Virtual autism: Too much screen time result in autism symptoms

I will examine how post-2010 debate in autism studies took place and the appearance of the notion of virtual autism in autism studies and the work of Sherry Turkle.

To sum up this piece, with the widening of the ASD as defined in the DSM V, there is now a grey area of the population which displays autistic behaviour. Research shows it is not clear whether the population's symptoms constitute a new kind of autism; virtual autism, caused by early infantile screen exposure (EISE), or if this population is autistic in the classic sense of the term (classic autism).

Note that works evoked in this part are not necessarily part of a neuromajority-centric discourse. However, these works can be considered as part of it in as much as they see autistic traits as unfavourable.

Let's start by defining what is virtual autism. M. Zamfir, who coined the term, points out that "the difference between classical and virtual autism lies in the fact that in the first case we are talking about biological neurological underdevelopment, and in the second case about the destruction of neurodevelopment caused by the impact of virtual reality¹.

As ASD was introduced in the DSM in the late 1980's², boundaries between diagnostic categories became so blurred that they are somewhat arbitrary.

Sherry Turkle, a psychology lecturer at the MIT, conducted extensive research on the effects of technology on our behaviour. In this essay, we will focus on her work in her 2015 book, Reclaiming Conversation.

Although her books do not make explicit reference to virtual autism, her books echo the symptoms observed in studies on virtual autism. However, during a talk at Google, she suggested that misdiagnosis of ASD occurs and that maybe those individuals need a conversation cure.

Note also that Turkle's work does not focus exclusively on early childhood (before six-years-old) as does virtual autism research, but Turkle instead focuses on teenagers.

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² Neurotribes p.436.

The main message of Turkle's work is that too much time spent on connected devices leads to less empathy, love, focus and ability for introspection.

Digital communication does not provide the vulnerability and real-time responsiveness required for essential social abilities to manifest.

She cites numerous studies that demonstrate that cell phones diminish conversations' topical depth, length, and corresponding feelings of closeness, empathy, and trust.

"These days, the first generation of children that grew up with smartphones is about to or has recently graduated from college. Intelligent and creative, they are at the beginning of their careers, but employers report that they come to work with unexpected phobias and anxieties". Sherry turkle

"Torn between our desire to express an authentic self and the pressure to show our best selves online, it is not surprising that frequent use of social media leads to feeling depression or social anxiety" Sherry Turkle.

She also cites studies that observed a 40% drop in all markers of empathy in all college students. Also, she mentions that 89% of American took out a phone during their last conversation, while 82% of them think it deteriorated their discussion.

Turkle points out that 'connected-device detox therapies' can allow empathy to rise again in 5 days. This echoes the reversibility evoked in virtual autism studies.

Turkle notes a shift in what constitutes socially normative behaviour "interrupting a conversation to read a few paragraphs is not socially acceptable, so why do we authorise the same kind of behaviour with our phones?". She says the reason might be because of the addictive design of phones that books do not have.

In her book, she also distinguishes solitude and loneliness. For her, solitude is the capacity to be with yourself, gain insight into yourself through introspection and know yourself better. In contrast, loneliness is the painfully-lived experience of being alone, with no positive outcome from this aloneness. She cites studies where participants preferred to administer themselves electroshock rather than do nothing; or studies where people checked their phones during the few seconds of waiting time occurring at a stop sign.

She also emphasis introspection as a condition to develop empathy:

"If you do not teach your child to be alone, they would only know how to be lonely. Teach them to be content with yourself. When you see people you project onto them what you need them to be rather than who they really are, you are not engaging in a real conversation because you do not listen to the other's needs and there is no empathy involved."

She also warns against empathy-pretending toys and devices as they do not provide the benefit of human conversation.

However, it is essential to note that Sherry Turkle's work does not imply that autistics do not have empathy. Actually, autism empathy is a lively field of research that is not yet fully explored.

Simon Baron Cohen³ distinguished two kinds of empathy, the affective and the cognitive. Cognitive empathy is the ability to identify and understand another's mental state or perspective, whereas affective empathy is the ability to respond with an appropriate emotion to another's mental state. His research suggests that autistics lack cognitive empathy.

However, this view has been criticised as empathy test are confusing and stress triggering for autistics, thus constituting a bias for Baron Cohen's result⁴⁵⁶. Notably, some studies emphasis that hypersensitivity among autistics could impair the empathy test results⁷

³ Baron-Cohen, S. & Wheelwright, S. (2004). The empathy quotient: an investigation of adults with Asperger syndrome or high functioning autism and normal sex differences. Journal of Autism and Developmental Disorders, 34, 163-175

⁴ https://issuu.com/lifeunlimited1/docs/altogether autism journal spring 2 page 8-9

⁵ https://www.altogetherautism.org.nz/a-shift-in-perspective-empathy-and-autism/

⁶ Goodall, E. (2013). Understanding and facilitating the achievement of autistic potential (2ndEdition).

⁷ Smith, a. (2009). Emotional empathy in autism spectrum conditions: weak, intact or heightened? Journal of Autism Developmental Disorder, 39, 1747-1748

Other studies attempt to show that the impact of technologies on sociability differed according to the level of social isolation of the subject. In case of social isolation, technologies could enable more friendliness, interpersonal depth and empathy.⁸

Other studies support that the hyper development of some zones of the brain due to screen time could impair the development of different zones linked to social intelligence.⁹

Another study shows support for the existence of virtual autism as screen time reduction from 4 hours a day to none led to a change in autism diagnosis among children below six years old. However, the conclusion points at the fact that the experiment needs to be repeated and randomised. The study also compiles similar results from other experiments. 11

⁸ https://journals-sagepub-com.ezproxy.kingston.ac.uk/doi/pdf/10.1177/1745691617746509

⁹ Heffler, K.F. and Oestreicher, L.M. Causation model of autism: Audiovisual brain specialization in infancy competes with social brain networks. Medical hypotheses, 2015.

¹⁰ https://www.sciencedirect.com/science/article/abs/pii/S2211949319300109

¹¹ https://drdouglas.org/wp-content/uploads/2019/03/domoff.2017.ppmc .pdf

Now that we have examined modern research on virtual autism, we can see how it clashes with revendication in the Neurodiversity Movement (NM).

First, the problem of self-diagnosis arises. David Molloy note¹² that ambivalence towards the medical profession and argument about the preventive cost of professional diagnosis is common in mental health communities. Molloy further notes that "the seductive image of the 'aspie' ... might attract young people who see it as a convincing explanation for their difficulties in socialising"¹³. This clashes with the aspiration for self-advocacy of the NM.

Furthermore, screen time detoxes evoked by Turkle and in virtual autism studies contravene to the NM opposition to treatments and therapies that aim at making a neurodiverse person look more the neuromajority.

¹² https://designerscaffolding.com/2019/07/15/sensory-overload-part-ii-amplified-recognition/

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Future perspectives

Given how recent research on virtual autism is, it is hard to imagine what the reaction of the neurodiversity movement to Turkles's work and Virtual Autism research will be. Indeed, we are in a situation where some children become virtual autistics when at the same time society accepts the idea that disease has to be seen as differences and not disabilities.

In such a situation finding a legitimate reason to prevent virtual autism while being consistent with the building of an autism-friendly society seems rather tricky, and it is more a philosophical matter rather than a media study one. However, more research on the subject should help us.