GENIUS, LUNATICS, AND POETS:
MENTAL ILLNESS IN PRIZE-WINNING AUTHORS*

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ABSTRACT

The links between mental illness and the creative arts, especially creative writing, are well-established, if controversial. Several studies have found more mental illness in creative writers than in control groups; few studies, however, have investigated the truly eminent, genius-level writers. To address the question of how genius-level writers compare to merely accomplished writers, two historiometric studies examined writers who won the Nobel Prize and Pulitzer Prize. Study One examined 986 20th century writers, while Study Two 889 American writers from the 17th century to the present day. In both studies, both types of prize-winners were more likely to suffer from mental illness than non-winners. In addition, Nobel Prize winners were more likely to suffer from alcoholism (Study One) and experience a personal tragedy (Study Two). Implications and theoretical possibilities are discussed.

Valentine: You can't open a door till there's a house.
Hannah: I thought that's what genius was.
Valentine: Only for lunatics and poets.

—Thomas Stoppard, Arcadia, Act Two, Scene Seven

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Genius and madness. Madness and poetry. The links between mental illness and the creative arts, especially for those who create with the written word, form a well-established, if highly controversial relationship. Does it take a manic high, a depressive low, or a schizophrenic outlook to produce great works of literature? Is mental illness the price of creativity—the toll one pays for being gifted? Do writers create despite their illness? Or is it all a spurious relationship?

There have been several studies that have found more mental illness in creative writers than in control groups [1, 2]. Other studies have examined the higher rates of psychopathology found in eminent writers [3, 4]. It is tempting to make sweeping statements about the nature of madness and creativity, but there are many potential problems. Creative writers are often over-represented in samples of eminent individuals, and some studies that find more mental illness in people in the written arts may merely mirror this bias [5]. Rothenberg cautions that biographies of well-known creators may emphasize anecdotes and angles that reflect psychopathology because it makes for a better story and thus more interesting reading [6]. In addition, Rothenberg writes [6], much of the empirical work done on creative writers utilizes poor control groups and inadequate statistical interpretation.

How about true genius, though? La crème de la crème. How do they compare with other creative writers? People who are extraordinarily gifted in various domains are often the subjects of empirical studies because unique developmental and cognitive insights can result from research on them [7]. However, past research on creative writers and mental illness has been limited in its scope. Some studies examine eminent authors who have achieved recognition and acclaim but who are not at the “genius” level [1], while other studies look at a few genius-level writers individually [8].

Ludwig conducted one of the few studies to consider levels of eminence [9]. In his study of over 1,000 eminent individuals (not just creative writers), Ludwig ranked his subjects on his Creative Achievement Scale (CAS), a measure that takes into account variables such as posthumous recognition, originality, and influence. Based on this score, he then examined the upper quartile of eminent individuals against the lower quartile of the lesser eminent individuals. Ludwig found the upper elite to be significantly more likely to suffer from mental illness and emotional difficulties and to be more likely to have some kind of medical illness or physical handicap [9]. Although women have been found to be more likely to suffer from mental illnesses such as depression [10], three times the percentage of males as of females were in the upper elite group. This finding may reflect the different opportunities available to men versus women throughout this century; nonetheless, it is an interesting one that bears further investigation.

Are those with true genius more prone to suffer from mental illness and other maladies than are those who “merely” have incredible talent? One way to answer this question is to follow Ludwig’s model [9] and attempt to rate people for their creative achievements. Another way, and one that may be more objective, is to
look at prize winners. How do those who win the Pulitzer or Nobel prizes compare with those who achieve eminence but do not win such prizes? Clearly, these prizes are fallible, and subject to politics and favoritism. But as a whole, the list of writers who have won one or more of these prizes is clearly superior in literary merit to a list of also-rans. These prizes also provide different perspectives on greatness, as a Pulitzer Prize is awarded for a specific work, whereas a Nobel Prize is awarded for a lifetime of work.

With these questions in mind, two studies were designed to look at how those writers who have won prestigious prizes compare with those writers who are also eminent but who have not reached such pinnacles of achievement. A historiometric approach, as outlined and described by Simonton [5], was chosen for these studies so that large numbers of writers could be analyzed.

**STUDY ONE**

Methods and Materials

The source of biographical data was *A Reader’s Guide to Twentieth-Century Writers* [11], an encyclopedic compilation of 986 prominent writers from the 20th century. Entries in this reference book ranged from a few paragraphs to a few pages. Several details were consistent throughout, including birth and death dates and a complete publication list for each author. Inclusion in the book was based purely on literary merits—a writer’s life details might determine the length of the entry, but not inclusion. Four different types of writers were included in the book: fiction writers (of both novels and short stories), poets, playwrights, and non-fiction writers. Of the 986 writers included, 81 won the Pulitzer Prize one or more times (16 won the award more than once) and 22 won the Nobel Prize. This database was also the source of a separate investigation examining gender, writing, and mental illness [12].

Several different variables were identified for each writer, including gender, age at death, age at first work, total number of works, and a number of “setback” measures. These measures included signs of mental illness, lingering physical illness, experiencing a significant personal tragedy in one’s life (e.g., losing a child), and alcoholism and drug usage. These items were scored as dichotomous 0–1 variables. Although some judgment calls had to be made on the mental-illness variable, key phrases and events were specifically noted (such as a hospitalization for psychological issues, a nervous breakdown, or a suicide attempt). In addition to the “setback” measures, a breakdown of the results for these variables, including each “setback” measure, can be seen for prize-winners and non-winners in Table 1.

Results

Two MANOVAs were performed using all four “setback” measures as dependent measures: one with Nobel-Prize winners vs. non-winners as the independent measure, and the other with Pulitzer-Prize winners vs. non-winners as the
Table 1. Means and Standard Deviations for Pulitzer Prize Winners and
Non-Winners and Nobel Prize Winners and Non-Winners,
Overall N = 986 (Study One)

<table>
<thead>
<tr>
<th></th>
<th>Pulitzer winners (n = 81)</th>
<th>Non-winners (n = 905)</th>
<th>Nobel winners (n = 22)</th>
<th>Non-winners (n = 964)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Total works</td>
<td>30.44</td>
<td>21.36</td>
<td>28.50</td>
<td>23.88</td>
</tr>
<tr>
<td>Age at 1st work</td>
<td>28.30</td>
<td>9.57</td>
<td>29.16</td>
<td>6.72</td>
</tr>
<tr>
<td>Age at death</td>
<td>69.40$^a$</td>
<td>13.84</td>
<td>68.89$^b$</td>
<td>15.92</td>
</tr>
<tr>
<td>Alcoholism?</td>
<td>0.17</td>
<td>0.38</td>
<td>0.07</td>
<td>0.26</td>
</tr>
<tr>
<td>Lingering illness?</td>
<td>0.20</td>
<td>0.40</td>
<td>0.16</td>
<td>0.37</td>
</tr>
<tr>
<td>Mental illness?</td>
<td>0.31</td>
<td>0.46</td>
<td>0.15</td>
<td>0.36</td>
</tr>
<tr>
<td>Personal tragedy?</td>
<td>0.25</td>
<td>0.43</td>
<td>0.19</td>
<td>0.40</td>
</tr>
<tr>
<td>Percentage female?</td>
<td>0.26</td>
<td>0.50</td>
<td>0.27</td>
<td>0.44</td>
</tr>
</tbody>
</table>

$^a$n = 52. $^b$n = 456. $^c$n = 16. $^d$n = 492.

independent measure. These MANOVAs were conducted to determine whether the prize-winners were more likely to suffer from mental illness, lingering physical illness, alcoholism/drug use, or personal tragedy.

The first MANOVA, investigating Nobel-Prize winners vs. non-winners, produced a Wilks’ Lambda of 0.99 and a Rao’s $R^2(4, 981)$ of 2.62; $p < .05$. Tukey’s HSD Post-Hoc Test showed no significant differences between the winners and non-winners on the variables of alcoholism/drug use, lingering illness, or personal tragedy, but there was a significant difference on the mental illness variable, $p < .01$. Nobel-Prize winners were more likely to suffer from mental illness than non-winners.

The second MANOVA, investigating Pulitzer-Prize winners vs. non-winners, produced a Wilks’ Lambda of 0.98 and a Rao’s $R^2(4, 981)$ of 4.76; $p < .001$. Tukey’s HSD Post-Hoc Test showed no significant differences between the winners and non-winners on the variables of lingering illness or personal tragedy, but there was a significant difference for the variables of alcoholism ($p < .01$) and mental illness ($p < .001$). Pulitzer-Prize winners were more likely to suffer from alcoholism or drug usage and from mental illness than non-winners.

To rule out possible contaminating variables, additional analyses were performed on the variables of gender, age at death, age at first publication, and total number of works. Based on a series of univariate ANOVAs, Pulitzer-Prize winners did not differ significantly ($p < .05$) from non-winners on the variables of gender, age at death, age at first publication, or total number of works produced;
Nobel-Prize winners did not differ significantly from non-winners on the first three variables. However, Nobel-Prize-winners were found to produce significantly more total works than non-winners, $F(1,984) = 18.19, p < .001$.

Therefore, the finding of more mental illness in prize winners than in non-prize winners cannot be explained by gender differences in the winner vs. non-winner samples or by age-related differences in these samples. The finding of significantly more total works by Nobel-Prize winners than non-winners is undoubtedly more related to the "lifetime achievement" nature of Nobel Prizes than to the presence or absence of mental illness in the winners.

In addition to these MANOVAs, correlations were computed for the "setback" measures and the number of Pulitzer Prizes won. No significant correlations emerged between the overall number of Pulitzer Prizes won and lingering physical illness or personal tragedy, but significant (if mild) correlations were found between the number of Pulitzer Prizes won and mental illness ($r = .12, p < .01$) and alcoholism ($r = .10, p < .01$). The effect sizes of these relationships, however, were so small (accounting for less than 1 percent of the variance) that the finding cannot be meaningfully interpreted.

**STUDY TWO**

**Methods and Materials**

Is the higher degree of mental illness in prize winners, relative to non-winners, a replicable finding? To focus on this question, a second study was conducted with a separate source of biographical data on eminent writers, *Webster's Dictionary of American Authors* [13]. Although *A Reader's Guide to Twentieth-Century Writers* [11] was limited to 20th-century writers, the Webster's book included 889 writers, some of whom dated back to the 17th century. And whereas Study One's source included writers from all around the world [11], the Webster's book focused only on writers from North America. Of the 889 writers included, 152 won the Pulitzer Prize one or more times (25 won the award more than once) and 12 won the Nobel Prize.

Of the 889 writers included in Study Two, a total of 220 were also included in Study One, with the breakdown as follows: 141 (101 males, 34 females) of the 418 fiction writers; 56 (43 males, 13 females) of the 244 poets; 16 (14 males, 2 females) of the 68 playwrights; and 7 (4 males, 3 females) of the 157 non-fiction writers. Of the 220 writers in both samples, nine won the Nobel Prize and 59 won the Pulitzer Prize. Although this overlap should certainly be noted, the majority of writers analyzed (669) were unique to the study. As with Study One, this database was also the source of a separate investigation examining gender, writing, and mental illness [12].

As with the first study, the following variables were identified: gender, mental illness, lingering illness, and personal tragedy. The variable of alcoholism and
drug usage was excluded from Study Two because of insufficient evidence (alcoholism was rarely referenced in the Webster’s entries). The same dichotomous scoring system and the same criteria were used as in Study One. Because of the wider range in the authors’ date of birth than in the earlier study (the earliest author was born in 1612, while the latest author was born in 1955), this variable was identified as well (see Table 2).

Results

As in Study One, two MANOVAs were performed using mental illness, lingering physical illness, and personal tragedy as dependent measures: one with Nobel-Prize winners vs. non-winners as the independent measure, and one with Pulitzer-Prize winners vs. non-winners as the independent measure.

The first MANOVA, looking at Nobel-Prize winners vs. non-winners, produced a Wilks’ Lambda of 0.97 and a Rao’s $R(3, 885)$ of 10.44; $p < .001$. Tukey’s HSD Post-Hoc Test showed no significant differences between the winners and non-winners on the variable of lingering physical illness, but there were significant differences in mental illness and personal tragedy, both at $p < .001$. Nobel-Prize winners were more likely to suffer from mental illness and experience personal tragedy than were non-winners. These findings remained true with the same level of significance when year of birth was held constant as a covariate.

The second MANOVA, investigating Pulitzer-Prize winners vs. non-winners, produced a Wilks’ Lambda of 0.99 and a Rao’s $R(3, 885)$ of 3.07; $p < .05$. Tukey’s HSD Post-Hoc Test showed no significant differences between the winners and non-winners on the variables of lingering illness or personal tragedy, but there was a significant difference for mental illness ($p < .05$). Pulitzer-Prize winners were

<table>
<thead>
<tr>
<th>Table 2. Means and Standard Deviations for Pulitzer Prize Winners and Non-Winners and Nobel Prize Winners and Non-Winners, Overall $N = 889$ (Study Two)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pulitzer winners</strong></td>
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<tr>
<td>$(n = 152)$</td>
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<td>M</td>
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<tr>
<td><strong>Age at death</strong></td>
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<tr>
<td><strong>Lingering illness?</strong></td>
</tr>
<tr>
<td><strong>Mental Illness?</strong></td>
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<tr>
<td><strong>Personal tragedy?</strong></td>
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<td><strong>Percentage female?</strong></td>
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$a_n = 97. \ b_n = 511. \ c_n = 9. \ d_n = 599.$
more likely to suffer from mental illness than were non-winners. This finding remained true with the same level of significance when year of birth was held constant as a covariate.

To rule out possible contaminating variables, additional analyses were performed on the variables of gender and age at death. Based on a series of univariate ANOVAs, neither Nobel-Prize winners nor Pulitzer-Prize winners differed significantly ($p < .05$) on either of these two variables.

In addition to these MANOVAs, correlations were computed for the "setback" measures and the number of Pulitzer Prizes won and the number of notable contributions achieved. No significant correlations emerged between the overall number of Pulitzer Prizes won and lingering physical illness or personal tragedy, but a significant (if weak) correlation of .09 ($p < .05$) was found between the number of Pulitzer Prizes won and mental illness. The effect size of this relationship was so small, however, accounting for less than 1 percent of the variance, that the finding cannot be meaningfully interpreted.

**DISCUSSION:**

**STUDY ONE AND STUDY TWO**

Although some significant results emerged for alcoholism (Study One) and personal tragedy (Study Two), the finding that was consistently strong and significant in all aspects of both studies was the link between mental illness and winning important prizes. This pattern of mental illness among the greatest of the great is consistent with the results of "high-eminence" individuals being more prone to suffer from mental illness than "low eminence" individuals [9].

Ludwig fits this connection of mental illness and greatness into the larger category "Psychological Unease," and uses this factor as one of eight predictors for true greatness [9]. He views mental illness, when present, as having a more indirect relationship on achievement in combination with these other factors.

Ludwig’s conclusions are based on a wide variety of creative individuals; the results from the present studies indicate that an even stronger relationship between extremely high eminence and mental illness may exist in creative writers [9]. Why should this discrepancy exist? Why should a writer who has won a Pulitzer Prize or Nobel Prize be more likely to suffer from mental illness than a writer who is eminent enough to warrant inclusion in books such as the *Webster’s Dictionary of American Authors* [13] or *A Reader’s Guide to Twentieth-Century Writers* [11]?

Perhaps one answer might be found in the mental processes involved with creation. Several theorists have advanced the idea that while both mental illness and creativity involve imagination and daydreaming, they are different types of thought processes, and the mechanisms used for creativity are usually healthy and productive [14, 15]. This distinction may be less valid for someone with genius-level ability at creative writing. The type of thinking and imagining needed to produce a work (or works) that rises so far beyond the ordinary—or even the
“merely” great—may interact more with less healthy patterns of thought. Indeed, genius-level creativity has been compared to having a mystical, almost spiritual level of consciousness, which can edge close to madness [16].

One reason for this connection may be that there are different levels of contributions required for different levels of greatness. Sternberg [17] and Sternberg, Kaufman, and Pretz [18] proposed a propulsion model of creative contributions with eight different types of contributions that can be made to a field. These range from replication (demonstrating that a past achievement can still have an effect, such as painters in the school of Rembrandt or many genre novel-writers) to reinitiation (not only taking the field in a new direction, but also starting from an entirely different perspective). Most contributions fall somewhere in the middle, of course, advancing their field slowly forward. But while “mild” greatness can certainly be achieved with a lower level of daring, perhaps it takes a higher level of innovation to reach the pinnacle and zenith of a field. Perhaps the Nobel Prize winners and Pulitzer Prize winners are more likely to be trying new forms and creating new ways of looking at art.

One hypothesis could then be that creators who consistently produce reinitiative contributions are more likely to be mentally ill than are those who produce less innovative works. The ability to see the world in a completely novel way may come with a unique price tag. The mental processes that underlie this type of creative thought may be more tied to unhealthy processes than is creative thought that is more founded in a traditional style.

Works of a reinitiative nature are certainly not the only ones to win Pulitzer Prizes, and creators whose work tends to be extremely innovative are, likewise, not the only ones to win Nobel Prizes. Indeed, the finding that highly eminent writers are more likely to suffer from mental illness is based on correlational research and represents a trend; these studies are merely a first step toward a larger investigation of the phenomenon. The judgments on what constituted a person with mental illness were rooted in solid evidence (i.e., suicide attempts and psychiatric hospitalizations), but a more in-depth analysis that might pick up on more subtle nuances is needed to reach deeper insight—and be able to make broader claims.

Another area that could use further exploration is the relationship between the times in an author’s life that he or she is acutely suffering from psychiatric difficulties and the times that are the most productive in both the quantity and quality of literary output. If these future studies show that a writer’s best works are created when he or she is experiencing the highest level of emotional difficulties, then the relationship between mental illness and creative genius would be further articulated.

These two studies reveal a significant relationship between extreme genius and suffering from mental illness. This finding, while still preliminary, was consistent and strong across both studies—writers who won a Nobel Prize or a Pulitzer Prize were more likely to have a mental disorder than other eminent writers who had not
won these prizes. The ability to create at such a high level is so rare and exquisite—akin, as Tom Stoppard might say, to opening a door before there is a house—that it is easy to overlook the potential costs.

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REFERENCES


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