

# The Deconstruction of Gilles de la Tourette's Syndrome

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#### **Abstract**

The present deconstruction of Gilles de la Tourette's Syndrome introduces this complex disorder using an existential paradigm. An analysis of the history of constructed reason and power highlights the assumptions of 'disorder' that infiltrate society and serves to critique predisposed thought with reference to Tourette's. The review considers the representationalist theory of language and concepts within psychiatric discourse. A brief analysis of previous case studies shows Tourettic energy as part of the individual 'self' and introduces a comparison of Tourettic movement to more mutual human experience, such as music and poetry. Past research that explores preventative social interaction is introduced, which show positive advancements in treatment by challenging the conventions of internal etiology and which highlights the importance of reducing attached stigma.

**Keywords:** Tourette's Syndrome, Deconstructing psychiatric disorder, social stigma

### Introduction

Over a century since its first formal diagnoses by the man whose name became the eponym for the condition, Gilles de la Tourette's syndrome remains an enigmatic phenomenon with no consistently identifiable pathology. Individuals with the syndrome may encounter clinical misunderstanding (Turtle Robertson, 2008, p. 454) as well as an inherently misinformed public Tourette's is referred to as a syndrome as it presents itself by a cluster of symptoms. The American Psychiatric Association (DSM-IV-TR, 2000) states the symptomology as multiple motor tics with the occurrence of one or more phonic tics. Although it does not state their appearance or form, common simple tics include blinking, twitching and coughing, whilst complex tics may consist of more elaborate movements such as twirling and phonic behaviours that involve different sounds, singular words or even whole phrases. Echolalia, the mimicking of others vocalizations and palilalia, the repetition of one's own language, have also been reported in cases of Tourette's, as well as the repetition of gestures, known as echopraxia. Narrative approaches have considered further composite behaviour as Tourettic, such as a burst of energy when playing an instrument (Sacks, 1995; Steingo, 2008). For formal diagnosis, two other conditions must also be met. The first is that the individual must present tic symptoms before the age of 18. Secondly, the symptoms must present themselves for over a year with less than three consecutive months of respite. Therefore, not only do tics wax and wane, suggestive perhaps of some external influence, tics are not idiosyncratic to Tourette's but may exist on a continuum, experienced at a lesser extent by members of the "normal" population.

Tourette's syndrome is often diagnosed with co-morbid conditions. The most commonly

reported are Attention Deficit Hyperactivity Disorder and Obsessive-Compulsive Disorder (Cohen, Sade, Benarroch, Pollak & Gross-Tsur, 2008, p. 299). Tourette's however, even when diagnosed without these associated behavioural complexities, is still reported as a social and academic disability despite regular reports of IO levels, indicating that the syndrome is "unrelated to intelligence" (Miller, 2001, p. 535). It is therefore proposed that there must be wider social implications attached to the diagnosis. Hollenbeck (2003) explains that "Tourette's differs from other neuropsychiatric disorders in one simple way: It is largely the disease of the onlooker. When I tic, I am usually not the problem. You are." Here Hollenbeck introduces the paradox of Gilles de la Tourette's syndrome; a 'disease' that only becomes apparent in the context of social and political milieu, or what we may more commonly consider public space (Davis, Davis & Dowler, 2003). This is not to suggest that the suffering caused by Tourette's is illusionary. Having Tourette's can be a distressing experience; however, Hollenbeck implies is that a large part of this distress may not be the tic itself, but the stigma it evokes from the public. Therefore, through eradicating this stigmatization at least part of the discomfort can also be eradicated.

In 2009, Culter, Murphy, Gilmour and Heyman provided research that highlighted the damage caused by stigma. They reported children diagnosed with Tourette's Syndrome as having a lower subjective quality of life and, the most significant reasons crucially, of effecting this quality life social/emotional problems rather than physical symptoms. Khalifa, Dalan & Rydell (2010) also reported children with Tourette's as having lower self-perception in areas including appearance, social relations and psychological well-being. Although unrelated to tic severity, it is questionable whether some co-morbid conditions reported, such as anxiety, sleep disorders and further mental health problems (Dodel et al., 2010, p. 1060) could be related to this stigma.

The clinical implications suggested by the research points towards peer education regarding the syndrome in order to challenge people's tendency to form opinions on physicality. In *Madness and Civilisation*, Foucault notes that this is a common trait in

people's perception of madness and suggests, "what the eighteenth century had first noticed about it (madness) was not the secret interrogation, but only the social effects: the torn clothes, the arrogance in rags" (Foucault, 2009, p. 190), a sentiment highlighting a history of how physical representation proceeds and dominates any real understanding of the internal condition.

# Social Construction of Abnormal Behaviour

To understand how, as a society, we have come to interpret mental syndromes such as Tourette's in our modern world, it is important to understand how we arrived at assumptions of abnormality through the construction of knowledge. Since the age of the Enlightenment there have been strong distinctions between what is viewed as reason and what is viewed as unreason. This is reflected in the way Tourette's used to be viewed as a 'moral' disease, a 'weakness of will' (Sacks, 1995) laying outside of constructed reason. The act of separating reason from unreason is social, and society is often ruled through elite power, which inherently leads to exclusion of anyone deemed different from this power. Although we no longer live in a feudal system under the rule of sovereign power, Foucault (1991) argues that the main function of modern disciplinary power is still "hierarchical observation" and "normalizing judgment" (p. 170). The key difference being that disciplinary power acts to subtly correct those deemed different, replacing overt public punishment conducted through the sovereign. Porter (1987) observed that "the history of madness is the history of power" and noted that "labeling insanity is primarily a social act, a cultural construct." He argues "do we call people mentally 'confused' because we find confusing?" them (pp. 8-20). interpretation of how we organize human behavior is particularly relevant to the Tourettic individual who has been deemed abnormal, despite the fact that their symptoms are often cathartic, resulting in a return for them to their internal normal state. Evans (1998) explains that, apart from a minority of tics that causes excess strain on certain muscle groups, "the noises and other tics do not disable...to be disabled infers a social context. If I "have" TS (sic) and live on a desert island, am I disabled?" (p. 13). Here, Evans shows how normality is no longer a personal function but a social construct.

It may be that government and power not only legitimise power but "make new sectors of reality thinkable and practicable" (Rose, 1990 as cited in Parker, Georgaca, Harper, McLaughlin & Stowell-Smith, 1995, p. 59). This construction of reality has led to behaviours that do not fit into established belief systems being punished only for these behaviours to be deemed acceptable when viewed retrospectively. What is socially constructed as abnormal in present day belief systems may not be viewed as abnormal in the future. An example of this is the early modern tradition of labelling certain behaviours as being traits of witchcraft. Szasz (1960) went as far as to say, "Mental illness exists or is "real" in exactly the same sense in which witches existed or were "real" " (p. 117). Jung (1970) furthers this comparison; although the belief system may have changed, as a society we still torment those seen to be different and states "We no longer subject him to the test of drinking poison; we do not burn him or put screws on him; but we injure him by means of moral verdicts pronounced with deepest conviction" (p. 164). This is reflected in the way we treat those individuals we deem mentally abnormal and the stigmatisation received by those we put into this category.

Evans (1998) cites a personal account of someone with Tourette's who expresses this parallel and the consequent feeling of being judged, "You feel 'on trial' like your entire social being and worth is bought under scrutiny of strangers, and why? Just because you make an involuntary noise that other people find upsetting" (p. 1). The example here shows how strongly people's lives are affected through how we judge what we perceive to be normal by using only our own experience of life. Jung (1970) used the example of the Western tendency to view 'primitive' cultures as having an inferior consciousness. He compared the differences between the rituals of 'primitive' and Western man, comparing culture specific social norms, such as the insult caused by standing on ones shadow to the offence caused by a gentleman leaving his hat on indoors. He concluded, "His good is just as good as ours, and his evil is just as bad as ours. Only the forms under which good and evil appear are different; the process of ethical judgment is the same" (p. 147). Yet

nearly 80 years later, the trend remains that everything outside personally constructed reason is wrong and this is seen in the misunderstood attitudes towards those with syndromes such as Tourette's. Bilokreli (2009) recalls that when sharing the news to other teacher staff that she would have a boy with Tourette's Syndrome in her class, "I was perhaps most bothered and astonished when the response from others was laughing" (p. 2).

The potential for humour related Tourette's syndrome has been exploited by the media in comedy series such as The Simpsons' episode "Marge Gets a Job" (1992) and South Park's "Le Petit Tourette" (2007), with such examples focusing on exaggerated form of coprolalia, the utterance of 'anti social' words, which effects under 10% of those diagnosed (Brown, 2000, p. 349), or the misguided image of associated violence. Perverse pleasure extracted at the expense of the Tourettic individual becomes voyeuristic and presents the argument that it is no longer the individual who is problematic but it is the society that is acting 'sick.' The label Tourette's in turn becomes synonymous with and misinformed these extreme media representations and becomes a loaded discourse used for stigmatization. Wahl (2003) explains, "Words have power...words reflect and shape prevailing attitudes, attitudes that in turn shape social behaviour" (p. 14). As coprolalia is "out of context with the ongoing conversation" (Miller, 2001, p. 543) its function is not for offense. This in turn should eradicate any loaded discourse associated with the words, something often not portrayed in media representation. Parker et al., (1995) note that it is professional discourses that inform and also modify common representations of mental illness. suggests that although media representation reaches a wider social audience, it could be argued that the syndrome and therefore its stigma, only exists because psychiatry decides to create the label and has marked it as unreason.

One suggested motive as to why Tourettic symptoms present so dichotomously to constructed reason is their shattering of the unwritten governed rules that patrol public space. Although public brings about connotations of inclusion, Davis, Davis and Dowler (2003) note that for people with Tourette's this space is exclusionary. They

describe public space as "the realm of politics and economics separated from the domestic sphere" (p. 103), embodying everything that has been constructed. This space then rejects Tourettic movement, which becomes "disruptive to the order and health of public space" (p. 105). Fruend (as cited in Blackman, Mitchell, Burton, Jenks, Parsons, Raman & Williams, 2003) comments that "self control and a state of vigilance is essential" (p. 358) which often appears to be lacking in Tourettic movement and sound.

#### Tourette's and the Self

However, it may be a misconception that those with Tourette's have no self-control over their actions. Human beings have a readiness to "organize their experience and to interpret their social lives according to narrative plots" (Sarbin, 1998, p. 177), therefore, anything that breaks this is seen as abnormal and unwanted. Tourette's, with its unpredictability, breaks appearing constructed narrative of how we imagine one should behave. For this reason, the symptoms of Tourette's are often treated as if they are alien to the sufferer. It is assumed that the tic derives from a place "outside the autonomous or real self' (Schroeder, 2005, p. 107, emphasis in the original), however, this does not correspond to reports from individuals with Tourette's who explain "I do the tic" ('Mr A', as cited in Cohen & Leckman, 1992, p. 320). Tics can create a release or catharsis; perhaps the most cited comparison is that of scratching an itch, often preceded in the same way by the presence of a sensation evoking the need for action, otherwise known as a premonitory sensory urges, although sometimes the tics are more autonomous, such as eye blinking (Leckman, Bloch, Scahill & King, 2006, p. 645).

In 2009, Steinburg, Baruc, Harush, Dar, Woods, Piacentini & Apter reported that although the premonitory urge to tic was not associated with tic severity in a child population, it was correlated with obsessions, depression and anxiety. Interestingly, when split into two age groups (age 10 and below and age 11 to 15), anxiety was only significantly correlated with premonitory urge in the older age group. This may suggest that older children have reinforced anxiousness caused by the premonitory urges, of being 'incapable of preventing' the tic (Chaturvedi, Gartin & Murdick, 2011, p. 57) and the associated fear of any social embarrassment that may be caused.

Stigma is created because Tourettic movements are often outside of aesthetically and socially accepted movements and sounds. One individual with Tourette's explains how he has had a verity of different tics but is able to explain them all as;

kinda like a habit. So let's say biting nails, you get that urge you always get to bite your nail. Sometimes you don't think about it but as soon as you see it you got to do it again. (Brad, as cited in Bilokreli, 2009, p. 52).

Although inconvenient, like a personal habit of biting nails, tics are part of the self and self-behaviour.

Through more deconstructive and narrative approaches to evaluating Tourette's empathetic syndrome, greater understanding of how it feels to tic can be reached, and the more positive aspects of the syndrome can be explored. This approach also highlights that Tourette's is not as simple as a physical disease that must be expelled from the body, as Sacks (1995) explains, the 'it' is not next to, but conflated with the 'I' (p. 73). The chapter 'A Surgeons Life' is the account of Sacks' time spent with a surgeon and amateur pilot Dr. Carl Bennett (pseudonym). The case study highlights the problems faced by the surgeon because of his Tourette's, but also considers the condition as indispensable part of his character. This ambivalence is seen when Bennett is displaying a tic of compulsively touching a lamp. Sacks questions as to why he sits next to it if it disturbs him so, to which Bennett answers 'sure it's a disturbance...but it's also stimulation' (p. 83). This introduces an interesting paradox that although Tourettic individuals appear deterministic in their movements, there may be a connection to what Lloyd (2007) describes as a Kantian view of a performative actor whose actions are "independent of the social-political world" (p. 57).

This unique element of Tourette's introduces the question whether there are any 'advantageous' elements of the syndrome as suggested in more philosophical contexts. One focus has been the unique relationship between Tourette's and music. There appears a repeated use of Tourettic terminology for band names and song titles. For example "Tourette" by Nirvana and punk band Pussy Tourette. Sørensen (2005) notes, "Tourette Syndrome has become a trope for the whole post-modern condition." He suggests that the usage of Tourette's in band names and songs expresses a "sub cultural bricolage, a practice where negative or stigmatic labels are embraced, both for their (out-group) shock value and for their (in-group) semiotic value in signaling cool deviance" (pp. 1-2, emphasis in the original). However, could there be a more natural link between Tourette's and music, a more literal reason why the two often collide in popular culture? Is there a Tourettic element to music? John Lethem's book Motherless Brooklyn (2000) depicts the life of a lead character who is a Tourettic detective. At one point he explains, "I don't know whether The Artist Formerly Known as Prince is Tourettic or obsessive-compulsive in his human life, but I know for certain he is deeply so in the life of his work" (Lethem, 1999 as cited in Kravitz, 2003). Real life accounts of an affinity between Tourette's and music have included Sacks' account of Witty Ticcy Ray, a Tourettic jazz pianist who was;

famous for his sudden and wild extemporizations, which would arise from a tic or a compulsive hitting of a drum and would instantly be made the nucleus of a wild and wonderful improvisation, so that the 'sudden intruder' would be turned to a brilliant advantage. (Sacks, 2007, pp. 102-103).

Sacks concluded that, although intrusive, Tourette's syndrome could be used for creativity. Steingo (2008) describes account of this dialectic experience between music and Tourette's, noting how "unexpected impulses seem to have given my playing a particular creative flair" (p. 30). He also introduces the work of Robert Ashley, an avant-garde composer whose 1996 piece "Autonomic writings" were inspired by his own Tourette like impulses. Steingo notes, "Ashley performs his Tourettic voice as his (own) voice. No longer the symptom of a syndrome that intrudes rudely, Ashley is his Tourettic voice" (pp. 30-31, emphasis in the original).

Music is often cited as a more primitive phenomenon, with an energy that transcends the formalities of language but, essentially, is still rule governed. These rules, however, are more intrinsic in nature and it could be posited that they derive from traditions older than formal language, therefore, when creating music, procedural knowledge is essential. Cutietta and Stauffer (2005) note its role in "performing patterns appropriately, sensing the common beat, performing in tune" and explain that all these things help the musician "develop understanding of the unwritten syntax" (p. 127). It could be suggested that the relationship between Tourette's and music is due to difference in the usage of procedural knowledge. Walenski, Mostofsky and Ullman (2007) support this phenomenon through research that cites Tourette's as advantageous in children when rule-governed accessing procedural knowledge. They were much quicker than a control group at forming rule governed past tenses, such as expressing 'walk' in its past tense form 'walk-ed.' The researches asserted that the same neurological processes that create the intense energy of tics also helps the individual access the information more quickly.

The research also suggests that Tourettic impulse may have a relationship with language. Schleifer (2001) discusses the connection between Tourettic tics and poetry. Like music, poetic discourse involves rules and governance, but these are outside of normal language, they have a more mythological and intrinsic base. He likens both poetry and phonic tics to 'primal cries.' One example of Tourettic tics taking a poetic form is recorded in Sacks' 1995 book chapter A Surgeons Life. He refers to Bennett, the surgeon with Tourette's, and his compulsion to voice outloud thoughts running through his mind in a reduced and repeated expression.

Thus, he says, when the weather is nice he may want to be out in the sun getting a tan. This thought will be in the back of his mind while he is seeing his patients in the hospital, and will emerge in sudden, involuntary utterances. "The nurse may say, `Mr. Jones has abdominal pain,' and I'm looking out the window saying, `Tanning rays, tanning rays' " (Sacks, 1995, p. 84).

Here Bennett's expression reflects Heidegger's function of poetic language, which expropriates "world and things into the simple one-fold of their intimacy" (Heidegger, 1971, p. 210). Bennett has removed the personal subjectivity of his thoughts and expressed them in a more pure form of language. However, Bennett also recalls, when referring to some of his more unusual tics, "One cannot always find sense in these words; often it is just the sound that attracts me. Any odd sound, any odd name, may start repeating itself, get me going" (p. 88), thus highlighting the role of sound. Similarly, poetry is, to a degree, based on the sounds within language. The words are often chosen for more than their idiosyncratic meaning but because of the way they sound, producing more mythological associations. Brown and Kushner (2001) refer to a relationship between coprolalia and poetry, noting that cursing relies on innuendo and euphemism and therefore, like poetic words, their force can "exceed(s) their immediate context" (p. 550). Schleifer (2001) suggests "resources of language most starkly apprehensible in the extremity dysfunction of Tourette's Syndrome are a source of much of poetry's power" (p. 568).

Interestingly, a primitive part of the brain charged by emotion, known as the basil ganglia, is the area most referred to in neurological accounts of the syndrome. Tourette's shows that language is, in part, connected to older circuits of the brain and may not be as unique to higher cortical functioning as often assumed. Schleifer (2001, p. 566) notes how this "connection between body and spirit has often been denied", most notably since the Enlightenment. However, accepts the mythological archetypal elements of language. Carl Jung (as cited in Clarke, n.d.) agreed that "poetry is outside of one's range of consciousness" (p. 1). In the 1600's Thomas Browne stated, "We are only that amphibious piece between a corporal and spiritual Essence, that middle form that links those two together" (as cited in Dunn, 1950, p. 140). It could thus be argued that the energy that creates Tourretic tics representative of this spiritual essence, the same essence that motivates poetry and music, stemming from a more primal element of our amphibian brain. However, unlike the arts, Tourettic behaviour is not socially accepted in an increasingly corporal world and is therefore stigmatised and discouraged. At the

very least this allows the questioning of "the very basis of Western Metaphysics" (Steingo, 2001, p. 30) and by highlighting the relationship between poetry, music and Tourette's, we begin to fathom a normality of the existence of less subjective impulses that may influence performativity. Similarly to how Freud suggested art arose from the same psychological mechanisms as Neurosis (as cited in Clarke, n.d.), perhaps poetry and music is the expression of our own Tourettic voices.

## **Implications for Treatment**

The functions of these reports are not to romanticise the dark side of the condition however, but to help create informed choices in terms of treatment. The interaction of Tourettic behaviour with personality and the self highlights certain considerations when choosing medication in an attempt to relieve symptoms. Cohen and Leckmen (1999) explain, "In a strange way, there may also be a loss to humanity, since the biological vulnerability may also have an adaptive value" (p. 19) and go on to describe these values as energy, humour and a general zest for life. Side effects of medication can cause weight gain, increase lethargic behaviour and sleepiness and may cause cognitive blunting (Hendren, 2002); therefore attempting to reduce the tics may compromise this energy. A further issue with medication is that within child psychiatry, the choice to medicate is often externally made. Bvmedication, the child is being adversely made to feel like there is an abnormal aspect of their personality that needs to be expelled. Burd et al., (as cited in Stern, Blair & Peterson, 2007, p. 10) claim that up to 40% of cases go on to be symptom free in adulthood, yet despite this, because of the attached stigma, the syndrome may still affect individuals in measurable ways other than symptom severity. For example, Meyers (as cited in Hendren, 2002) reported a population of 114 individuals with Tourette's as having a four times higher rate of unemployment in adulthood and, essentially, who were employed underemployed in jobs below trained skill, indicative of a lasting discrimination.

Medication also points to an entirely internal etiology of the syndrome, removing any focus on external factors. Even more, humanistic research has shown ignorance of the more complex personality element. For example, O'Quinn and Thompson (1980) presented an article that explores research conducted with five young people diagnosed with Tourette's disorder, assessing related language, speech and learning deficits. The article was described as an "extended" view and although researchers noted the social educational problems experienced; the cause of dysfunction was still largely attributed to neurobiological actions. The researchers also noted that teachers should be briefed on the disruption that those with Tourette's might cause and that flexibility in teaching style may need to be adopted. However, these problems still viewed as mainly consequences of the individual's condition. More recent studies have begun to show how symptoms of Tourette's can be made worse through external social factors that disrupt the notion of an 'internal disease.' In 1995 Silva, Munoz, Barickman and Friedhoff noted that "Tourettes symptomatology fluctuates secondary to environmental factors" (p. 305) and that anxiety producing events, such as starting a new school, increased Tourettic tics. Lin et al. (2007) noted that depression was a predictor of tic severity importantly, this depression was predicted by psychosocial factors. Compared to the control group those who suffered from Tourettic and/or obsessive-compulsive symptoms were more likely to suffer with depression. Although not formally stated, both these studies could be used in support for a link between stigma and symptom severity. Miller and Kaiser (2002) recognize the core feature of stigma to be the devalued social identity, which in turn leads to an array of stressors.

The clinical implication of these reports is discussed by Silva et al., (1995), "The potential effect of environment on symptomatology may lead the physician to consider that temporary increase in tics may respond more appropriately to a period of acclimation to the environment than to an increase in medication dose" (p. 312). However, this view is still considered secondary in mainstream psychiatry. Gilbert (2006), although noting that the presence of tics is "not an indication for medical treatment" (p. 639), suggests symptom-suppressing medication should be reserved for cases where there is "a significant social impairment, function impairment, pain or class room disruption." Although perhaps justifiable for relieving painful tics, there is an argument that the side effects of medication are not worth risking when the discomfort stems because behavior disrupts social normality.

However, there have been some recent advancements in clinical practice that have begun to concentrate on environmental factors as well as explore non drug based therapy. Research has mainly focused around children within a school environment, as Holtz & Tessman (2007) explain, many of the social adjustment problems suffered by individuals with Tourette's 'have their roots in negative childhood experiences in the classroom' (p. 531).

In 2007, Turton and Rayner showed how evidence supporting an existential form of clinical practice could prevent the need for medication. They developed strategies to work with a school child suffering with Tourette's, hypothesizing that reported misbehavior was a direct result of a hostile environment. present because stigmatization in the classroom. They conducted behavioral therapy not only with the child, but also with his peers and teachers, and set up a peer support group with both a decline in tic severity and challenging behavior as a result. Particular classroom considerations may also be important, involving practical interventions such as using a computer or recorder if handwriting is problematic, extra time in exams, scheduled breaks as well as managing peer reactions. Showing media and books that portray individuals with Tourette's in a positive light within the educational environment has also shown positive effects (Chaturvedi, Gartin & Murdick, 2011). In 2002, Woods presented an educational video about Tourette's to one group of their sample prior to showing a video of an actor/actress portraying Tourette's symptoms. This group rated more positive attitudes regarding the actor/actress than a second group, who had not seen the prior educational video. Holtz & Tessman (2007) reported similar finding, noting that an intervention video can lead to 'greater knowledge, positive attitudes, and behavioural intentions' (p. 531).

Another recent area of research has been Comprehensive Behavioural Interventions for tics (CBIT). Woods, Piacentini & Walkup (2010) explain, 'the brain is very responsive to environmental cues' and that 'over time, with repeated cueing, the brain can be trained to

respond in predictable and consistent ways' (p. 20). This is something referred to as neuroplasticity, and knowledge about the phenomenon is key to CBIT. CBIT works in three stages, the first is looking at what environmental factors make tics worse and the second stage is challenging such factors (for example, through the classroom implications mentioned above). The third stage is direct therapy with the individual and consists of Habit Reversal Therapy, which has received the most empirical support of the behavioural interventions for Tourette's (Woods, Conelea & Himle, 2010 p. 519). Habit Reversal Therapy involves creating awareness and selfmonitoring of tics and then encourages the individual to create a 'competing response' when the premonitory urge to tic is felt, for example through a voluntary behaviour that is 'physically incompatible' with (Piacentini Woods, Scahill, et al., 2010, p. 4). In 2010, Piacentini, Woods, Scahill, et al., presented a controlled trial using Habit Reversal Therapy in a large sample of children and adolescents. Using the Yale Global Tic Severity Scale, they found that individuals being given behavioural therapy over a 10-week period showed a significant reduction in tics to the controls. Importantly, 62.5% continued to show a reduction of tics after a six-month period, showing potential long-term benefits after treatment has ended. However, it appears that support has yet to be disseminated to those in need of treatment (Woods, Conelea & Himle, 2010) and that behavioural therapies are far from a first line treatment option. It is argued that it is not only the recently supported efficacy that makes behavioural therapy a viable treatment option, but also the ethical and philosophical implications. Looking for environmental cues for tics helps prevent an internalisation of symptoms, whilst peer education helps 'normalise' tics. Importantly, these clinical findings support the socially constructed ideology of mental health. By actively removing the stigma attached to the label, the condition itself is decreased. These results also have implications for cases with co-morbid symptoms. Cohen et al., (2008) found anxiety and depression in children with Tourette's syndrome was "markedly influenced by psychosocial factors, extending beyond the influence of ADHD and OCD" (p. 299). By tackling environmental issues, this may then break what Harris (1996) calls the 'cyclical effect' (as cited in Turton & Rayner, 2007, p.

346), where negative experience is created through a hostile environment, and the environment becomes more hostile due to this increase in negative experience. However, unfortunately in society today, stigma will still prevail, and therefore treatment for Tourette's still revolves heavily around tic reduction. One huge advantage of behavioural therapy is that it is free from the side effects that often come hand in hand with medication.

#### What now?

These studies indicate positive advancements in the treatment of Tourette's through consideration of social construction in relation to the syndrome. They begin to shift the focus away from internal etiology, thus reducing attached shame and stigma. However, personal accounts of living with the syndrome feelings point to of exclusion. Foucauldian analysis of the history of constructed reason and power can help us understand the assumptions that infiltrate our society and, through deconstruction, we can begin to address and challenge such predisposed thought. Tourettic energy is no longer alien, but conflated, albeit complexly, with the individual self, and is shown to be comparable to more mutual human experience, such as music and poetry. However, the research into Tourette's has just began, and a greater extent of further analysis and research is required to improve understanding into a condition which, as Sacks (1995) notes, is almost as complicated as human nature itself. Crucially, however, it is clear that an existential approach is necessary in a syndrome so bound in philosophical significance.

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