Lynne Waheeba

Dr. Victoria Turgeon

CEM- 675: Healthcare Seminar

April 12nd 2019

Identity in Schizophrenia

Who am I and how did I become “me”? The question of personal identity remains the main topic of discussion in a majority of academic fields, including philosophy, psychology and even biology. Philosophically, personal identity is an unanswered question in that its response depends heavily on whether the person subscribes to a dualistic or a physicalist ideology. Psychologically, personal identity is looked at from the lens of personality. The five major categories of psychology (psychodynamic, behavioral, cognitive, humanistic and biological) all have a different perspective on development of and individual discrepancy in human personality. As for the biological aspect, there is less debate about the origins of personal identity, as the discipline focuses on biological aspects of neural physiology, rather than the impact of environmental changes on psyche. Many physical and psychological ailments affect one’s identity as well as society’s perception of the individual after this identity change. One of those disorders is schizophrenia, which is a chronic psychotic disorder characterized by disturbed behavior, thinking, emotion and perception.

Schizophrenia is rooted in a biological explanation for the symptoms while presenting itself as a psychological disorder. As a result of psychological changes, the affected person witnesses direct changes to self-perception and sense of belonging in society. These changes cannot be explained divorced of the philosophical aspect of personal identity. The idea of personal identity emerged from philosophy, so the origins of skewed identity perception must be analyzed from this perspective before diving into the biology and psychology of schizophrenia. This paper will discuss a large range of topics, starting with the definition of schizophrenia from

the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) alongside its symptoms and diagnostic criteria. Second, I will take a deeper look at the symptoms from a biological side and discuss the reasons as to why schizophrenia arises in individuals. Then, I will discuss the symptoms from a psychological point of view, providing the ways schizophrenia is diagnosed in individuals. From there, I will explore the study of personal identity from the point of view of two different philosophers: René Descartes and David Hume. Using the different definitions of personal identity, I will explain the stigma associated with those who are diagnosed with the disorder and how that affects their personal development, place in society, and close relationships. The aim of this paper is to discuss schizophrenia from all aspects, and find a solution that could end the stigmatization of the disorder.

The DSM-5 has identified schizophrenia as a chronic psychotic disorder in which disturbances in thought, behavior and emotions are present. The diagnostic criteria for the disorder include the presence of two or more positive symptoms for over one month, alongside the negative symptoms for over six months. Positive symptoms include: Hallucinations, delusions, disorganized speech, disorganized or catatonic behavior. Whereas, negative symptoms include loss of motivation, lack of emotions, or any other feature that would impair daily functioning. When schizophrenia is diagnosed, three different phases are identified for the patient, beginning with the Prodromal phase, which is the year or so before the diagnosis in which the person gradually notices the onset of the disorder; this phase includes mainly negative symptoms with some positive symptoms. The second phase is the Active/acute phase, the phase in which positive symptoms arise and are affecting the person's functioning. The last defined phase, the Residual stage, is characterized by the person gradually losing positive symptoms and

left with negative symptoms (Ciccarelli & White, 2014). Patients start experiencing the prodromal phase in their late teens to early twenties (Walker & Tessner, 2008), which is the time most individuals are starting to claim their own identity and personality so those who are diagnosed feel a disconnect from themselves. They tend to question their uniqueness and start doubting their reality as they cannot distinguish who they truly are from the delusions or hallucinations. This disconnect forces them to become divorced from reality and they fail to give meaning and direction to their life.

Today, schizophrenia is considered a biological disorder and not a neurodegenerative one due to the lack of new evidence that has confirmed neuronal death. But the manifestation of the disorder remains psychological affecting the patient's personality and behavior. Researchers have identified three key physiological and endocrine mechanisms that contribute to the manifestation of the disorder but none of these mechanisms alone are ascribed to the sole reason for said manifestation. The first mechanism includes changes in the patient's dopamine levels and research has found that these changes are directly linked to the acute phase of the disorder, rather than the residual one (Howes & Kapus, 2009). This conclusion reinforces the idea that there is more than one factor affecting the manifestation of the disease due to the wide range of the symptoms a patient experiences outside of the psychotic episodes themselves. Additional research has found that the irregular firing of dopaminergic neurons leads to an important deviation in normal behavior in response to harmless stimuli. In addition, a scientific theory to explain psychosis itself concludes that dopamine signaling is "filtered" through the person's sociocultural and cognitive pathways leading to the variation in psychotic episode narratives between patients in response to a similar dopamine imbalance (Howes & Kapus, 2009)

The second mechanism is in regards to an increase of glutamine levels. A study done by the Maryland Psychiatric Research Center looked at the glutamatergic response to heat pain stress and found that although glutamine levels decreased for all participants, a slight spike in glutamine levels were observed in patients of schizophrenia. This spike was correlated to childhood trauma in all patients, which provides evidence for the environmental stressors associated with the development of schizophrenia. In the discussion section of the study, the researchers did claim that this finding should be taken "with a grain of salt," because other studies have found variability in the reproducibility of these results. This only adds to the complication of the disorder, as science still has not found a reliable way to study its causes, especially with the environmental impact on individual development of schizophrenia (Chiappelli et al., 2017). The one thing that science agrees on in regards to the biological diagnosis of schizophrenia, is the decreasing size of the hippocampus as patients age, which is the third physical change seen in the brain. The decrease in size is attributed to the clustering of neurons in the hippocampus thus reducing the volume. This leads to abnormalities in function and circuitry of the hippocampus. Another finding included the disarray of pyramidal neurons in the cortex, which is indicative of a developmental problem (Kovelman & Scheibel, 1984). There have also been many synaptic neurons identified as a part of the problem including genes expressed by the glutamatergic neurons, which was discussed above. (Harrison & Eastwood, 2003). Despite the confidence in the fact that the hippocampus is involved in this disorder, the effects of the hippocampal abnormalities vary vastly from person to person, because the hippocampus is one of the regions that contributes to the developing personality (Whittle et al., 2008)

Psychologically speaking, all theories fail to explain schizophrenia, and some do not address how it could possibly arise. The only personality theory that sheds light on the disorder is behavioral theory and that is because this theory is based on neurobiology. This makes schizophrenia a psychobiological disorder in which the symptoms can only be felt psychologically but in a very heavy emphasis on the biology. The onset of the disorder tends to be in late teens to early twenties, which is when personality tends to be solidified (Nevid et al., 2014), and it tends to be a slow process that is not very apparent to the person or those around them. Those who are affected tend to have some sort of traumatic experience in their childhood years or other environmental factors which lead their brain to develop differently than the neurotypical human (Nevid et al., 2014). Based on this evidence, it can be inferred that their personal identity does not dramatically change post-diagnosis. Although this is an attractive argument, it must be studied from various perspectives starting with René Descartes who discussed the dichotomy of body and mind.

Descartes' First Meditation goes through a very long thought process in which Descartes tries to find something certain and unshakeable onto which he could build his philosophy. In order to do so, he formulated the theory of Radical Doubt, which separates things we are certain about versus things about which we are justified in being certain. Before explaining this differentiation, I must expound on the idea of Radical Doubt. Descartes found that there are many things we are justified in being certain about, and those are the things we cannot truly be certain about. For example, our senses are one thing that he thought were deceiving because there is no way for us to truly know that we are all seeing the color red in the same way. There is no objective way of measuring the level of red all of us are seeing when we look at a red cup,

therefore, there is no way to truly be certain that we are all seeing the same shade of red. As for the things that we are certain about, he did not think there were many and that is because there is no proof about us not being controlled by an evil genius who is manipulating our every move. There is also no proof that we are not constantly dreaming and this all could be one long dream in which we are functioning. With the latter idea, he mixes senses as well because he notices that some of our dreams feel as if they were reality, so how can we with certainty say we are awake and autonomous beings? This brought him to the idea that when we doubt, we cannot doubt that we doubt so that must be a certainty. He says doubting is a form of thinking— when we can be sure that we think, or doubt, then we can be equally sure that we exist while we are thinking so if indeed, we can be sure that we are thinking, there has to be something that does the thinking and that thing is I. So essentially, the only thing I can be certain of at this point is that I exist and based on this discovery, he based his entire philosophy. “Cogito Ergo Sum” or “I think therefore I am” allows for the presence of a mind that is thinking as he cannot prove a living body associated with the mind making the human nothing but a “thinking thing.” This thinking thing that was founded by Descartes becomes the self, which is what the person sees themselves to be. In summary, Descartes “Cogito Ergo Sum” theory allows for the existence of a mind separate from the body, which means that Descartes does not believe in the bodily criterion for personal identity, rather in a psychological continuity (Descartes, 1998). Due to the dichotomy of the brain and the mind, the issues to the hippocampus do not affect the way the person sees themselves. The different selves that are found in the different phases of schizophrenia are nothing but mere parts to a larger whole, which is the identity the person forms. A person forms one identity that keeps evolving throughout their lives, but it does not split into two defined

perceptions of self, where one is pre-schizophrenia onset and the second is post-schizophrenia onset.

The bodily criterion is supported by the philosopher David Hume, who completely rejected Descartes' entire argument because he saw no point in speaking of a self, as he did not believe in its existence. To understand Hume's assertions of the self, it must be understood that he believes in the necessity of feelings, or passions as he calls them, rather than rations. The way he sees identity is dependent on the impression of a felt sensation which is stored as "an idea" in the brain. When that specific sensation re-occurs, the idea of the original sensation comes to mind, and he calls the re-emergence of the idea, "impression of reflection" which then produces a revised idea. This cycle continues until the person is essentially dead, so every perception and thought we have is based on an idea of the original sensation to which we no longer have access. This intimate relationship between sensation and reflection makes Hume disregard any kind of real personal identity. For him, the basis of personal identity is in the passions themselves, since that's what our sensations are based on. Because passions are continuous, fluctuating, and cannot coexist, identity cannot be static and must be constantly changing through time. Hume explains the illusion of a continuous personal identity by explaining that we have a distinct idea of a thing for a certain amount of time, the identity of the thing. We also have an idea of few close relations which exists independently of the separate identity of a thing but our imagination thinks of them as coexisting and dependent on each other, giving us the illusion of a continuous thread of thought and identities rather than a smooth transition between those two ideas. Hume believes the smoother the transition is, the more realistic this idea of identity will become but regardless, it will always be nothing but an illusion (Hume, 1740).

Based on Hume's understanding of personal identity, a schizophrenic must not worry about his identity changes between the residual and acute phases because the only difference that is presented is the rocky transition between the two phases rather than a fundamental change to personal identity. For Hume, the only difference between a schizophrenic and a neurotypical is that the neurotypical goes through a much smoother transition of events in her everyday life whereas the schizophrenic does not. In this regard, the psychotic's variation in dopamine levels between the acute and residual phases must not be interpreted as anything serious, rather as a normal event of human nature. This view does have many implications, though, because it allows for subjectivity and completely disregards the problems that a person could be having in their everyday life. Regardless of what distress a person may be going through, it can be explained though Hume's transition theory disregarding the possibility for a fundamental problem.

Although the above philosophers have opposite ideas on the nature of personal identity and whether or not it exists, they both agree that other's perception of us affects who we become and the way we develop. This takes a very serious meaning for those with schizophrenia, because their diagnosis becomes a part of their identity that they cannot escape or hide from the public. Although only 1% of the population is actually affected by schizophrenia, that small percentage experiences stigma and discrimination from their immediate surroundings as well as from their healthcare workers. Stigma is the result of implicit biases that exist within ourselves. These implicit biases are hidden in our subconscious but they affect the way we, as individuals, think of a certain topic. They creep into our conscious as perceptions of a certain idea, these perceptions may be correct or incorrect but they tend to have little to do with the thing we are perceiving and more with how we understand it. Although these perceptions pertain only to us, and not another

individual, the resultant action of our perception affects the way the other perceives themselves. This is true especially if "the other" is in a vulnerable position and they know they are in that position due to a certain biological issue they have no control over.

Providing a more international perspective to the discrimination, a combined study between Czech Republic, Switzerland, UK, and the Netherlands found four different levels of discrimination. The macro-level, which is the biggest influencer of perception and includes the biased media coverage. At meso-level, there was discrimination in the medical setting, legal setting and while interacting with the police. In addition, persons with schizophrenia felt this stigma in society while trying to find a job or talking to support groups. For the micro-level, discrimination was imbedded in the attitudes of society and the avoidance behavior neurotypicals in the population had when it came to interacting with persons with schizophrenia. The micro-level stigma played a large role in the development of intro-level stigma as the family members of the patient felt the need to provide "unlimited care" to patients with schizophrenia, which then reinforced all societal discrimination (Krupchanka et al., 2018). This level of stigmatization was also found in China but it was studied from the perspective of the patient and her family caregivers. Patients tended to feel shame and self-loathing because of the way society was looking at them. They also saw themselves as a burden onto their family caregivers, who were now also discriminated against by association (Wong et al., 2018). Similarly, these results were found in an American study, with one exception of patients having treatment-resistant schizophrenia, with no possibility of relieving symptoms. The lack of treatment options available for patients added stress on the caregivers, as there was no way to control the disorder, putting the patient in a very vulnerable position in society (Brain et al. 2018).

The last two studies in America and China describe the birth of a rocky relationship between the patient and their caregivers because the caregiver is stigmatized against by association with the patient themselves. This leads to a disconnect from loved ones translated to an incoherence in the personal identity of those who have schizophrenia because they develop a sense of hopelessness in regards to their condition. They stop believing in the truth of medication and they feel as if they are a burden on those around them. The hopelessness is intensified by the stigmatization that patients receive in the healthcare system from their own doctors and healthcare providers. A study in Spain looked at the attitudes of nurses and doctors when dealing with patients with schizophrenia, and they found that despite healthcare workers knowing the signs and symptoms of schizophrenia, they have skewed perceptions of what the disorder looks like and how to approach those patients (Llerena et al., 2002). A similar finding was discussed in the Dominican Republic, except it was found that the more experienced the healthcare worker was, the better they handled a patient with schizophrenia and provided treatment (Caplan, Little, Graces-King, 2016).

The stigmatization of persons with schizophrenia is an issue that is deeply imbedded in society, thus, the changes that ought to be established need to impact the way society portrays persons with schizophrenia. The doctors in the Dominican Republic study were more likely to treat patients better with less dismissiveness if they had more experience with schizophrenia patients, so the solution must be threefold: medication, a societal understanding of the disorder, and subsequently a better doctor-patient relationship. Identity formation is a complicated and subconscious process affected by the experiences of an individual. The philosopher Jean-Paul Sartre believed that who we become is very dependent on how other people perceive us, and we

tend to internalize these perceptions, which is evident in the birth of hopelessness in the hearts of persons with schizophrenia (Being and Nothingness, Sartre). The accuracy of these perceptions does not matter, because even doctors, who have the educational background on the disorder, are victims to their own biases about patients with schizophrenia, proving that education alone is not enough to shed light on the reality of the disorder. Changing the way schizophrenia is taught in schools needs to be changed to shed light on the perceptions and the trap of societal stigmas, this way doctors and healthcare workers are better prepared while treating those with the disorder. There also needs to be increased public awareness through a change in the way movies and TV shows display schizophrenia patients, to allow for visibility of the entire disorder on a day-to-day basis and not only the negative aspects of it. Schizophrenia is a biological disorder and should be treated as such, because the psychological manifestations do not overshadow the neurological abnormalities that are causing the disorder itself.

Sandy Jeff is a schizophrenia patient who gave the world an amazing memoir "*Flying with Paper Wings: Reflections on Living with Madness"* in which she described in detail what it was like to live with schizophrenia. The voices telling her she was evil and "Satan's whore" started appearing when she was about 23 years old. When the voices started talking to her, she started feeling deep down that she was evil, that she indeed was Satan's whore. She had no idea where these voices were coming from but she knew that they were real. Sandy describes hallucinations as a person talking to her without a body and no one can hear them other than her. They become a "real" person to her that is also adding to the stigma around her disorder. They would tell her to get away from everyone and that everybody is going to hurt her one way or another, and she believed them. "Perhaps the most puzzling aspect of my madness is the loss of

insight into one's self and condition; it is this that makes me think of my mad self as a stranger." (Jeffs, 2009). But the one thing that allowed her to reconnect with her-self was the friends she had who never lost faith in her and her recovery, because every time she went into a psychiatric facility, the doctor's attitudes towards her disorder made her feel eviler and less of a human being with a life worth living. Between the hallucinations telling her she was evil, and the doctors furthering the divide between her sane and mad self, she was left with a strong sense of guilt for having the disorder. She started blaming herself for being alive and for not being "normal" to the point where she completely isolated herself from everyone due to the fear that she was going to infect them with "the evil." For her, "stigma is defined as a mark of disgrace and a state on one's reputation" (Jeffs, 2009) and Sandy was stigmatized from her society, who constantly judged her, and her voices, who told her she was worthless. Through all that she said, she didn't have time to form an identity with anything more than a fragile sense of self that can be shattered with a weird look from a stranger. Sandy urges her reader to understand the complications of identity formation through the disorder, and the importance of being kind to those with psychological disorders. If it was not for the kind words of a stranger and her friends not losing faith in her recovery, she claims she would have ended her life years ago with no regrets (Jeffs, 2009)

Acceptance among others gives a person meaning for living, whether this person is neurotypical or a schizophrenia patient. We must always remember that our perception and bias of an issue indefinitely and inevitably prolongs that issue. We should be aware of our surroundings and educate ourselves on the reality of the world and on the fact that people are much more than their portrayal in various media. Schizophrenia is a disorder that is not visible to

the naked eye but it is physical and biological with symptoms that end up completely changing the person's life and identity. The effects can be explained biologically, psychologically and philosophically, showing an invisible link between fields studying human nature, regardless of how different they may appear. To allow schizophrenics to become more themselves, and live a fulfilling life, we must be aware of the fact that they are no different than the neurotypical and should be treated no different than the neurotypical.

Action Plan:

Education in schools is not the sole way to combat stigma and it should not be considered as such. Medical students and health care professionals are prone to dismissing their schizophrenia patient's pains as "in their head" or "nothing but a delusion" instead of recognizing their pain as real. Medical professionals know the symptoms of the disorder and know the idiosyncratic nature of its manifestation in patients. This shows that something else needs to be done, because knowing the facts is not enough to stop the stigmatization.

One short term plan to combat this stigma includes more social awareness and the de-glorification of schizophrenia and its effects on the human life. Netflix, HBO and other streaming outlets provide an alternative educational service in which real life issues are discussed in a non-normative fashion. For example, the docuseries "*Explained*" from Vox on Netflix provides 20-min episodes spanning topics from political correctness to the "orgasm gap" so including an episode on the every-day life of a patient with schizophrenia should be included in the movement to reduce the taboo. HBO episodes in *Vice* discuss even edgier topics including the Klu Klux Klan and electronic immortality, but nothing on schizophrenia. Having shows with such wide target topics can provide air time for the truth of schizophrenia, without the glorification of hallucinations that Hollywood emphasizes. Thanks to Hollywood, the perception of the disorder now is that patients are dangerous, dirty, and irrational. This is not an accurate depiction of real people who have schizophrenia, which can be corrected through shows like the ones mentioned above.

The barrier to this plan is the presence of those who do not believe schizophrenia is a real disorder. The retired psychologist Phil Hickey on his personal website *Behaviorism and Mental Health: An Alternative Perspective on Psychiatry's So-called Mental Disorders* (http://behaviorismandmentalhealth.com/2010/01/21/schizophrenia-is-not-an-illness/) describes schizophrenia as the manifestation of maladaptive behaviors when reacting to failure. Not only is this statement incorrect, it disregards the pain and anguish all schizophrenia patients go through in their day-to-day lives. In addition, it spreads misguided false information about the realities of the biological disorder that is simply manifested in a psychological manner. Dr. Hickey is undermining the realities of patients and contributing to the stigmatization of the disorder. Other's perception of us contributes greatly to our perception of ourselves and to the formation of our identities, so this psychologist is clearly and blatantly telling schizophrenia patients that they have the disorder due to their parents coddling them and their own personal failures. This puts non-existent responsibility upon those with schizophrenia hence adding to their anxiety, anguish and distorted image of themselves leading to worsening symptoms. Schizophrenia is clearly biological.

Providing a long-term solution for stigmatization includes constantly debunking false factual information that is spread about the disorder. This means talking more about the disorder and allowing a comfortable space for those with schizophrenia to be able to exist without shame. Comfortability comes as more awareness is spread and this can happen by organizing talks for those with schizophrenia to tell their story. Although only 1% of the world population is affected, this does not mean we should not be allocating resources, time and effort to find a safe zone for schizophrenia patients to be. They should not be defined by their disorder so we should not treat

them as such, whether it is in hospitals or coffee shops. Realistically speaking, the spreading of awareness will take a few years, because we will be going through a paradigm shift, which takes multiple steps and multiple generations. It took the world many decades to accept HIV as a non-stigmatized disease, and some still hold that stigma. Neurotypical humans get to choose their own identities, more or less, so why should a patient with schizophrenia Have an ignorant society shaping his or her own self-perception and sense of belonging?

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