

Evidence for a link between creativity and affective disorders:A. Case-control studies:

1. Andreasen examined writers vs. controls and found that 80% had some type of mood disorder and 43% had either bipolar I or bipolar II disorder. (using DSM III for lifetime prevalence rates). This is the most methodologically sound study of the link between creativity and affective disorders.

Andreasen NC. Creativity and mental illness: prevalence rates in writers and their first-degree relatives. *Am J Psychiatry*. 1987; 144:1288-1292

2. Evaluated female writers vs. controls and found that rates of a variety of diagnoses were consistently higher in the writers; depression (56%), mania (19%), suicide attempt (15%), GAD (14%). Additionally, 68% of the writers vs. 27% of controls had received care of a therapist.

Ludwig AM. Mental illness and creative activity in female writers. *Am J Psychiatry*. 1994; 151:1650-1656

B. Cross-sectional studies:

1. Award-winning artists (poets, novelists, playwrights, biographers and artists) were evaluated to determine whether they have ever received treatment for a mood disorder and showed that overall, 38% of the sample had been treated for a mood disorder (63% of the playwrights) as compared to 1.7% of the general British population. (* assessing treatment use is not a valid method for assessing the presence or absence of a diagnosable disorder)

Jamison KR. Mood disorders and patterns of creativity in British writers and artists. *Psychiatry*. 1989; 52:125-134

C. Retrospective Analyses:

1. Using biographical data only, on a large sample of prominent, accomplished artists from all areas of the arts, Ludwig analyzed lifetime rates of **any mental disorder** and found that as compared to other (i.e. non-artistic) professions, artists have a much higher lifetime rate of mental disorders. Categories used: architecture design (52%); composing (60%); music/singing/dance (68%); visual arts (73%); theater (74%); writing (78%).

Other categories include: formal arts (58%); performing arts (72%); expressive arts (77%). He also looked at the lifetime rates of **depression** specifically for writers according to type of writing: nonfiction (47%); fiction (59%) and poetry (77%).

Ludwig AM. Method and Madness in the Arts and Sciences. *Creativity Research Journal*. 1998; 11(2):93-101

2. Using suicide and occupational data from the 1990 National Mortality Detail File, Stack used a variety of analyses to determine that the rate of suicides in the sample of artists was nearly three times the national average. Furthermore, unlike other studies, he controlled for gender and other sociodemographic variables in the analyses and was able to determine that artists have an elevated risk of suicide amounting to 125%. Thus, artists have a significantly higher risk of suicide as an occupational group.

Stack S. Gender and Suicide Risk Among Artists: A Multivariate Analysis. *Suicide & Life-Threatening Behavior*. 1996; 26(4):374-379.

3. Using a group of 14 (all male) Abstract Expressionist painters of the New York School, Schildkraut et al. made retrospective diagnoses based on collected information from published biographies and archival material such as letters and diary entries. Eight of the 15 artists (or 53%) were determined to have suffered from depression or a depressive spectrum disorder. Six of the 15 (40%) received psychiatry treatment and three (20%) were hospitalized for psychiatric problems. Two (13%) committed suicide.

Schildkraut JJ, Hirshfeld AJ, Murphy JM. Mind and Mood in Modern Art, II: Depressive Disorders, Spirituality, and Early Deaths in the Abstract Expressionist Artists of the New York School. *Am J Psychiatry*. 1994; 151(4): 482-488.

Putative factors underlying this link:

A. Temperament/Personality

- a. Rumination (Verhaeghen P, Joormann J, Khan R, 2005)
- b. Neuroticism/Cyclothymia/Dysthymia (affective) and openness (cognitive) appear to be related to creativity. (Strong CM, Nowakowska C, Santosa CM, Wang PW, Kraemer HC, Ketter TA)

- B. Biological vulnerability – as measured by the adrenal steroid, dehydroepiandrosterone-sulfate (DHEAS) (Akinola M & Mendes WB)

C. Social rejection (Akinola M & Mendes WB)

Methodological issues challenging research in this area:

1. What is the optimum sample size to study?
2. How should creativity be defined and measured?
3. What is an appropriate comparison group? (only a few studies have used a non-creative comparison group)
4. An overwhelming majority of the published literature in this area has focused on affective disorders in writers to the exclusion of other artists including visual and performance artists.
5. Retrospective diagnoses are problematic, because they are based on historical sources rather than direct clinical examinations.
6. Samples included in these studies have been disproportionately male, and thus the results cannot be reasonably compared to the general population owing to the fact that we know both rates of affective disorders and suicide differ between gender.