

## Does Medication for ADHD Impair Creativity?

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The article which appeared in the *Journal* on February 3, 2005, "What if Einstein had taken Ritalin - ADHD's Impact on Creativity," alleges that stimulant medication for ADHD reduces creativity. This notion is very much at odds with existing research, with the opinions of expert clinicians who treat ADHD, and with the experiences of the affected adults themselves. Most unfortunately, it raises unwarranted fears and concerns.

While there are undoubtedly many creative individuals among those who have ADHD, there is no evidence to indicate that ADHD itself confers greater creativity. In fact, the far more common experience is that, however great their creative talents may be, the symptoms of ADHD prevent individuals from developing and expressing those talents. It takes concentration, focus, and stick-to-itiveness to capture an idea on paper, to compose a piece of music, to create a work of art, or to write a novel. These are the very functions impaired by ADHD and ameliorated by medication.

In 1989, I undertook a study, sponsored by the National Institutes of Health, which examined the question of whether methylphenidate (Ritalin) impairs creativity in children. Children with clearly diagnosed ADHD performed an "alternate uses" task in which they were asked to generate as many uses as possible for common objects. Responses were scored on the basis of their originality. Thus, a common use of "brick" was "to build a house" whereas to "use it as a paperweight" or to "use it for weight-lifting" were scored as original uses. The task was administered following placebo and following each of three different doses of methylphenidate within the therapeutic range. The results, published in the *Journal of the American Academy of Child and Adolescent Psychiatry* (Solanto et al., 1989), showed quite clearly that the children produced significantly more original or creative responses following methylphenidate than they did following placebo. Since that time, another research group also found a facilitative effect of methylphenidate on performance (Douglas et al, 1995) and a third group found no effect positive or negative (Funk et al., 1993).

While there have as yet no similar published studies of the effects of stimulants on creativity in adults, substantial clinical experience and research evidence indicates that adults with ADHD are more effective and productive in their chosen fields, whether in the professions or the arts, following medical treatment for ADHD (Wilens et al., 2004).

The article relies heavily on anecdote to support the claim that stimulant treatment reduces creativity. I was struck by the fact that only one of the individuals cited in the piece had actually taken medication for their ADHD symptoms. Rather they *feared* that treatment would dampen their creativity or mask their special gifts. As a professional who has evaluated and treated many children and adults with ADHD, I would venture to state that these individuals succeeded *despite* their ADHD - given some combination of talent, drive, and support - not *because* of it. With medication, they might have found that the road was less bumpy, more direct, and less stressful for themselves and those close to them.

## References

Douglas, VI, Barr, RG, Desilets, J et al. (1995), Do high doses of methylphenidate impair flexible thinking in attention-deficit hyperactivity disorder? *J Am Acad Child Adolesc Psychiatry* 34: 877-885

Funk, JB, Chessare, JB, Weaver, MT et al. (1993), Attention deficit hyperactivity disorder, creativity and the effects of methylphenidate. *Pediatrics* 91: 816-819

Solanto, MV, Wender, EH. (1989), Does methylphenidate constrict cognitive functioning? *J Am Acad Child Adolesc Psychiatry* 26: 897-902

Wilens, RE, Faraone, SV, Biederman, J. (2004), Attention-deficit/hyperactivity disorder in adults. *JAMA* 292(5): 619-623