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Running Head: RUMINATIONS

Ruminating About Mental Illness and Creativity

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### **Ruminating About Mental Illness and Creativity**

Although a popular one, the question of whether mental illness is good for creativity is not new. As Becker discusses in his chapter, the ancient Greeks were speculating about “madness” and how it relates to creative genius long before the Renaissance-era artists thought to paint portraits of Italian emperors as piles of twigs and gourds (see Giuseppe Arcimboldo, 16<sup>th</sup> century), or the romanticists composed paintings of grown men eating babies (Francisco Goya – Saturn Devouring His Son, c. 1819) and people biting one another to steal each other’s identities (William-Adolphe Bouguereau – Dante and Virgil in Hell, 1850). In fact, Socrates, Plato, and Aristotle carried on a philosophical tradition of questioning the “divine madness” of inspiration. It was thought in ancient Greece that the greatness of poets and prophets was a gift bestowed upon people in an altered state of awareness by the gods (or demons, depending on who we’re asking). Periodically since then, artists, poets, and philosophers were thought to be able to create because of divine demonic intervention, “melancholia,” disease, drug use, or the like. And we, as researchers, are left to sift through the madness (and lack thereof) in search of evidence that this relationship actually exists (or doesn’t).

In this chapter, we offer some reflections—or ruminations, as befits the occasion—on creativity and mental illness. These ideas are abstracted from and inspired by this interesting batch of chapters. We’ll ponder a few topics: whether mental illness is specific to a few creative domains, why links exist when they are found, and what to take away from this large and sprawling literature.

#### **Is Mental Illness Particularly Prevalent in Certain Creative Domains?**

Take almost any biography of a great writer, thinker, or artist — somewhere in that book, you are bound to find at least some mention of an extreme ritual or habit that the subject

embraced. For instance, it's been alleged that Ernest Hemmingway would begin the day's work by meticulously sharpening 20 pencils. And perhaps even more radically, it has been rumored that Edith Sitwell used to begin her day by lying in a coffin, as a means of inspiring her poetry. But are these rituals or superstitions ever responsible for the greatness of these eminent creators? It's possible that an odd habit here and there may make up a small part of great creators' daily routines, but incredibly unlikely that saying good morning to the pots and pans (as Carl Jung was rumored to do) and other such fanciful strategies result in spontaneous inspiration for high-caliber creative ideas.

Perhaps only *some types* of creative thinkers benefit from odd habits and eccentricities that are characteristic of psychopathologies. Indeed, historical evidence seems to suggest this. Simonton (this volume) discusses research surrounding this perception of madness and creative genius through a historiometric perspective. Earlier studies of the creativity/madness relationship found that only between 4 and 8 percent of the studied creative geniuses displayed signs of some sort of mental illness (Ellis, 1904). But more contemporary research found that breaking creative thinkers into groups based on discipline leads to a more detailed picture of the relationship between psychopathology and creativity. Post (1994) collected information about a large group of eminent creators and divided them into subcategories based on their expertise. Strikingly, what Post found when he divided his sample of "greats" into categories was that eminent writers and composers were markedly more likely than great thinkers, politicians, or scientists to display signs of psychopathologies. Likewise, Ludwig (1995) also found that great poets, writers, and composers had far higher lifetime prevalence of mental illnesses than great military leaders or politicians. It seems then, that perhaps only *certain types* of creative achievements are fueled by aberrant functioning.

Indeed, certain domains of creative achievement seem plagued psychopathology. For instance, there's some evidence (albeit outdated and controversial, as other authors in this volume point out) that great works of fiction and poetry were likely drafted by an alcoholic author (Andreasen, 1987). Famous ballerinas are more likely than the rest of us to have an eating disorder (Ravaldi, et al., 2003). Poets die younger and have hard and tormented lives (Kaufman, 2001, 2003, 2005). And much of the most influential and best-loved music was written or played by drug-addled musicians (Ludwig, 1995). But scientific discoveries and political and military coups, it seems, do not have share this same affinity for psychopathology; in fact, Ludwig (1998) found that creative geniuses in domains like science and politics — domains that require logical thinking and formal expression of ideas — experience less psychopathology than creative geniuses operating in any other domain. (Except maybe for Joseph Goldberger, who — in an attempt to prove that pellagra was not an infectious disease — ate the scabs from the rashes of pellagra sufferers).

#### **Are Certain Mental Illnesses Particularly Associated with Creative Greatness?**

The range of mental illnesses is vast, as an afternoon browsing through the Diagnostic and Statistical Manual of Mental Disorders (DSM) and International Classification of Diseases (ICD) will attest, but only a small handful of disorders consistently appear in research, and the evidence is stronger for some disorders than others. In her chapter, Healey (this volume) dissects the research on creativity and Attention-Deficit/Hyperactivity Disorder (ADHD) in children. In the literature, disordered children and creative children are often described similarly in terms of temperament, activity, and social skills (Guenther, 1995). Healey, however, points out that although the behaviors exhibited by children with ADHD resemble behaviors also exhibited by children who are skilled at creative thinking, the two are more distinctive than first glance may

let on. Where children with ADHD often leap from idea to idea without a guiding theme, children who are creative thinkers can be more selective, controlled, and structured in recruiting and combining ideas. A seal and a sea lion may look like the same animal, but like ADHD and creative thinking, they're entirely different species.

For other disorders, however, several chapters in this volume point out (Abraham; Carson; Kaufmann & Kaufmann; Kinney & Richards; Kozbelt, Kaufman, Walder, Ospina & Kim) that perhaps we should not be so skeptical of the slew of biographies (Jamison, 1993), epidemiological studies (Goodwin & Jamison, 2007), and recent reviews (Galvez, Thommi & Ghaemi, 2011; Johnson, et al., 2012; Lloyd-Evans, Batey & Kenney, 2006; Pollack-Kogan & McCabe, 2010) indicating that there is indeed a higher incidence of psychopathology in creative thinkers. There's enough evidence associated with some disorders—depression; mania and the bipolar spectrum; and the schizophrenia spectrum—to suggest that some disorders have some associations with some creative domains.

Several authors suggest that rather than disorders being the cause of creativity, creativity and certain features of disorders may be linked to similar neurological and genetic processes (see Kinney & Richards; Beaussart, White, Pullaro, & Kaufman). For instance, while both hypomania and bipolar disorder are associated with prolonged periods of increased energy, rapid thinking, less need for sleep, and more positive attitudes, only people affected by the less intense hypomanic mood swings are able to harness the motivating positive energy in order to increase productivity while still filtering out the grandiose, impractical ideas. In the same vein, people experiencing a major depressive episode are often plagued by ruminating negative thoughts, but people experiencing a less intense dysthymic episode are able to use the rumination adaptively to channel insight.

Paul Silvia 5/7/2013 2:27 PM

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### **Adaptationism as an Explanation for Creativity and Mental Illness**

An intriguing idea found in several chapters is that some mental illnesses are passed down because they convey creativity as an adaptive feature (see chapters by Kozbelt et al. and Carson). Positive schizotypal symptoms, for example, might be dysfunctional, but they foster creative ideas that can serve adaptive functions. This argument has a certain appeal—it tackles the hard problem of how mental illnesses persist and celebrates creativity as a positive resource—but we're ultimately unconvinced.

First, the associations between some disorders and creativity are not large enough or consistent enough, in our opinion, to be compelling. Bipolar disorder, for example, isn't so strongly related to creativity, and creativity isn't so strongly related to reproductive success, that bipolar could persist solely due to an incidental effect on creativity. Second, "heritability" and "adaptiveness," themselves slippery concepts, become even slipperier when applied to sociocultural concepts such as creativity and psychopathology.

And finally, we wonder if these ideas reflect hubris on the part of creativity researchers, who naturally see creativity as tremendously important and a driving force in individual and cultural achievement. We would encourage researchers to consider bipolar disorder and schizophrenia from the lens of people with these disorders, their parents, and their children. Are we really to believe that disorders like depression, bipolar, and schizophrenia—disorders that are crippling and disabling, that disrupt relationships and social networks, and that cause self-harm and suicide—persist because they have weak effects on creativity in some cultural domains? The implications of this idea feel vulgar and sound wrong.

### **The Big Picture of Mental Illness and Creativity**

Stepping back to look at the literature as a whole, what can we conclude? It seems obvious to us from research discussed in the preceding chapters that creativity and mental illness are less related than common stereotypes would have us believe. We're thus sympathetic to Schlesinger (this volume), who denounces the "mad genius stereotype" as an empty stereotype. We agree that this idea has been seriously oversold. Like no other research problem, this one can drive creativity researchers to madness and melancholia: the amount of evidence in support of such links is disproportionate to the amount of popular interest in the problem and to the contentiousness of the issue in professional circles. Nevertheless, we take away from these chapters a sense that, for some severity levels of some disorders, and for some domains—one can reasonably conclude that creativity and mental illness are linked.

As Abraham, Carson, Healey, Kinney and Richards, Papworth and others in this volume point out, there are some interesting insights found in the creativity–mental illness literature. As discussed by Papworth (this volume), we find that across mental illnesses, researchers incorporate two prevalent patterns of disordered thinking into their models of psychopathologies. The first, *maintaining cognitive biases*, lead to people interpreting information, thoughts, feelings, and sensations as particularly meaningful or representative of skewed expectations and beliefs. The second, *lacking cognitive inhibition*, leads to a reduction in filtering out seemingly irrelevant cognitive input. Although these patterns are strongly associated with maladaptive thought processes — like rumination, impulsivity, hearing voices, and catastrophizing, for example — and with disorders such as Major Depression, Generalized Anxiety, and Schizophrenia, they are also strongly associated with the normal cognitive functions that people elect to engage when coming up with creative ideas. People who are able to think creatively often have diverse associations, uninhibited generation, and divergent problem solving strategies



— in other words, they are able to selectively turn off and on the same thinking patterns that consistently plague people with persistent psychopathologies.

Likewise, many chapters in this volume acknowledge that there is a lot of murkiness in the study of creativity and mental illness. In this literature — more so than in any other recent creativity research — the concept of creativity is loose, poorly defined, and ill-suited for serious, quantitative research. This presents two problems for researchers. First, as Simonton (this volume) points out, the looser a domain's constraints are for defining what is creative, the more we tend to find instances of people with various psychoses operating “creatively” within that domain. And second, as Kinney and Richards, Schlesinger, Carson, Abraham, and others (all this volume) discuss, there seems to be a shared vulnerability or “third variable” that is associated with the thinking styles of the mentally ill and the thinking styles that lead to creative ideas. But because “creativity” is different across different studies, it's difficult to say just which commonalities are driving the relationship between the two thinking styles.

In short, it is admittedly fascinating that people who develop or are genetically predisposed to developing mental illness are often more creative. But as we've seen in chapters throughout this volume, the connection between mental illness and creativity is tenuous, at best, and likely perpetuated by romanticized and mystical conceptions of artists as tortured souls. Artists, writers, and creative thinkers are no more tortured than the rest of us, though — more realistically, they just seem to embrace the unconventional thinking strategies that we tend to associate with affective and schizotypal disorders, yet maintain intact executive functions that are advantageous (and probably necessary) for creative thinking (cf. Beaty & Silvia, 2012, 2013; Nusbaum & Silvia, 2011; Silvia & Beaty, 2012). Researchers ought to focus on demystifying the creativity–psychopathology relationship by examining the specific, functional ways in which

disordered thoughts are similar to creative thoughts. For example, as Kinney and Richards point out, disordered eminent creators are often disordered in the direction of unhealthy positive moods — and as Baas, De Dreu, and Nijstad's (2008) comprehensive meta-analysis of mood and creativity finds, positive mood is, in general, conducive for creative thinking because it increases fluency and flexibility, two important cognitive abilities that contribute to creative ideation.

One take-home message, we think, is that creativity science should invest more heavily in understanding the basic processes of normal creativity. This strategy is more likely to yield theories that can be translated to the problem of how creativity works in disorders and pathological samples. The other route—using disordered samples as a lens through which to understand creativity more generally—seems less fertile, if only because it hasn't moved our basic-science understanding of creativity very far thus far. The best way to understand the few links that exist between creativity and mental illness might thus be to step back from this contentious problem and work out the foundational cognitive, biological, and social processes that foster creative ideas in normal populations.

### References

- Andreasen, N. C. (1987). Creativity and mental illness: Prevalence rates in writers and their first degree relatives. *American Journal of Psychiatry*, *144*, 1288-1292.
- Baas, M., De Dreu, C., & Nijstad, B. (2008). A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin*, *134*, 779-806.
- Beaty, R. E., & Silvia, P. J. (2012). Why do ideas get more creative across time? An executive interpretation of the serial order effect in divergent thinking tasks. *Psychology of Aesthetics, Creativity, and the Arts*, *6*, 309-319.
- Beaty, R. E., & Silvia, P. J. (2013). Metaphorically speaking: Cognitive abilities and the production of figurative language. *Memory and Cognition*, *41*, 255-267.
- Galvez, J. F., Thommi, S., & Ghaemi, S. N. (2011). Positive aspects of mental illness: A review in bipolar disorder. *Journal of Affective Disorders*, *128*, 185-190.
- Goodwin, F. K., & Jamison, K. R. (2007). *Manic-depressive illness: Bipolar disorders and recurrent depression*. New York: Oxford University Press.
- Guenther, A. (1995). *What educators and parents need to know about... ADHD, creativity, and gifted students*. Practitioners' Guide A9814. The National Center on the Gifted and Talented, University of Connecticut.
- Jamison, K. R. (1993) *Touched with fire: Manic-depressive illness and the artistic temperament*. New York: The Free Press.
- Johnson, S. L., Murray, G., Fredrickson, B., Youngstrom, E. A., Hinshaw, S., Bass, J. M., ... Sallum, I. (2012). Creativity and bipolar disorder: Touched by fire or burning with questions? *Clinical Psychology Review*, *32*, 1-12.

- Kaufman, J. C. (2001). The Sylvia Plath effect: Mental illness in eminent creative writers. *Journal of Creative Behavior, 35*, 37-50.
- Kaufman, J. C. (2003). The cost of the muse: Poets die young. *Death Studies, 27*, 813-821.
- Kaufman, J. C. (2005). The door that leads into madness: Eastern European poets and mental illness. *Creativity Research Journal, 17*, 99-103.
- Lloyd-Evans, R., Batey, M., & Furnham, A. (2006). Bipolar disorder and creativity: Investigating a possible link. In A. Columbus (Ed.). *Advances in psychology research, 40*. New York, NY: Nova Press.
- Ludwig, A. M. (1995). *The price of greatness: Resolving the creativity and madness controversy*. New York, NY: Guilford Press.
- Ludwig, A. M. (1998). Method and madness in the arts and sciences. *Creativity Research Journal, 11*, 93-101.
- Nusbaum, E. C., & Silvia, P. J. (2011). Are intelligence and creativity really so different? Fluid intelligence, executive processes, and strategy use in divergent thinking. *Intelligence, 39*, 36-45.
- Pollack-Kagan, S., & McCabe, R.C. (2010). Mood disorders and creativity. In P. C. McCabe & S. R. Shaw (Eds.), *Psychiatric disorders* (pp. 41-49). Thousand Oaks, CA: Sage.
- Post, F. (1994). Creativity and psychopathology: A study of 291 world-famous men. *British Journal of Psychiatry, 165*, 22-34.
- Ravaldi, C., Vannacci, A., Zucchi, T., Mannucci, E., Cabras, P. L., Boldrini, M., ... Ricca, V. (2003). Eating disorders and body image disturbances among ballet dancers, gymnasium users and body builders. *Psychopathology, 36*, 247-254.
- Silvia, P. J., & Beaty, R. E. (2012). Making creative metaphors: The importance of fluid

James C Kaufman 5/2/2013 11:51 AM

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Emily Nusbaum 5/2/2013 9:15 PM

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intelligence for creative thought. *Intelligence*, 40, 343-351.

