Analysis of movie " a beautiful mind"



A Beautiful Mind The movie "A Beautiful Mind" directed by Ron Howard is based on the real story of mathematician John F. Nash Jr., played by Russell Crow.

John Nash was a gifted young man from West Virginia that, while studying in Princeton, created his "game theory" also knows as "Nash equilibrium", which was the break through in modern economics, and for which he got the Nobel Memorial Prize in Economics later on in his life. Also except his extraordinary mind John Nash had a psychological disorder - Schizophrenia. Schizophrenia is a group of disorders characterized by severely impaired cognitive processes, personality disintegration, affective disturbances, and social withdrawal. "# Schizophrenia is the disease of the brain itself which interferes with function of the brain, which can trigger symptoms like hallucinations, delusions, thought, movement and speech disorganization, inappropriate affect, which are called positive symptoms. There are also negative symptoms that include flat affect, alogia, and avolition.

(Understanding Abnormal Behavior, p. 19-427) There are different types of Schizophrenia: paranoid, disorganized, catatonic, residual, and undifferentiated. Paranoid Schizophrenia is the one that John Nash was diagnosed with. This type of Schizophrenia includes hallucinations and delusions that generally have the same theme, but this Schizophrenia has no symptoms like: speech or movement disorganization. (Understanding Abnormal Behavior, p.

429-431) Schizophrenia also has three phases, which we can see in the movie. First phase is Prodromal phase, which is the onset of the symptoms,

but symptoms aren't prominent. Second phase is Active phase, which shows development of full schizophrenic symptoms that start appearing after some stressor or demand. For example, in the movie when John Nash had met a demand of finding a thesis, while he was in Princeton, for his paper he started seeing his first hallucination, in form of his imaginary roommate and best friend Charles Herman. And third phase is Residual phase, in this phase the positive symptoms disappear after medication therapy, but some of the negative symptoms still left, like flat affect, alogia or avolition.

In the movie we can see this phase when John Nash is taking his medications. The delusions and hallucination have disappeared but he shows symptoms of flat affect and avolition, which is helplessness in taking any action or to get oriented by something. (Understanding Abnormal Behavior, p. 433) According to DSM – 4, diagnostic criteria for Schizophrenia in general is the appearing of two or more symptoms, such as delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, for significant portion of time during 1-month period. Also one or more major areas of functioning such as work, interpersonal relationships or self-care are below the level achieved prior to onset of symptoms. Another criterion for diagnosis is duration.

The signs of disturbances persist for at least 6 months. And within these six month there has to be at least 1 month of symptoms. The DSM – 4 excludes the disorders that are similar to Schizophrenia, such as Schizoaffective and Mood disorder, because even though they are similar there are key symptoms that differentiate these disorders. It also excludes symptoms that are similar to Schizophrenia, but are induced by medication. (DSM-4, p. 285-

286) The diagnostic criteria for the specific type of Schizophrenia, the Paranoid Schizophrenia, are preoccupation with one or more delusions or/and frequent auditory hallucinations.

But there are no symptoms that include the disorganized speech, disorganized or catatonic behavior, or flat or inappropriate affect. (DSM-4, p. 287) The movie doesn't portray the cause of Nash's Schizophrenia, probably because the real cause of this disorder hasn't been discovered yet. But still there are a lot of different theories about how Schizophrenia develops. One of the theories about development of Schizophrenia includes the genetic factor.

This means that the closer the blood relative is to the person diagnosed with Schizophrenia the more chance there is that he or she will develop the disorder. The twin studies confirm this theory; studies show that identical twins are both more likely to develop Schizophrenia, that non-identical. Even though we see correlation between heredity and Schizophrenia, still most of people that had parent with Schizophrenia will not develop it themselves. Another theory that explains Schizophrenia is called Dopamine hypothesis. It says that Schizophrenia develops from excess dopamine activity in the brain.

The theory has been somewhat proven by the experiment in which there were used three kinds of drugs (Phenothiazines, L-dopa, Amphetamines) that have affect on dopamine. The results were positive, but still a quarter of the people that are treated by antipsychotic drugs have no response to them.

Also there are theories about effect of environmental factors on development of the disorder. Such theory might say that Schizophrenia may develop from

physical damage to the brain or disruption of normal brain development early in fetal or prenatal periods.

(Understanding Abnormal Behavior, p. 435-449) John Nash showed mostly just positive symptoms of Schizophrenia. And since he had Paranoid Schizophrenia it was easy to distinguish these symptoms. John Nash was suffering from visual hallucinations, delusions and paranoia. By having hallucinations John Nash saw objects, had interpersonal relationships, and worked for people that have never existed. There are different types of delusions, the one that Nash had in the movie is called delusions of persecution, which is a belief that other people are after him, or trying to kill him.

Nash showing symptoms of paranoia too, which showed his reluctance to trust others, suspiciousness and hypersensitivity. Also after getting the treatment Nash was showing mostly negative symptoms. The negative symptoms included flat affect, where he did not show any emotions, and avolition, where he had no motivation, even when his son was crying while sitting on Nash's knee, John still wasn't motivated to anything until his wife came in. In the movie, while giving presentation, John Nash is captured and sent to psychiatric facility. Because of his delusions he thought that he is capured by Soviets for interrogation, so he would not listen to the doctor. Finally his wife Alicia confronts him by retrieving never opened envelopes that he had left at "secret" mailbox.

When Nash saw the evidence, he realized that this all secret operation was a hallucination, and he agrees to go through therapy. While John was at the

institution, he was going through insulin shock therapy, "which is induced coma and convulsions by overdose of insulin which afterwards leads to recovery of mental functions. "# After he received full insulin shock therapy, John was released and prescribed antipsychotic medications, which reduce the positive symptoms, like hallucinations, delusions and disorganized thoughts, but have small effect on negative symptoms, such as social withdrawal and apathy. However later in the movie John stops taking his medications because it was interfering with his intellectual functioning, which lead to relapse of his symptoms. When he started having delusions and hallucinations again, he realizes that the people that he sees cannot be real because they didn't' age over long period of time, than with the help of his wife and the doctor he learns how to ignore and live with his delusions and hallucinations without taking any medication.

The treatment that John Nash received in the movie was the best treatment for Schizophrenia at that time. He received insulin shock therapy and antipsychotic medications that relieved his symptoms, but it didn't cure his Schizophrenia, because there is no cure found for this disorder. The only intervention that I think would have helped John Nash more is that if he would have been diagnosed with his disorder sooner. His first symptoms started when he was a student in Princeton University and he was hospitalized a couple years later when he was a professor in MIT, which gave him a great deal of depression and anxiety. As in the movie Nash's psychiatrist Dr. Rosen, character played by Christopher Plummer, said that: "Nightmare of Schizophrenia is not in the unknowing what is real and what is

not, but in realizing that the places and people that you love may even never existed.

The movie didn't portray the facts about Nash's life accurately, but Nash's disorder was portrayed really well. Both positive and negative symptoms, such as hallucinations, delusions, paranoia, flat affect and avolition were very realistic. Also the depression, anxiety and problems that John Nash had to deal with after finding out about his disorder were shown. All these characteristics were believable and portrayed professionally by Russell Crow. This movie shows that power of the mind can overcome anything.

In the movie John Nash learns how to see the difference between what is real and what is the "trick" of his own imagination. Than Nash learns to ignore and live with his hallucinations, this was working out very well for him; he was leading a normal functional life even though his symptoms were still prominent. He started working in the Princeton University again, and after some time he started teaching there. He spent most of his time on the campus of the university, which helped him with his disorder by being surrounded by the same people and places, there was less chance that he will develop any new hallucinations or delusions, and also by being in the environment that he felt comfortable in reduced his stress, so the symptoms weren't prominent.

But still John was suspicious of new people that he met; we can see that in the movie when he is approached by a person from Nobel's Committee, Nash asks one of his students if she can see that person too, just to make sure that he is real. This movie really shows that intellect can help the person to lead a normal and functional life "Work Cited: Sue, D. Sue, D. Sue, S. (2006). Understanding Abnormal Behavior.

Houghton Mifflin Company: New York, Boston. American Psychiatric Association. (1994). DSM – IV. Washington, DC. Sabbatini, R.

The History of Shock Therapy in Psychiatry. Brain and Mind 01/30/08. http://www.cerebromente.org.

br/n04/historia/shock_i. htm A Beautiful Mind. Directed by Ron Howard.
Universal Pictures. 2001 John F. Nash Jr.

"Autobiography". Nobel Prize. 1995. The Nobel Foundation. < http://nobelprize. org/nobel_prizes/economics/laureates/1994/nash-autobio.

html>