short would argue that a higher quality of life would lead to higher rates of suicide and lower rates of homicide, whereas a lower quality of life would lead to lower rates of suicide and higher rates of homicide. Lester (1989) reviewed several studies he had

Common sense suggests that, as we improve conditions in the world, people should be much happier. If we can eliminate poverty and oppression (such as sexism and racism), if we clean up the environment, if we improve the educational and cultural offerings for our citizens, if we do all this, then we should be much happier. Then, as the quality of life increases, life should be more worth living and suicide less common.

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conducted which supported the hypothesis derived from Henry and Short's theory.

Another obvious prediction from Henry and Short's theory is that suicide and murder are opposite behaviors. Societies with high rates of one of the behaviors should have low rates of the other. Lester (1987) reviewed research on the sociological correlations between suicide and homicide rates, and several studies report opposite associations between social characteristics and suicide and homicide rates. For example, societies with a higher quality of life had higher suicide rates but lower homicide rates than societies with a worse quality of life. For other variables, however, the patterns of correlations were quite different for homicide and suicide, but not opposite.

Bando et al. (2012) found a spatial cluster of high suicide rates in the southern part of Brazil, the same region with the highest income per capita. Bando and Lester (2014) found that suicide and homicide were negatively correlated in Brazil and in, a multiple regression analysis, that suicide was related to high socioeconomic status. These studies suggest that the suicide rates of regions in Brazil may be associated with the quality of life in the regions. The present study was designed to explore whether suicide and homicide rates were associated with two indicators of quality of life in Brazilian states.

Method

The present study is a cross-sectional ecological study using suicide, homicide and quality of life data in the 27 states and the 26 capitals of Brazil as the unit of analysis. Deaths considered to be suicide were those that used codes corresponding to "intentional self-harm" (X60 to X84); for homicide, the codes used were deaths due to "assault" (X85 to Y09) according to the International Classification of Diseases and Deaths (ICD-10). The mortality database utilized was that of the Ministry of Health Mortality Reporting System (DATASUS 2012). Sociodemographic data were extracted from the National Census (2010) from Instituto Brasileiro de Geografia e Estatística (Brazilian Institute of Geography and Statistics, IBGE). We calculated the age adjusted rates of suicide and homicide using direct standardization. This approach adjusts crude rates according to the age distribution of one external, arbitrarily-defined population. In this case, Brazilian population in 2010 was used as a reference (Ahmad et al., 2001). However, these suicide rates do not control for variations across the states and capitals in sex or ethnicity.

The Brazilian Human Development Index (HDI) follows the same three dimensions of the United

Nations HDI - longevity, education and income but modifies the methodology (PNUD 2013). The second indicator of quality of life was extracted from the Federation of Industries of Rio de Janeiro (FIRJAN, 2015). The Municipal Development FIRJAN Index (MDFI) was inspired by the HDI and includes the variable employment along with the income to compose the index.

The Brazilian HDI and the MDFI assume that, to measure progress in the quality of life of a population, it is necessary to go beyond the purely economic aspect and consider other social, cultural and political influencing the quality of human life. Both indexes range from 0 (low quality of life) to 1 (high quality of life). All the data used are available with free access.

The analyses were conducted with data for the years 2000, 20005, and 2009.

We collected the indicators according to the available period, the HDI for the years 1991, 2000, 2010 and the MDFI for the years 2000, 2005, 2009. Then we calculate the respective suicide and homicide age adjusted rates.

Results and Discussion

The results are shown in Table 1. For the 27 Brazilian states, the higher the quality of life on both measures, the higher the suicide rates. The results for homicide rates were, however, inconsistent – a weak positive association in some years and a weak negative association in other years. The data for the 26 capital cities did not support an association between the quality of life and suicide or homicide rates.

		Capital cities	States
		(n=26)	(n=27)
MDFI and			
Suicide rate	2000	-0.01	0.46*
	2005	0.12	0.32
	2009	0.02	0.29
Homicide rate	2000	-0.06	0.35#
	2005	-0.20	0.05
	2009	-0.17	-0.33#
HDI and			
Suicide rate	1991	-0.08	0.60***
	2000	0.06	0.51**
	2010	-0.14	0.31
Homicide rate	1991	-0.13	0.29
	2000	-0.03	0.35#
	2010	-0.42*	-0.37#

 Table 1: Pearson correlations between the quality of life and suicide and

homicide rates in Brazil

two-tailed p < .10

* two-tailed p < .05

** two-tailed p < .01 *** two-tailed p < .001

Previous research on the association between the quality of life and suicide and homicide rates used large areas – nations and states or provinces. It may be that breaking regions down into smaller

units (in the present case, cities) eliminates these associations, although possible reasons for this are not immediately apparent. Future research should explore the role of the size of regional unit in the consistency of the associations between the quality of life and suicide rates. In addition, the present study failed to find a consistent association between the quality of life and homicide rates. Again, possible reasons for this inconsistency are difficult to discern, but the results do throw doubt on Henry and Short's thesis that suicide and homicide rates are opposed behaviors which show opposite correlations with social variables.

The present study has a limitation that is inherent to the ecological study design. An association observed between variables at the group level does not necessarily represent the association that exists at the individual level. This bias is known as the ecological fallacy. Furthermore the study was correlational in nature, and so none of the results presented should be interpreted as cause-andeffect statements since associations do not imply causality.

Declaration of interests

Daniel Bando and David Lester declare that they have no conflict of interest.

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Original research **The Birthday Blues** Brian Honick ¹, David Lester^{1,⊠}, John F Gunn, III¹

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Abstract: Data from 10,884 suicides, whose dates of birth and death were posted on a suicide memorial wall, were examined for whether they were more likely to die by suicide on their birthdays than expected. Sixty-three suicides died on their birthdays as compared to an expected number of 29.8, significantly more than would be expected by chance.

Keywords: birthday blues; suicide; anniversary reaction

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The question of whether suicides have a tendency to choose their birthdays for their suicidal act has received a great deal of attention. Several studies have found no significant increase of suicides on birthdays: Wasserman and Stack (1994) for elderly suicides in Ohio, Panser, et al. (1995) for a small sample of suicides in Minnesota, Chuang and Huang (1996) for suicides in Taiwan, Lester (1997) for a sample of famous suicides, Lester (2005) in small sample of 74 suicides among those who played in the major leagues in the United States, and Lester (1986, 1988) for a small sample of 208 suicides in Philadelphia (USA)¹.

However, Christoffel, et al. (1988) found an excess of suicides on and around their birthdays, while Barraclough and Shepherd (1976) found that elderly suicides were more likely to die by suicide in the 60-day period around their birthday (but not so for younger suicides). Kunz (1978) found an excess of suicides in the three months after their birthday than in the three months before their birthdays. Shaffer (1974) found that children who died by suicide were more likely to do so within two weeks of their birthday. Hagnell and Rorsman (1980) found that seven of the 27 suicides in their sample died with 30 days of their birthdays.

More recently and using large samples, Jessen and Jessen (1999) analyzed 32,291 suicides in Denmark and found a decrease in suicides in the week prior to the birthday and an increase in the week after the birthday. Williams, et al. (2011) studied 50,160 suicides in England and Wales and found an excess of suicides on the individuals' birthdays among men, especially for those aged 35 years and older. Zonda, et al. (2016) analyzed all suicides (n=133,421) in Hungary for the period 1970-2002 and found that more suicides occurred on birthdays for men of all ages and for women over the age of 60. This birthday blues phenomenon was found for urban and rural suicides, for those of all marital statuses, and for both violent and nonviolent methods for suicide. In contrast, Reulbach, et al. (2007) found no birthday blues effect in 11,378 suicides in Bavaria, Germany.

¹ Unusually, this study had comparison groups of homicidal and natural deaths.

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The present research was designed to further examine the birthday blues effect using a large sample of over 10,000 suicides listed on a suicide memorial wall.

Method

The suicide memorial wall (www.suicidememorialwall.com) allows the significant others of those who died by suicide to post the name, age, and dates of birth and death on the wall. At the time of downloading the contents of the wall (April, 2014), there were 11,253 names on the wall. The postings were downloaded using EXCEL and transferred to an SPSS data file.

The sex of the people was checked automatically using genderchecker.com. Many names are ambiguous, and so the sex of many individuals remained unknown (11.2%). Of the remaining people, 79.3% were men and 20.7% women. The mean age was 31.4 years (SD = 13.7, range 9 to 94), median 28 and mode 18. The year of birth ranged from 1823 to 2002, with a mean of 1970 (SD = 16; median 1974 and mode 1983) and the year of death ranged from 1848 to 2014, with a mean of 2003 (SD = 8.6; median 2004 and mode 2005). Ninety percent of the dates of birth were 1949 or later, and 90% of the dates of death were 1994 or later.

All entries were checked for discrepancies, such as the age of the person not matching the distance between the dates of birth and death. Any impossibilities in the month (for example, not in the range of 1-12) were identified. A search was made for duplicate names, as well as possible reversals for date of birth and date of death. These were resolved or, when this was not possible, switched to missing data. Some of the suicides had missing data. After the data set had been cleaned, data remained for 10,884 suicides with a date of both date of birth and date of death. The majority of the suicides were from the United States, but a few were from other countries.

Results and Discussion

For the examination of how many individuals died by suicide on their birthday, data were available for 10,884 suicides. For 10,884 suicides over a long period of time, the expected number of suicides is 10,884/365.25 (using a correction for leap year) which equals 29.8. The number observed was 63 (χ 2 = 37.09, df = 1, p < .0001).

For those whose sex could be determined, 45 (81.8%) of the people who died on their birthday were men and 10 were women, not significantly different from the sample of suicides as a whole. Similarly the mean age of the suicides occurring on birthdays (32.8) was similar to that of the sample as a whole (31.4). There seemed to be no particular age at which the birthday suicides peaked. The modal age (with only six suicides) was 23. None occurred at age 21, and only two at age 40 and one at age 50.

For month of birth and month of death separately, data were available for 11,058 suicides. There was no variation for month of birth (χ 2 = 16.05, df = 11, p = .14) but there was a significant variation over month of death (χ 2 = 26.02, df = 11, p = .005) with March having the most (8.91%) and October (7.95%) and fewest in December (7.42%), replicating the commonly reported Spring and Fall peaks in suicides (Lester, 1979).

Although the present sample of suicides is not the type of sample that is typically used for research (a consecutive series of suicides in a region of the world), the sample did show the typical pattern of a Spring and Fall peak, and a greater proportion of men. Although the birthday blues effect was found for the present sample, the fact that only 63 of the 10,884 suicides died by suicide on their birthdays (versus an expected number of 29.8) indicates that the birthday blues effect, if it exists in a population, requires a large sample for it to be detected.

Most researchers who study the birthday blues effect use the broken promise effect described by Gabennesch (1988) to explain the phenomenon. Gabennesch suggested that people typically hope that their lives will improve but, when their lives do not improve, feel let down and are more likely to choose to die by suicide. This proposed effect has been used to account for the Spring peak in suicides and the Monday peak in suicides since, when Spring comes after Winter and the new week starts, and people's lives continue to be miserable, those who are already depressed may experience increased hopelessness and be more prone to choose to die by suicide. Birthdays are often viewed as "the first day of the rest of your life" and, if life continues to be miserable, then depressed people may be at greater risk for suicide. However, although macrosociological studies have been conducted to test the broken promise effect (such as those on the birthday blues), no psychological studies of individuals have appeared that test the effect directly.

There are some data that suggest that mortality from all causes might increase on or around birthdays (e.g., Abel & Kruger, 2009), and so any peak in suicides on birthdays may be part of a broader phenomenon, perhaps the increased salience of mortality and the resulting anxiety on

ceremonial occasions, which would fit in with terror management theory (Greenberg, Pyszczynski & Solomon, 1986).

The study is limited by the fact that it was not a complete sample of all suicides in a given region in a given time period, and neither is it a random sample, but the suicides listed on the memorial wall were not placed there with the intent of testing any psychological or sociological hypothesis about suicide, and so the suicides on the memorial wall should not be biased in favor or against the hypothesis. Previous research has examined the impact of variables such as marital status and the method chosen for suicide, but these data were not posted on the memorial wall. Abel and Kruger (2006-2007) noted that official records may misstate the actual day of death. Missing data are often assigned to dates such as the 1st or 15th of the month. However, this is less likely to be the case in death dates posted by relatives of the deceased.

The inconsistencies in the results of the present study and past studies is perplexing, and more research is needed to identify the conditions under which the birthday blues phenomena for suicidal deaths is found versus those under which the effect is not found.

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Original research Changes in the content of diary entries by a suicide as the date of death draws near

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Abstract: The diary for the four years prior to her death of a young woman who died by suicide, was examined to see whether trends in the content could be identified as the day of her death drew near. Many linear trends were observed over the last month, the last five months and the last four years of the diary which may provide insights into the psychodynamics of this particular suicide. For example, over the last month of her life, Sara focused less on the past, made more references to herself, used more tentative words (such as "maybe"), used more question marks, and had a greater focus on cognitive processes (such as "think").

Keywords: suicide, diaries, cognition

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There has been interest in how suicides behave in the hours, days and weeks prior to their suicidal actions. Information on changes in their behavior might provide some insight into the minds of suicidal individuals as they approach the time of their death and also provide clues that clinicians and significant others might observe. Clements, Bonacci, Yerevanian, Privitera and Kiehne (1985) and Keith-Spiegel and Spiegel (1967) both noted that staff notes on psychiatric in-patients in the 24 hours prior to their suicides indicated an improvement in mood. Lester (2010) observed calming in the mood of a young man left two tape recordings for his parents six and two hours prior to his suicide. These results were surprising because an improvement in mood would seem to indicate a reduced risk of suicide rather than an increased risk, but they also serve as a warning to mental health professionals that an improvement in mood is not a reason to minimize the risk of suicide in a patient.

Pennebaker and Stone (2004) studied the diary of a young college student (called Katie, a pseudonym) in the year before she killed herself and noted an increase in positive emotions and a decreased in negative emotions over the last six months of her diary. This result was also surprising since the improvement in mood took place over a much longer period than expected – six months rather than 24 hours. The question arises, therefore, whether these changes in mood were unique to this young woman or is it a general trend?

An opportunity to answer this question presented itself with the diary of a 33-year-old single woman who killed herself (the pseudonym Sara will be used for this article) and who left a diary that extends up to the day that she died. Sara appears to be an intelligent young woman who dropped out of college because, as she states, a lack of motivation. She works as a part-time waitress and dates lower class men most of whom are alcohol and drug abusers. Her suicide occurs after an onand-off 18-month relationship with one of these men after he tells her that he does not want to be with her.

In their study, Pennebaker and Stone used a computer program, the Linguistic Inquiry and

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I would like to thank the person who made this diary available to me but who wishes to remain anonymous



Word Count (LIWC: Pennebaker, Francis, & Booth, 2001) to analyze changes in the content of Katie's diary. This program counts the presence of 74 linguistic categories such as words denoting positive emotions, negative emotions, death, religion, and social relationships. The present analysis used the LIWC to search for changes in the content of Sara's diary over time.

Method

As noted above, the LIWC (Pennebaker, et al., 2001) was used to analyze the diary entries. Apart from the word count and the words per sentence, the other measures are expressed as percentages. For example, the measure for anger is the percentage of words expressing anger relative to the total word count. It is possible, of course, for a particular word to fit into two or more categories. For example, a swear word may also be a sexual word.

The present analysis focused on the 10 entries in the diary in the last month of Sara's life, the 38 entries in the last five months of her life, and the 62 entries in the last four years of her life. Five months prior to her death, Sara attempted suicide and was ordered by the court into outpatient counseling. She attended counseling regularly and took an antidepressant. In the five months between her suicide attempt and her death by suicide, Sara mentioned the word "suicide" nine times in her diary.

Results

There were ten entries in the last month of Sara's life (the month of May). Nine of the 73 variables showed significant linear changes over this month (two-tailed p < .05) and ten showed linear trends (p < .10), more than would be expected by chance (see Table 1).

Table 1

Linear changes in the word content in Sara's diary (Pearson correlations shown). Only variables with at least one statistically significant correlation are shown.

	Last month	Last 5 months	Last 4 years
	n=10	n=38	n=62
Word count	-0.56*	0.01	-0.06
Words per sentence	-0.51	0.02	-0.28**
Question marks	0.71**	0.22	0.09
Dictionary words	0.16	0.39**	0.36***
Words with >5 letters	0.28	-0.14	-0.31**
Pronouns:			
all	0.50	0.22	0.58***
I	0.66**	0.02	0.22*
We	-0.65**	-0.12	-0.19
Self	0.57*	-0.04	0.16
You	0.40	0.23	0.28**
Other	-0.34	0.08	0.31**
Assent	0.60*	0.09	0.20
Article	-0.66**	-0.31*	-0.58***
Prepositions	-0.72**	0.10	-0.11
Numbers	-0.36	0.03	-0.22*
Emotions:			
Negative emotions	0.29	0.28*	0.26**
Anger	-0.31	0.31*	0.39***
Sad	-0.06	0.05	0.22*
Cognitive mechanisms	0.57*	0.37**	0.38***
Causes	0.07	0.31*	0.25**
Insight	0.49	0.23	0.24*
Discrepancies	0.36	0.18	0.33***
Tentative words	0.72**	0.28*	0.25*
Senses	-0.43	-0.08	0.21*
Social	-0.13	0.12	0.35***
Communications	-0.29	0.04	0.24*



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References to:			
others	-0.25	0.17	0.35***
friends	0.55*	0.07	0.10
humans	0.68**	0.14	0.09
	0.08	0.14	0.09
Time:	0.30	0.07**	0.20**
in general	-0.39	-0.37**	-0.26**
Past	-0.61*	-0.09	0.08
Present	0.57*	0.28*	0.31**
Future	0.49	0.34**	0.16
Space	-0.80***	-0.13	-0.27**
Up	-0.62*	-0.26	-0.24*
Down	-0.76**	0.20	0.05
Including words	-0.58*	0.21	-0.27**
Excluding words	0.49	-0.02	0.23*
Occupations	0.24	0.39**	0.49***
Jobs	0.07	0.31*	0.39***
Achieve	0.10	0.49***	0.48***
Leisure	-0.29	-0.42***	-0.22
Home	-0.03	-0.40**	-0.05
Sports	-0.59*	-0.04	-0.30**
TV	-0.37	-0.27*	-0.13
Music	-0.41	-0.08	-0.27**
Religion	0.01	-0.19	-0.28**
Sexual	0.05	0.13	0.31**
Swear words	-0.34	0.36**	0.22*

* two-tailed < .10

** two-tailed < .05

*** two-tailed < .01

The psychologically significant changes were:

- 1. A decreased word count per entry
- 2. More question marks
- 3. More references to herself
- Fewer references to herself plus others (e.g., we)
- 5. More references to friends and other people
- 6. Less focus on the past and more on the present
- More focus on cognitive processes (the use of words such as cause, know, think)
- More use of tentative words (such as maybe, perhaps, guess)

There were 38 entries in Sara's final five months (from January through May), and 17 linear trends were identified. Three of these trends were also found over the final month of Sara's life: more words associated with cognitive processes, more use of tentative words and more focus on the present. Over the final five months, there was also more focus on the future, and this was almost statistically significant over the final month also.

Over the last four years of her life (with 62 entries), 33 trends were identified. The increase in words associated with cognitive processes, tentative words and words indicating the present tense were also statistically significant, indicating that these trends were long-term trends.

Since the goal of the study was to search for changes in the diary that might indicate an imminent suicide, linear trends found in the last month but not in the last five months or the fouryear period were identified (see Table 1). The decreases were word count, references to self plus others, prepositions, references to the past, and references to movement downwards. The increases were question marks, references to friends, and references to humans in general. Several other trends were found in the final month but not in the final five months: an increase in references to herself, and decreases in articles, references to space and to movement upwards, inclusive words, and sports.

Regarding the variables of interest suggested by previous studies of diaries, for all three periods, there were no significant trends in positive emotions, and negative emotions increased only over the last five months and the whole four years, but not in the past month. Thus, the findings from Katie's diary did not generalize to this diary.



Discussion

This study of the diary of a young woman who died by suicide was designed to explore whether trends found in the analysis of a similar diary (Pennebaker & Stone, 2004) of an increase in positive emotions and a decrease in negative emotions could be replicated. Sara's diary did not show these trends. However, many linear trends were observed over the last month, the last five months and the last four years of the diary which may provide insights into the psychodynamics of this suicide. For example, over the last month of her life, Sara focused less on the past, made more references to herself, used more tentative words (such as "maybe"), used more question marks, and a had greater focus on cognitive processes (such as "think"). It was as if Sara was questioning what she should do at the present time, and reducing her focus on others and on the past. This does not necessarily mean that she will choose to die by suicide, but perhaps that she may be about to make some decision.

How general are the trends identified for Sara? Whereas research has been conducted on samples of over 250 suicide notes (e.g., Gunn, Lester, Haines, & Williams, 2012), only studies of a few diaries have appeared, probably because such diaries are rare and because the significant others of the writers are often reluctant to share them with researchers. However, Lester (2014) presented case studies of seven diaries from people who died by suicide, both quantitative and qualitative studies. Hopefully, in the future, larger samples of the diaries of those who died by suicide will be collected and more general trends identified.

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Essay ASSISTED SUICIDE FOR PRISONERS

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Abstract: Handke and Bretschneider (2015) argued that prisoners should be eligible for assisted suicide as are members of the general population in some American states and in some countries. This proposition is examined. First, the concept of an appropriate death is discussed, followed by a brief review of suicide in convicted offenders. Finally, the issues of mental competence in making decisions and prisoner rights are discussed. It is concluded that, under appropriate guidelines, assisted suicide should be permitted for convicted offenders if members of the general population in those regions or countries have this right.

Keywords: prison suicide, assisted suicide, appropriate death

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Handtke and Bretschneider (2015) argued that prisoners have civil rights as do individuals in the general population and, therefore, they should be eligible for assisted suicide. Handtke and Bretschneider noted that prisoners are able to make informed choices. They are imprisoned with a clearly defined sentence, and the prison system in their country may offer in-house palliative care or hospice care. They can rationally weigh their options in these matters. Regarding their autonomy, although this is limited in some areas, such as choice of physician or the number of family visits, their existential choices are not as limited. They can, for example, refuse lifesaving treatment and issue do-not-resuscitate orders.

The present paper explores some of the issues involved in assisted suicide for prisoners.

An Appropriate Death

Lester (1996, 2003) has discussed many of the issues surrounding choosing to die suicide and assisted suicide. Since we all have to die, the crucial decision is, of course, not whether to die, but how to die. Ideally, each of us should die an appropriate death, and Lester has discussed what this might mean. For example, in one definition of an appropriate death (Kalish, 1985), the different types of death should occur at the same time. When the organs of the individual and the organism cease to function, there is what we may call physical death. Individuals are psychologically dead when they cease to be aware of themselves and of their own existence. Social death is when the individual accepts the notion that for all practical purposes he or she is dead. Social death may be defined from the point of view of the individual or from the point of view of the significant others, such as when the elderly relative is put in a home and forgotten by his family and friends. The final kind of death is anthropological death in which the individual is cut off from the community and

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treated as if he or she no longer exists. The Orthodox Jew who marries a Gentile is anthropologically dead to the Orthodox community. These four kinds of death can occur at different times in an individual's life, and Lester suggested that a death could be considered appropriate when all four of these different kinds of death coincide in time. A person who falls into coma (psychological death) and physically dies much later has had an inappropriate death.

Binswanger (1958) judged a death to be appropriate if the person has played a role in his own death. A person struck down by chance factors, such as lightning, therefore, does not die an appropriate death as defined in this way. In contrast, a person dying by suicide plays the maximum role in his or her death.

Deaths are legally classified as natural, accidental, suicide or homicide (the NASH taxonomy). Some view a natural death as good since, in a natural death, the body retains its integrity. An act of suicide, such as shooting oneself, destroys the body's integrity and is, therefore, inappropriate in this definition. From this point of view, any life that is prolonged by the use of transplants and medical intrusions into the body is not appropriate. Suicide and assisted suicide could be appropriate under this criterion if an appropriate method is chosen for suicide. Arguing against this notion, Shneidman (1968) said that he saw nothing natural about bacteria or viruses entering his body and causing death any more than a bullet or a knife entering his body.

The timing of a person's death may be relevant. Shneidman (1967) argued that there may be times in a person's life when death would be appropriate and would give a self-consistent tone to the life-style of the person. Such a death can even heighten an individual's impact by making his or her memory more treasured.

If you ask people how they expect to die, they can often give you an answer. Perhaps they have thought about this and decided between preferred alternatives. Their choice will reflect something about themselves, their personality and their fears, and it may also reflect their life-style. The passive person may choose to die at the hands of another or from a virus. The self-destructive person may commit suicide. An appropriate death can, therefore, be defined as one which is consistent with the person's life-style. For example, Ernest Hemingway's suicide by firearm in the face of severe medical and psychiatric illnesses was consistent with the death-defying life-style he had cultivated during his lifetime.

Lester (1996, 2003) also argued that the quality of life *as perceived by the individual* should be taken into account. Some individuals may choose, for example, to undergo painful treatment for cancer whereas others may choose to forego treatment and let the cancer take its course. Still others may hasten their death by choosing suicide. Each individual makes a choice as to the quality of life under these different choices and chooses that option that provides the best quality.

Suicide and Assisted-Suicide among Convicted Offenders

Despite intense observation and supervision by correctional staff, suicide rates among prison inmates are high and comparable to men in the community. For example, Tartaro and Lester (2005) reported that suicide rates for male prisoners in the USA ranged from 13 to 18 per 100,000 per year whereas the suicide rate for American men in general is about 18. Lester and Tartaro (2002) estimated a suicide rate of 113 for inmates on death row in the USA in the 1990s despite the even more intense supervision present for prisoners on death row.

Relevant to this consideration is the fact that some inmates sentenced to death eventually cease appealing their death sentences and insist that attorneys representing them stop appealing on their behalf. Strafer (1983) noted that five of the first eight men executed after 1976 (after the United States Supreme Court permitted executions if certain conditions were met) volunteered at some point to accept the process leading to their execution. This phenomenon may be likened to victim-precipitated homicide (Wolfgang, 1957) in which the victims play a role in precipitating their own murder, a behavior seen as having suicidal component.

The geriatric inmate population in the USA is growing at such a rate that special geriatric prisons have been constructed (Aday, 1994). In recent years, almost a third of deaths among prisoners are a result of AIDS (Camp & Camp, 1995), and the incidence of AIDS among inmates is roughly ten times higher than in the general public (Hammett, et al., 1994). Slome, Mitchell, Charlebois, et al. (1997) reported that 53%



of the physicians they surveyed had helped AIDS patients in the community to die by suicide, with a mean number of patients helped of 4.2 and a median number helped of 1.0. Thus, there are several risk factors for suicide which are becoming more frequent among American prisoners.

It is clear that life in jail and prison can be sufficiently harsh that inmates prefer to die by suicide than to continue to exist. The statistics on suicide are supported by scholars who have presented more general data on the harsh conditions in prisons (e.g., Rideau & Wikberg, 1992). It is, therefore, entirely conceivable that inmates may wish to die rather than live in such conditions, and such a decision may meet criteria for being logical and rational. If the inmate is, in addition, suffering from a severe or terminal illness, choosing suicide may be a rational choice.

Choosing Suicide and Mental Competence

In some of the criteria proposed for permitting an individual in the community to choose suicide and to receive aid from a physician or pharmacist in obtaining the necessary lethal medication, the mental competence of the individual is often included. It is usually proposed that only an autonomous, competent adult can make such a choice. Autonomy entails the individual being free to make choices, while competence entails the individual understanding the alternatives and being able to make a rational choice among them.

Children, the mentally retarded and those judged to be psychiatrically disturbed are typically not considered to possess autonomy or competence. The problem of psychiatric disturbance poses difficulties for approving assisted suicide in nonincarcerated individuals, and the difficulties are multiplied for those incarcerated. The majority of suicides in the community are typically diagnosed after the suicide as having had a psychiatric disorder (Robins, 1981), and the most common disorder is a mood disorder, usually a major depressive disorder.¹ Since depressive disorders can be treated (primarily by medication or psychotherapy such as cognitive therapy), should depressed individuals have their depression treated before they are permitted to choose suicide? However, depressed individuals in the community cannot be forced to take medication or undergo psychotherapy unless formal court orders are obtained for involuntary commitment to a psychiatric hospital and, even then, patients with good legal representation can resist treatment against their will.

In prisons, many inmates have chronic psychiatric disorders, while others experience transient situational disorders caused by the stress of imprisonment. The proportion of psychiatrically disturbed inmates has increased in the USA in recent of years, possibly as а result the deinstitutionalization of psychiatric patients, many of whom have ended up in prisons instead of psychiatric units (Winfree & Wooldredge, 1991). As a consequence, many inmates are medicated to help them (and the staff) cope with the stress of imprisonment. Deciding upon the criteria for assessing whether an inmate is competent to make a decision may prove difficult. However, solutions for the analogous problem in carrying out death sentences, in which inmates must be judged to be competent for execution, have been proposed (e.g., Radelet & Barnard, 1988).

Therefore, rational arguments in favor of assisted suicide may be more relevant for prisoners since the quality of their life is considerably worse than members of the general population.

Prisoner Rights

In the USA, prisoners do have the right to refuse medical treatment (including extraordinary interventions) and to refuse psychotherapy and psychiatric medications. Washington v. Harper (494 U.S. 210 [1990]), relying on Turner v. Safley (482 U.S. 78 [1987]), held that prisoners and involuntarily committed psychiatric patients can refuse antipsychotic medication, unless such medication is necessary for safety reasons. The result is that such decisions are usually left to the discretion of the medical staff of the prison, unless prisoners file lawsuits. It would not be surprising, therefore, if prisoners were granted in the future a right to assisted suicide similar to that which is granted to citizens in general. If prisoners requested such a procedure, they would probably have to have a severe or terminal illness and have been transferred

¹ It should be noted that rarely, if ever, do such studies include a control group. If research did include a control group, the diagnosis of those in the control group should be arrived at using the same techniques as those used for suicides (interviews with friends and relatives of the individuals), and those diagnosing the individuals should be "blind" as to which the individuals are suicides and which are controls.



to a hospital setting. Thus, the staff involved in the decision would be medical rather than custodial.

Implications

The first question that arises is whether assisted suicide has occurred in prison settings. Many physicians admit that they have helped severely ill and terminal patients in public and private hospitals die by suicide even though such behavior is illegal (Quill, 1993), and it is quite possible that unofficial and undocumented assisted suicide has occurred in prison settings.

Assisted-suicide is already available in some American states (and in some countries) and so it may be argued that this option (or right) belongs also to prisoners. If it is decided that prisoners have

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this same right, procedures will have to be established for allowing an inmate to choose assisted suicide. A prisoner dying from a chronic illness and in psychological and/or physical pain who meets established criteria should be allowed to choose this option, if appropriate procedures have been followed.

One of the arguments made against permitting assisted-suicide available for the general public is that some people may be pressured into choosing this option by significant others or by the medical professionals with whom they consult. For prisoners, the possibility of pressure to choose this option may be greater. Established procedures should have provisions to minimize or eliminate this risk.

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Essay Suicide and our SubSelves: Understanding Celebrity Suicides

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Abstract: This note proposes that a subself theory of the mind can help us understand the seemingly puzzling suicides of apparently happy and successful celebrities such as the recent suicides of Kate Spade (fashion designer) and Anthony Bourdain (CNN reporter). The public sees the façade self that these celebrities present to the world, and to their "friends," but we rarely, if ever, see the other subselves that constitute their mind.

Keywords: façade self, celebrity suicides, subselves

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Recent cases of suicide by famous people (Kate Spade, fashion designer, and Anthony Bourdain, CNN reporter) have led many commentators to contrast the public persona (façade selves) of these individuals with their unexpected suicide. In public, they seem happy and successful, and this makes their suicides appear to be inexplicable. Lester (2010, 2015) proposed a subself theory of personality (or a multiple self theory of personality) which is relevant to these suicides and makes them less puzzling.

Some people, at some points in their lives, say that they need to take some time "to find themselves." This means that, along the way, they lost the sense of who they really *are*, which implies that they do not like or accept who they *are*. In a recent essay Lester (2013) wrote on the motivations for suicide and discussed suicide resulting from *loss of self*. Lester quoted from the diary of a young man who killed himself who wrote: "Not enough of me exists or works right for me right now." His existence felt fragile to him: "I'm slipping. I'm falling."

Palmer (1972) proposed a theory of suicide based on the tension between the roles that we have. Palmer's concept of tension is relevant to our subselves, for we have different subselves in operation in our different roles. There is often tension between the many internalized roles that we have, and the ideal is to have just the right amount of tension. If the tension is too little, and people perceive little interference between the roles, they begin to feel an inexplicable and severe frustration. The lack of tension seems as if the personality is disintegrated, and the personality collapses. This is made worse if people have fewer roles, for then there will be less interference.

When inner tension grows very low, the foundations of inner belief are drastically shaken. That seeming inner peace and harmony which the individual has held as an ideal, turn out in practice to be extremely disturbing. If tension in the inner system has been consistently low, the individual suffers continually a collapsed internal state, an inner nothingness.

(Palmer, 1972, pp. 127-128)

This state increases the risk of suicide.

Lester (2013) also discussed suicide as an *escape from the self*, an idea proposed by Baumeister (1990). Lester quoted from the diary of a man in his 30s who died by suicide and who earlier had written: "This experience has left me with less of the feeling that I am a useless cog in society, that I don't count, that no one cares what I do, that my actions are fruitless, that I'm stupid and incapable.....that I'm not a blot on the societal world, a misfit, a cancer, a sponger, a misnomer..." Although that experience seems to have helped a little, he did not live much longer. Other experiences confirmed to him that he

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was a misfit and a cancer, and his death by suicide allowed him to escape from his mental pain.

Apart from those who have lost their self and those who want to escape from their self, most people believe subjectively that there is a "real me," a core self that is partially hidden by the façade selves that we erect in different social situations. In viewing the suicides of Kate Spade and Anthony Bourdain, it seems that commentators have taken the façade self to be the real self.

Individuals present various images on a daily basis as a result of the different roles and corresponding functions that they perform. We are used to switching from one subself to another and choosing a subself to fit the occasion. In modern times, the popularity of online activities such as *Twitter* and *Facebook* have allowed people to craft the narrative of their lives and to present themselves to friends and family, and to the world, in a particular light. This fits a popular television message – "Image is everything."

This may be true even of suicide notes. Yang and Lester (2011) noted that, typically, suicide notes are viewed as providing insights into the psychodynamics of the suicidal individual. Yang and Lester proposed, in contrast, that some suicidal individuals use their suicide note to present a picture of themselves that they want others to remember. Suicide notes may sometimes present a façade self rather than a real self.

Lester and George (2000) suggested that there may be individuals who are driven to take their own lives while wishing that they were free of this desire. Their first-order preference is to die by suicide, but their second-order preference is to choose life over death. The converse could also be true - individuals who choose to live but who wish that they were the kind of person who could die by suicide. A subself theory of the mind provides a way of resolving this conflict, for example, by permitting each subself to have executive power (be in control of the mind) for some periods of time and in some settings. It is possible, therefore, that the person may choose to die by suicide when the subself with the first-order preference (to die by suicide) is in control of the mind.

The notion of two selves that arises in discussions of the issues of "why can't I do what I truly want to do?" and in self-deception (which appears to involve two selves, the subject and the object of deception) is also relevant to suicide. As Petrov (2013) has noted, suicide implies a similar duality, a dissociation between the one who performs the act and the one who is affected by it. Petrov noted that St. Augustine viewed the suicide of Lucretia (who had been raped by the son of an Etruscan king) as the guilty Lucretia killing the innocent Lucretia. In psychoanalytic theory, the suicide is killing an introjected object rather than the self, a murder of the "hated other." Suicide is sometimes referred to as self-murder, *felo de se* (a felony of oneself) and, in German, selbstmord (or selbstmörder [self-murder]), and the word *suicide* contains this duality (sui-cide).

Subselves and Psychotherapy

The proposal of that each individual's mind is composed two (or more) subselves has been used in psychotherapy for suicidal individuals. For example, in a case reported by Goulding and Goulding (1978) of a psychiatrist who had made several suicide attempts, they asked him in one session to split his self into two parts. In one chair he played the subself that has not allowed him to kill himself in the past the part of him (subself) that did not take quite enough pills, that allowed him to be found, and that survived after his heart stopped beating. In the other chair he put the other subself - the one that wanted to die. He then created a dialogue between the two parts of himself.

I will not let you kill me. I want to be alive and stay alive. I will not let you kill me.

I hear you; you really want to live, don't you. I won't kill you. I won't kill myself.

I am the most powerful part of me and I will not let anything happen to me that ends in my death. (Goulding & Goulding, 1978, pp. 181-182).

Firestone (1986) presented clinical evidence that suicidal people are often tortured by thoughts or "voices" which degrade and criticize the self. These thoughts can grow in intensity until they take precedence over the normal rational thoughts. Suicide is the result of acting upon these negative thoughts. Firestone's concept of inner voices can easily be construed as thoughts coming from another subself. Firestone (2004) discussed how voice therapy could have helped a young woman who committed suicide at the age of 21, leaving a diary covering the final year of her life.

Katie had been sexually abused by her alcoholic father. After he left the home, her mother became psychotic, and Katie and her younger sister were placed separately in a series of foster homes. Katie developed an eating disorder which had required hospitalization on several occasions. At college, Katie had a boy-friend, but her relationship with him raised many problems for her. In a hypothetical therapy session, Firestone speculated how Katie could have helped to explore her inner voice and to shout the words out loud.



Therapist: It sounds like you have a lot of negative thoughts about yourself. Try saying that again. "I'm a pig and a weak person and I don't deserve anything good" – only this time, say it as if another person was saying it to you about you.....

Katie: (Louder voice) "What is wrong with you? You can't even stick to a diet for one week. You should starve yourself! Eat nothing, you don't deserve anything. You're a loser! Not worth ANYTHING! (screaming) No one is ever going to care about you. (cries deeply, for a long time) (Firestone, 2004, pp. 180-181).

Katie realizes that her mother said similar things to her, and then, in this hypothetical therapy session, Katie says:

Katie: It's like there's this other person living inside my head. Sometimes it feels like Mom, sometimes though it's like my Dad. Maybe it's both of them, ganged up, trying to kill me.

(Firestone, 2004, p. 182)

Discussion

We are often surprised when a seemingly happy and successful celebrity chooses to die by suicide. From the perspective of a subself theory of the mind, we have taken one subself of the person (a façade self) to be the whole person.

A subself theory of the mind reminds us to be aware that the individual may have many subselves and that the façade self we see in the media may be adopted for a role that the person plays in public. In his obituary for Anthony Bourdain, Redzepi (2018) noted that "Everyone felt like they knew him." Of course not. The Bourdain that Redzepi and others felt that they knew was simply one façade self that Bourdain presented to them.

The person may have many different roles in different situations and, therefore, many other subselves that accompany these roles. Anon (2018), in an obituary in *The Economist*, noted that Bourdain rose from dishwasher in restaurants to head chef. As head chef, he was frenetic, chewing aspirins continually. As a teenager, he "dropped acid," later for seven years he used heroin and, after he stopped using heroin, he took to cocaine. The façade selves that Bourdain presented were different on acid, on heroin and on cocaine. He had several marriages and a child, and the façade selves he presented to these individuals were, in all likelihood, different from one another. We must remember that people are complex.

However, it is the subself that has executive power over the mind when the person is *alone* that may be the subself that is at high risk for suicide, and this is the subself that we, and even counselors, never get to witness.

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Essay

The Debate over Whether Physician-Assisted-Suicide Is the Same or Different from Suicide

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Abstract: The American Association of Suicidology argued that physician aid-in-dying is not the same as suicide. In this essay, it is noted that suicidal acts by each method chosen for suicide have unique properties and different psychological correlates. Therefore, physician aid-in-dying and physician assisted suicide can be viewed as suicide by a unique method and, therefore, viewed as suicide.

Keywords: physician aid-in-dying, assisted suicide, methods for suicide

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In 2017, the American Association of Suicidology (AAS, 2017) published a statement arguing that suicide is not the same as physician aid in dying, meaning physician-assisted suicide (PAS). They pointed to differences, such as legal approval for PAS required that the person was not psychiatrically disturbed, and the person must have a terminal illness. Since AAS has preventing suicide as one of its aims, but since AAS does not want to prevent PAS (which has been legally approved in several American states and countries), this semantic distinction is necessary for AAS.

Some commentators have argued that this distinction is not valid. The present commentary also argues that the distinction between suicide and PAS made by AAS is not valid because it is probable that suicides by each method for suicide (such as by solids and liquids or by firearms) are not the same. It can be argued on the basis of research that the causes, predictors and correlates of suicide by each method are quite different. For example, suicide by hanging may require a different sociological explanation than suicide by an overdose of medication. If this is valid, then PAS is merely suicide by a different and unique method. What is the evidence that suicide by each method may be a distinct behavior?

Are Suicide Rates by Different Methods associated over Regions?

Lester (1990) explored the differences in the suicide rates by different methods by examining differences by state in the USA. First, he used factor analysis to see which methods of suicide clustered over the states. Cluster 1 contained suicide bv hanging/strangulation, cutting/piercing, jumping and "other methods." Cluster 2 contained suicide by other gases/vapors and submersion/drowning. Cluster 3 contained suicide by solids/liquids and firearms/explosive. This means, for example, that states with higher rates of suicide by hanging also had higher rates of suicide by jumping but did not differ in suicide rates by drowning.

Lester (1987) found that, although overall suicide rates increased to the west across the states of the USA (with no north-south variation), suicide rates by hanging were high in the north, while suicide rates by poisons and firearms were indeed higher in the west.

Do Regional Suicide Rates by Different Methods have Similar Predictors?

Lester (1990) examined 37 social and economic variables over the states of the USA and identified seven clusters of variables. The total suicide rate was associated positively with scores on the cluster

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measuring low social integration and negatively with scores on the cluster measuring the age of the population. The associations for the suicide rate by each method were:

- Solids/liquids: positively with urban/wealthy and low social integration;
- Gases/vapors: positively with urban/wealthy and participation in the labor force and negatively with southern;
- Hanging: positively with urban/wealthy and negatively with southern;
- Drowning: positively with the age of the population and Roman Catholicism;
- Firearms/explosives: positively with low social integration and negatively with urban/wealth and the age of the population;
- Cutting/piercing: positively with urban/wealth and Roman Catholicism;
- Jumping: positively with urban/wealth and the age of the population;
- "Other methods": positively with urban/wealth.

Lester concluded that Durkheim's (1897) theory of suicide, which included low social integration as a causal factor, was confirmed only by rates of suicide by solids/liquids and by firearms/explosives. A different sociological theory of suicide would be necessary to explain suicide rates by other methods.

Suicide Rates by Different Methods over Time

Lester (1996) looked at the suicide rates by each method over time in England and Wales from 1950 to 1985. The total suicide rate was positively associated with the birth rate and negatively with the marriage rate. The suicide rates using poisons, cutting and firearms had no sociological correlates. The suicide rate using domestic gas was negatively associated with the marriage rate. The suicide rate using other gases (primarily car exhaust) was positively associated with the divorce and unemployment rates. The suicide rate by hanging was positively associated only with the divorce rate. The suicide rate by submersion was negatively associated with the unemployment rate. Thus, the sociological correlates of the suicide rates by each method over this time period differed.

Lester (2000) replicated this study using suicide rates from the USA over time from 1950 to 1985. The total suicide rate was significantly associated with marriage and birth rates positively and divorce rates negatively. This pattern was found also for suicide rates using firearms. For suicide rates using solids/liquids, all three regression coefficients were negative, and for suicide rates using hanging, all three regression coefficients were positive. Lester (1988) found that, from 1946 to 1977 in the USA, the total suicide rate increased, as did the suicide rates by poisons and by firearms. In contrast, the suicide rates by hanging and by residual methods declined.

Personal Characteristics of Suicides by Different Methods

There is a great deal of recent research on suicides who choose different methods, such as jumping in front of trains (e.g., Mishara & Bardon, 2017) and those jumping from bridges (e.g., Saeheim, et al. 2017). For example, suicides using firearms tend to be more impulsive than those using other methods and to less often have a history of non-lethal suicide attempts (Anestis, Khazem & Anestis, 2017). Preventing firearm suicides also calls for different prevention strategies than preventing suicide by other methods, such as national firearm control laws and safety lock on firearms (Houtsma, Butterworth & Anestis, 2018).

Discussion

The idea that suicides by the various methods used may be distinct and different behaviors was suggested by Clarke and Lester (1989) in their book on the tactic of restricting access to lethal methods for suicide prevention. They noted that there was good evidence that many suicides would not have switched methods for suicide if their preferred method was unavailable. These acts may be methodspecific. Suicide may not be a unitary behavior, but rather a collection of somewhat different behaviors distinguished in part by method. Suicide by each method may have unique psychological, psychosocial and sociological correlates and, therefore, causes.

The evidence presented in this comment is primarily sociological. However, suicides by different methods differ at the individual level too. For example, Stack (2015) has documented differences in the suicides choosing particular locations for their death, whether it be at home, in a hotel or in a natural area. For example, suicides at the Grand Canyon National Park were younger, more often Asian, less often divorced, less often reacting to health problems, or intimate partner problems, less often drug and alcohol abusers and less often depressed, less often left a suicide note, and more often used falls and jumps and died in a car as compared to all suicides in natural areas and all suicides in general in the USA.

The conclusion is, therefore, that PAS is merely suicide using a different method. In the same way that suicides using each different method for suicides have unique sociological correlates, the rate

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of suicide by PAS will also have unique sociological correlates and those choosing PAS will have unique psychological characteristics. Further research is needed to explore the differences between those who choose PAS, those who choose suicide without assistance, and those who choose to die of natural causes.

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Essay

A Two-Self Theory of Suicide and Implications for Counseling Suicidal Clients

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Abstract: Building upon the ideas of Brian Mishara's two tendency model of suicide and Bijou Yang Lester's two component model of decision making, a two-self model of suicide is presented, involving a suicidal self and a nonsuicidal self interacting with each other. A series of postulates and corollaries are presented, along with implications for counseling.

Keywords: subselves; counseling; suicidal clients

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Mishara (1996) proposed the existence of two basic tendencies that vary over time: (i) a suicidal tendency D and (ii) a life tendency L. It could be, of course, that these two tendencies are merely opposite ends of a single dimension, but Mishara opted to view them as two separate tendencies¹. These two tendencies can influence each other through a process of mutual inhibition, and this inhibition can be weak, moderate or strong. There are many experiences that can influence D, the suicidal tendency, such as loss of a partner or a diagnosis of a terminal disease, and there are also many experiences that can affect L, the life tendency, such as falling in love or achieving a goal.

Bijou Yang Lester (2011), a behavioral economist, was interested in explaining the choices made by individuals. She proposed that choices are determined by a two-process model, in which the individual's behavior is affected by a rational component and an irrational component. She noted that one can behave rationally or irrationally. However, when one behaves rationally, there may be irrational components, and, when one behaves

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Address: 101 Vera King Farris Drive, Galloway, NJ. E-mail: lesterd@stockton.edu irrationally, there may be rational components. Yang Lester gave the example of credit card use. Carrying a zero balance and getting the cash bonus is rational behavior with a rational component. Carrying a nonzero balance but getting the cash bonus is irrational behavior with a rational component. Having a zero balance but no cash bonus is rational behavior with an irrational component. Carrying a non-zero balance and getting no cash bonus is irrational behavior with an irrational component. Consider an adolescent wrist-cutter. Karl Menninger (1938) would view the wrist-cutting as motivated by an unconscious suicidal impulse. In Yang Lester's model applied to this behavior, the adolescent is behaving rationally by choosing to live, but with an irrational element (self-mutilation).

When individuals plan and stage their suicidal action, they have to make many choices, choices which will affect the likelihood of dying from the method chosen and the likelihood of others intervening and saving the individual (Lester & Stack, 2015). For example, an individual planning suicide using an overdose can choose to take the overdose at home or in a motel away from home, and they can also vary the time of the evening and night when they consume the overdose, decisions that affect the

¹ There is a parallel here, of course, with Freud's life and death instincts – Eros and Thanatos (Tabachnick & Klugman, 1067).



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chances of someone intervening to prevent the suicide. Some of these choices may be more rational than others or, in the present context, have rational and irrational components. For example, taking a lethal overdose (rational for dying by suicide) at home when other residents are likely to arrive home soon (irrational for dying by suicide) has both components.

Yang Lester noted that two process models (and, we might add, two tendency models) have some similarity to two-self models of the mind. In these models, there seem to be two (or more) subselves arguing with each other, struggling to make sense of the situation, and arriving at a decision. Lester (2015) has proposed a subself theory of the mind in which he proposed that the mind is made up of two or more subselves (or subpersonalities). He proposed a theory phrased in terms of a set of 16 formal postulates accompanied by 38 corollaries. He chose this formal form of presentation in order to make the model explicit and empirically testable. Lester did not apply his subself model of the mind to suicide, and the present paper takes some of his postulates and corollaries that seem relevant to a two-self model of suicide and examines their implications for understanding suicide.

There are many theorists who have proposed versions of a subself theory of the mind. For example, Carl Jung (1971) proposed the existence of complexes in the psyche, Eric Berne (1962) proposed ego states, while Abraham Maslow (1970) proposed syndromes.

Therefore, in the following sections, a series of postulates about a two-self theory of suicide will be proposed. In addition, some of the postulates will have accompanying corollaries². First, the question of what is a subself must be answered. For present purposes a subself is defined as a coherent system of thoughts, desires and emotions, organized by a system principle. For this theory of suicide, it is assumed that there are two subselves, a suicidal subself and a non-suicidal subself.

Is a Two-Self Mind Universal?

Postulate 1:

Not every individual has both a suicidal subself and a nonsuicidal subself.

Although the present theory is a two self-theory, we must acknowledge that some individuals may never have a suicidal self while others may never have had a nonsuicidal self. It should be noted in passing that some theorists assert that we do not have any subselves. As Baumeister (1998, p. 682) stated, "The

multiplicity of selfhood is a metaphor. The unit of selfhood is a defining fact." I believe Baumeister to be wrong in this.

Executive Control

Postulate 2:

At any point in time, one subself is in control of the mind. It may be said to have executive power.

Corollary 2a:

When one subself has executive power, the other subself is said to be suspended.

Corollary 2b:

A subself may appear in many situations, or only on rare special occasions. One subself may be domineering while the others is submissive.

The psychotherapist should endeavor to determine how much of the time the suicidal subself has executive control and whether the suicidal subself is domineering.

Corollary 2c:

A subself may have executive power for anywhere from seconds to hours or even longer periods of time. In the majority of situations, each subself has executive power for a reasonable period, perhaps extending for hours or days. On the other hand, when people have internal dialogues within themselves, debating whether to take some action, each subself has executive power for the time it takes to argue one side of the argument.

Corollary 2d:

Selfhood is whichever subself has executive power at the time.

The issue of who "I" am has long been debated by psychologists interested in the notion of selfhood. In the present theory, selfhood is perceived by the individual to be whichever subself has executive power at the time.

Corollary 2e:

The existence of two subselves accounts for the inconsistency in the behavior of individuals.

Postulate 3:

Individuals can seek to create new subselves for the future.

Several scholars have introduced the concept of possible selves (Hooker & Kaus, 1992). Although their concept appears to be similar to the present focus on subselves, it is not. Hooker and Kaus's concept of possible selves refers to goals and fears for the future. Hooker and Kaus instructed their subjects to think about *"the kinds of experiences that are in store for us and the kinds of people we might possibly become…what we hope we will be like"* (p.

² The personality theorists who stimulated these ideas are given full credit and cited in Lester (2010, 2015).



395), and they give an example of *"one of my own* [possible selves] is to win the lottery and become a millionaire" (p. 305).

Despite this difference between their concept and the present theory, their discussion raises the possibilities that people might indeed seek to create new subselves as defined in the present theory. When depressed people enter psychotherapy to change their lives, their behavior can be construed as seeking to create a new non-depressed (or nonsuicidal) subself for the future. In this example, the reality is that the depressed or suicidal subself will not disappear or be destroyed, but rather that it will take over the mind for less and less time in the future.

Integration

Postulate 3:

The individual can try to integrate the subselves.

It may be impossible ever to eliminate one subself. In that case, the issue arises as to how the mind might be integrated. It might be that the process of involves breaking down the boundaries between the two subselves and integrating them into a single unified self. This may not be desirable with a suicidal subself and a nonsuicidal subself. Alternatively, it might be that the two subselves coexist with one another, with the individual acquiring tactics to suspend the suicidal self whenever it assumes (or tries to assume) executive power.

The Sources of Subselves

Postulate 4:

The suicidal subself may be a regressive subself developed early in life, formed by the introjection of the desires and thoughts of powerful others (in particular, parental figures) and imitation of their personality and behavioral styles.

In Transactional Analysis (TA), it has been proposed that the suicidal impulse (and in the present theory, the suicidal subself) stems from the parent's early injunctions that the child should never have been born and that the child should cease to exist (Woollams, et al., 1977). The infant or child can receive a "do not exist" message at any age and in various ways. The infant may be handled stiffly or with distaste. Perhaps a parent actually says, "I wish you'd never been born." The child may perceive such an injunction even when there is no specific injunction. For example, if the birth was a difficult one, and the child hears about this, the child may decide that he or she deserves punishment for hurting the mother.

This injunction can become part of the person's script and, in the present theory, part of the suicidal

subself. According to TA, the injunction is received by the child and so becomes part of the Child ego state. In contrast, the nonsuicidal subself is grounded in the Adult ego state. In guidelines for crisis intervention and counseling with suicidal individuals, a TA approach recommends asking questions that will put the patient's Adult ego state in executive control in order to calm the patient and minimize the influence of the Child ego state for the present time.

Postulate 5:

The suicidal subself may be formed as a result of early experiences.

The suicidal self may be formed by relevant formative processes including traumatic experiences (such as verbal, physical and sexual abuse) or the conditions of worth as described by Carl Rogers (1951).

A Positive Aspect of Two Subselves

Postulate 6:

The possibility of attributing negatively valued aspects (thoughts, desires, emotions, or behaviors) of oneself to the suicidal subself may enable the individual to maintain high self-esteem since the negative aspects of the suicidal subself do not color the nonsuicidal subself.

Enmeshed Subselves

Postulate 7:

The two subselves may become enmeshed, and the psychotherapist must help the client create sufficiently impermeable boundaries so that the nonsuicidal self can withstand pressure from the suicidal self to take over executive power and resist intrusions from the suicidal self into the nonsuicidal self when the nonsuicidal self has executive power.

Implications for Counseling

In a subself model of the human mind, it is critical that the counselor help the client to identify the different subselves. The names given to these subselves need not fit a predetermined set of categories developed by a theorist, and the counselors can let the client label their own subselves as they are identified. Some useful labels for subselves come from the business world, such as chairman of the board and recording secretary. Indeed, the counselor may seek to create new subselves, such as a recording secretary if the client does not have such a subself already, and a mediator, a subself that negotiates between conflicting subselves.



There are several systems of counseling that are based on concepts similar to the subself model proposed by Lester. Transactional Analysis (TA) uses the concepts of ego states, but these are limited to three major ego states, Child, Adult and Parent. However, the TA principles can easily be modified for the proposed two subselves proposed in Lester's model, and Orton (1974) has described the use of TA for crisis intervention. Goulding and Goulding (1979) have proposed Redecision Therapy, based on TA which focuses of helping clients reject injunctions from parents and making decisions to change.

Jeffrey Young (Young & Klosko, 1993) introduced schema therapy in which schemas are organized patterns of thoughts and behaviors, akin to subselves. People's behavior (coping styles) is a result of their schemas, and schemas and coping styles can combine into modes. Psychotherapy involves identifying and examining these schemas, initiating dialogues between competing schemas, and testing their validity. These techniques can be found also in some forms of psychoanalytic therapy. For example, Pizer (1998) discussed the multiply constituted, distributed self, and presented a model for the tolerance of paradox and conflict in this distributed self as a developmental achievement.

For suicidal clients, Firestone (2004, 2005) has illustrated the use of Voice Therapy, a system in which subselves are presented as inner voices that express in words the thoughts and desires of the suicidal self, and she has described how therapy sessions might have proceeded with a young woman (described in Katie's Diary [Lester, 2004]) who died by suicide. Other systems of counseling that utilize a subself model are Polster (1995), Rowan (1990), Schwartz (1995) and Shapiro and Elliott (1976).

In recent years, those counseling suicidal clients have been urged to listen to the pain (psychache [Shneidman, 1996]) experienced by the clients (Pompili, 2018). In attempting this, it may be useful for counselors to recognize that the client may have two (or more) subselves, and to help the client identify and eventually evaluate these subselves.

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Essay Suicide in London in the 17th Century

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Abstract: It is rare to find rates of suicide from previous centuries. Data from a book published in 1662 enabled suicide rates by hanging to be calculated for London, England in the mid-1660s. The estimated suicide rate by hanging was in the range of 2.41 per 100,000 per year to 3.32.

Keywords: suicide rate; London; hanging

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David Sisler (davidsisler.com) drew my attention to a book published In 1662 by John Gaunt entitled *Natural and political observations mentioned in a following index, and made upon the Bills of Mortality.* In this book, Gaunt provided numbers for causes of death in the city of London. In a 20-year period beginning in 1629, Gaunt noted 229,250 deaths (Anon, 2009). Gaunt's list of causes of deaths did not, of course, match modern classifications, but he did note that 222 persons hanged themselves, while 86 were murdered during this period (Anon, 2009). However, 829 people died from drowning, some of whom may have been suicides, while 14 were poisoned, 26 smothered and 7 shot, possible murders or suicides too.

Gaunt estimated the population of London to be 460,000, while Emsley, Hitchcock and Shoemaker (2019) estimate the population in the mid-1670s as 500,000. Using Gaunt's population estimate, and assuming that the period was 20 years (Anon [2009] does not specifically state which years are being referred to), then the estimated suicide rate by hanging in London during this period in the mid-1660s is 2.41 per 100,000 per year and the estimated murder rate is 0.93.

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A listing of the suicides by hanging is from a reprint of a page from Gaunt's book ("https://www.jstor.org/stable/25487673?seq=1" \l "page_scan_tab_contents" \t "_blank") is provided in Table 1.

Table 1. Suici	des by hangiı	ng (1647-1660).
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Year	n
1647	11
1648	10
1649	13
1650	14
1651	9
1652	14
1653	15
1654	9
1655	14
1656	16
1657	24
1658	18
1659	11
1660	36
Total	214

The estimated suicide rate by hanging in London during this 14-year period in the mid-1660s is 3.32 per 100,000 per year¹.

The table provided by Jstor is not completely clear, but suicides by hanging are given for earlier years as

¹ The Great Plague was in 1665 and, in that year, there were 97,306 burials of which 68,598 were deaths from plague (Anon, 2009).



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presented in Table 2. The yearly average number of suicides by hanging rose from 6.9 per year in 1629-1636 to 14.9 per year in 1651-1658, more than doubling.

Sincere there were almost certainly suicides by other methods, a suicide rate of either 2.41 or 3.32 is an underestimate, but the true suicide rate was probably in the single digits, much as the (more accurate) suicide rate is in modern times in England and Wales when the age-standardized suicide rate for England and Wales in 2016 was 9.3 (http://www.ons.gov.uk).

Table 2. Suicides by hanging (1629-1636).

Year	n
1629	8
1630	8
1631	6
1632	15
1633	0
1634	3
1635	8
1636	7

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