Introduction

The purpose of this study is to explore a variety of potential causes of suicide (with the pre-existing data set that is presently available). Suicide is an action that results in death, and it is therefore important to understand its causes so that future occurrences can potentially be reduced. From this study, I hope to answer the following research question: Are individual or social variables the primary predicators of suicide rates? Drawing on the functionalist tradition that relies on social structure to explain individual behavior, I hypothesize that social variables (marital status, national citizenship, and religious affiliation) are better predictors of suicide than individual variables (race, alcoholism, and insanity). Through this research, I hope to contradict those who support biological, psychological, and behavioral explanations as predictors of suicide.

Literature Review

Current theorists that attempt to explain the factors that contribute to the existence of suicide differ primarily in terms of their explanations regarding the impact of social institutions on individual behavior. Functionalists and conflict theorists often argue that social structures are the primary determinants of individual characteristics and behavior, while theorists who emphasize agency focus on the way in which individuals give meaning to the world that they inhabit. Therefore, the discussion of suicidal determinants is often grounded in the broad theoretical debate between the role of agency and social structure.

Directly related to these opposing theoretical frameworks used to explain the causes of individual action are the current explanations of the act of suicide itself. Weishaar and Beck (1992) and Baumeister (1990) suggest that suicide is often used as a mechanism to cope with hopelessness, the feeling of persistent failure, frequently visible among older adults (though not a feeling felt exclusively by this group). Frankl (1984, 1971) and Weisman (1991) in contrast argue more as theorists who emphasize social structure and its impact on individual behavior by supporting the statement that, "an absence of meaning recognition can promote suicide" (Frankl 1984, 1971). He suggests that meaning in life is, "generally discovered in creative pursuits, in life's experiences and relationships, and in attitudes taken toward both positive life experiences and the 'tragic triad' of pain/suffering, guilt, and death." One's relationships and ability to positively deal with the "tragic triad" are related to the degree to which one is integrated into social institutions and networks. The failure to adequately integrate oneself in society can therefore contribute to one's lack of meaning in life, and contribute to one's decision to take one's own life.

As complex phenomena, the causes of suicide can be explained through a variety of perspectives including brain characteristics, genetics, psychological traits, and social forces, in addition to any combination of these. Those who take a more sociological stance argue that suicide results both from a lack of social integration (anomic suicide), and sometimes from too much social integration (resulting in altruistic suicide). From this perspective, the extent to which one is engaged in societal institutions is the primary

determinant of suicidal behavior. It is true that, "people suffering from diagnosable mental illnesses complete about 90 percent of all suicides," (Pseudo Lit. 2 page 3) which some argue supports theories that individual genetic predispositions for certain psychological disorders and depression are the primary causes of suicide. Sociological theorists in contrast may use this same statistic to argue that high suicide rates among the mentally ill occur simply because society has failed to adequately integrate this group of people into social institutions, causing these individuals to feel a sense of normlessness.

Though the current research on the causes of suicide is broad, it remains relatively inconclusive. Previous studies have focused predominantly on biological, psychological, and behavioral variables, and have neglected to conduct comprehensive scientific research on social factors as significant predictors of suicide. Because of this, I will conduct a study that involves the secondary data analysis of comprehensive pre-existing data, in an effort to explain the impact of individual and social variables as potential determinants of suicide.

Methodology

The data used in this study are secondary data that are being reanalyzed for the purposes of this research. The sources of this data are tables A and B on handout number one, tables C and D on handout number two, and tables E and F on handout number three. Table A examines the relationship between race (which for the purposes of this study is classified as a biological variable) and suicide. Table B examines the relationship between insanity, a psychological variable, and suicide. Table C examines the relationship between alcoholism, a behavioral variable, and suicide. And, tables D, E, and F examine the relationships between marital status, national citizenship, and religion, all social variables, and suicide respectively. A variety of statistical procedures will be used to analyze this data (looking for simple correlations), in an attempt to answer this studies' primary research question.

Results

In table A, the relationship between race, the independent variable, and suicide rates, the dependent variable, is shown. The data shows a comparison in the rates of suicide (number of suicides per one million people) among Austrian provinces with different German population sizes. According to table A below, race (as measured by the number of Germans in a province) does not seem to be correlated with rates of suicide. This is because in the province with the smallest German minority the suicide rate has an average of 86, the province with the important German minority has an average suicide rate of 140, the province that has a majority of Germans has an average suicide rate of 125, and the purely German province has an average suicide rate of 106. If race were correlated with suicide rates one would expect suicide rates to either consistently increase or consistently decrease as the proportion of Germans in a given province declined.

A. **—Comparison of Austrian Provinces with Respect to Suicide and Race**

		No. of Germans per 100 Inhabitants	Suicide-rate per Million		
Provinces purely German	Lower Austria	95.90	254	Average 106	
	Upper Austria	100	110		
	Salzburg	100	120		
	Transalpine Tyrol	100	88		
Majority German	Carinthia	71.40	92	Average 125	
	Styria	62.45	94		
	Silesia	53.37	190		
Important German minority	Bohemia	37.64	158	Average 140	
	Moravia	26.33	136		
	Bukovina	9.06	128		Average of two Groups 86
Small German minority	Galicia	2.72	82		
	Cisalpine Tyrol	1.90	88		
	Littoral	1.62	38		
	Carniola	6.20	46		
	Dalmatia	.....	14		

In sections A and B of table B, the relationship between insanity, the independent variable, and suicide rates, the dependent variable, is shown. In part A of table B, the data shows a comparison between the rank order of nine countries' insanity rates (number of insane per 100,000 inhabitants) and the rank order of their respective suicide rates (number of suicides per 1,000,000 inhabitants). The data show (through the randomness of section A of table B) that there is no correlation between the number of insane in a particular country and the number of suicides that occur in a particular country. Section B of table B shows that there is no correlation between average suicide rates and the number of insane in the four given regions as well. If insanity were correlated with suicide in section B of table B, one would expect average suicide rates to either consistently increase or decrease as insanity rates declined.

B. **—Relations of Suicide and Insanity in Different European Countries**

A

	No. Insane per 100,000 Inhabitants	No. Suicides per 1,000,000 Inhabitants	Ranking Order of Countries for Insanity	Ranking Order of Countries for Suicide
Norway	180 (1855)	107 (1851—55)	1	4
Scotland	164 (1855)	34 (1856—60)	2	8
Denmark	125 (1847)	258 (1846—50)	3	1
Hannover	103 (1856)	13 (1856—60)	4	9
France	99 (1856)	100 (1851—55)	5	5
Belgium	92 (1858)	50 (1855—60)	6	7
Wurtemburg	92 (1853)	108 (1846—56)	7	3
Saxony	67 (1861)	245 (1856—60)	8	2
Bavaria	57 (1858)	73 (1846—56)	9	6

B *

	No. Insane per 100,000 Inhabitants	No. Suicides per 1,000,000 Inhabitants	Averages of Suicides
Wurtemburg	215 (1875)	180 (1875)	107
Scotland	202 (1871)	35	
Norway	185 (1865)	85 (1866—70)	63
Ireland	180 (1871)	14	
Sweden	177 (1870)	85 (1866—70)	
England and Wales	175 (1871)	70 (1870)	
France	146 (1872)	150 (1871—75)	164
Denmark	137 (1870)	277 (1866—70)	
Belgium	134 (1868)	66 (1866—70)	
Bavaria	98 (1871)	86 (1871)	153
Cisalpine Austria	95 (1873)	122 (1873—77)	
Prussia	86 (1871)	133 (1871—75)	
Saxony	84 (1875)	272 (1875)	

* The first part of the table is borrowed from the article, "Alienation mentale," in the Dictionnaire of Dechambre (v. III, p. 34); the second from Oettingen, Moralstatistik, Table appendix 97.

In table C, the relationship between alcohol consumption, the independent variable, and average suicide rates, the dependent variable, is shown for different countries and regions in Germany. The data show that there is no correlation between a regions' per capita alcohol consumption and average suicide rates.

C.	ALCOHOLISM AND SUICIDE IN GERMANY		
	Consumption of Alcohol (1884–86) Liters per Capita	Average of Suicides per 1,000,000 Inhabitants	Country
1st Group	13 to 10.8	206.1	Posnania, Silesia, Brandenburg, Pomerania
2nd Group	9.2 to 7.2	208.4	East and West Prussia, Hanover, Province of Saxony, Thuringia, Westphalia
3rd Group	6.4 to 4.5	234.1	Mecklenburg, Kingdom Saxony, Schleswig-Holstein, Alsace, Grand Duchy Hess
4th Group	4 and less	147.9	Rhine provinces, Baden, Bavaria Wurtemburg

In the first section of table D, the relationship between marital status, the independent variable, and suicide rates, the dependent variable, are shown for each sex at seven different age groups. For both men and women, the data show that marital status is correlated with suicide rates because in every age group except one (ages 16-25 for men), the numbers of non-married/widowed who commit suicide are higher than the numbers of married who commit suicide. The second section of table D shows the degree to which suicides of unmarried men and women of the same age group are higher when compared to those of the married. One significant result is that non-married men above 75 are 37 times more likely to commit suicide when compared to their married counterparts, though non-married women in this same age group are only 4.5 times more likely to commit suicide when compared to their married counterparts. So, in the oldest age group, non-married men are much more likely to commit suicide than non-married women (both in relation to their married counterparts).

D. SUICIDES PER 100,000 INHABITANTS OF EACH SEX, OF LIKE MARITAL STATUS AND AGE

	16-25	26-35	36-45	46-55	56-65	66-75	Above 75
			Men				
Married	10.51	10.58	18.77	24.08	26.29	20.76	9.48
Non-married (widowed included)	5.69	25.73	66.95	90.72	150.08	229.27	333.35
			Women				
Married	2.63	2.76	4.15	5.55	7.09	4.67	7.64
Non-married	2.99	6.14	13.23	17.05	25.98	51.93	34.69

HOW MUCH MORE FREQUENT ARE SUICIDES OF UNMARRIED THAN OF MARRIED PERSONS OF SAME SEX AND AGE

	16-25	26-35	36-45	46-55	56-65	66-75	Above 75
Men	0.5	2.4	3.5	3.7	5.7	11	37
Women	1.13	2.22	3.18	3.04	3.66	11.12	4.5

In table E, the relationship between (European) country, the independent variable, and suicide rates, the dependent variable, is shown. The data show that suicide rates (measured as the number of suicides per million inhabitants) remain relatively constant overtime within each of the eleven European countries shown. But, there is quite a bit of variation in suicide rates between countries, so country does seem to be correlated with suicide rates.

E. —Rate of Suicides per Million Inhabitants in the Different European Countries

	Period 1866–70	Period 1871–75	Period 1874–78	Numerical Position in the 1 period	Numerical Position in the 2 period	Numerical Position in the 3 period
Italy	30	35	38	1	1	1
Belgium	66	69	78	2	3	4
England	67	66	69	3	2	2
Norway	76	73	71	4	4	3
Austria	78	94	130	5	7	7
Sweden	85	81	91	6	5	5
Bavaria	90	91	100	7	6	6
France	135	150	160	8	9	9
Prussia	142	134	152	9	8	8
Denmark	277	258	255	10	10	10
Saxony	293	267	334	11	11	11

In table F, the relationship between religion, the independent variable, and suicide rates, the dependent variable, is shown for different countries. The data show that for all countries included, Protestants have higher suicide rates when compared to both Catholics and Jews. Therefore, religious affiliation does seem to be a good predictor of suicide rates.

F. —Suicides in Different Countries per Million Persons of Each Confession

		Protestants	Catholics	Jews	Names of Observers
Austria	(1852–59)	79.5	51.3	20.7	Wagner
Prussia	(1849–55)	159.9	49.6	46.4	Id.
Prussia	(1869–72)	187	69	96	Morselli
Prussia	(1890)	240	100	180	Prinzing
Baden	(1852–62)	139	117	87	Legoyt
Baden	(1870–74)	171	136.7	124	Morselli
Baden	(1878–88)	242	170	210	Prinzing
Bavaria	(1844–56)	135.4	49.1	105.9	Morselli
Bavaria	(1884–91)	224	94	193	Prinzing
Wurttemberg	(1846–60)	113.5	77.9	65.6	Wagner
Wurttemberg	(1873–76)	190	120	60	Durkheim
Wurttemberg	(1881–90)	170	119	142	Id.

Discussion

Overall, the results show that the societal variables of marital status, national citizenship, and religious affiliation are all good predictors of suicide rates. The results also suggest that the more individual variables of race, alcoholism, and insanity are *not* good predictors of suicide rates. These findings are significant because they show that even a seemingly personal decision, such as committing suicide, is not determined by individual characteristics (race, alcoholism, and insanity), but rather by social institutions.

As described in the results section, table D indicates that marital status is correlated with suicide rates. The general trend is that both men and women who are married have significantly lower rates of suicide when compared to their unmarried counterparts. Those who are married may have lower suicide rates because the institution of marriage may provide a social support system that helps one satisfy certain goals, traditions, norms, and values. It is the integration in the social institution of marriage that may be the determining factor in whether or not one commits suicide in a time of crisis.

Despite this general trend, there is one instance where married individuals have higher suicide rates than their unmarried counterparts. Among men aged 16-25, the rate of suicide for married men is 10.51, while the rate of suicide for unmarried men is 5.69. This exception suggests that for young men (those aged 16-25), marriage may constrain and be a burden to one who may otherwise be experiencing the freedom that often comes with youth. Married men between the ages of 16-25 may therefore feel deprived of their single years, which may lead to depression, and possibly suicide. Table D also indicates that in the oldest age group (above 75), unmarried men are much more likely to commit suicide then unmarried women (both in relation to their married counterparts). It may be that men who live over 75 feel out of place in society where men typically die much earlier than women. Though married men over 75 encounter a similar situation, the marital institution may provide the social support to mitigate the negative affects of living so long (for men). Similarly, unmarried women over 75 are not an anomaly, which may be why they are much less likely to commit suicide (at least in relation to men in the same position).

The empirical evidence from table E suggests that suicide rates remain relatively stable within countries overtime, but between countries there is significant variance, indicating that national citizenship is related to suicide rates. Suicide rates within countries may remain relatively stable overtime due to the presence of distinct national cultures that promote or prohibit certain behaviors, values, norms, and beliefs. Suicide rates between countries may vary depending on the content of a particular countries' national culture. Saxony and Denmark consistently have the highest rates of suicide, which indicates that there is something about being a citizen of these two nations that predisposes one as more likely to commit suicide when compared to one from any of the other nine countries included in this study. I argue that those countries with high suicide rates have national cultures that promote individualism more, leading citizens of these countries to be more independently motivated, and less integrated into society.

As indicated in the results section of this paper, religion also seems to be a good predictor of suicide rates. The evidence suggests that Protestants have higher suicide rates when compared to both Catholics and Jews. I argue that this is because Catholics and Jews tend to live in more tight knit communities where traditional rituals impose many restrictions on the lives of inhabitants. With close knit communities and restrictions comes an intense sense of social support, something that the evidence suggests Catholics and Jews experience more than Protestants. The presence of social support networks in Catholic and Jewish communities may explain why these religious groups experience lower suicide rates among their people.

The findings in this study relate back to the broader theoretical debate surrounding the causes of suicide by reinforcing the idea that social structure, as opposed to agency, affects individual behavior most. Though this study allows one to conclude that it is social variables that predict the occurrence of suicide rather than individual variables, this study does have some limitations. This study relies on the premise that correlation equates to causation, which is scientifically unreliable to assume. Secondly, the way in which race is defined in this study is somewhat problematic. Race does not simply

encompass the proportion of Germans within a given population, but is a much more complex concept, that in a better study would have been operationalized in a more complex way.

Given the data presently available to conduct this study, the data seem to show relatively conclusive results, providing further support for our hypothesis.