
Sex Toys and Neurodiversity

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Abstract

Sex is a uniquely individual matter. Kinks and desires, pleasure and satisfaction are embodied and situated experiences. However, the design of commercial sex toys and the research about them has notoriously neglected the needs and desires of disabled people – and more so those with invisible disabilities. Neurodiverse people perceive the world differently from neurotypical people, which means that they perceive sex differently as well. Hence, there exist previously untapped opportunities for sex toy design catering to neurodiverse populations. In this workshop paper, we make a larger argument of how research into sex toys and neurodiversity can further our understanding of technological experience. We aim to develop research questions to help designers grapple with this important yet neglected design space in Human-Computer Interaction.

Author Keywords

Sex Toys; Playfulness; Neurodiversity; Accessibility

ACM Classification Keywords

H.5.m [Information interfaces and presentation (e.g., HCI)]:
Miscellaneous

Neurodiversity

The concept of neurodiversity has been coined by Singer at the end of the last century [14] to describe people with

a range of cognitive conditions such as ADHD, autism, dyslexia, dyspraxia, and so on. It proposes an understanding of these conditions as variances in people's brains instead of a medicalised 'disorder'. It acknowledges both situated disadvantages and advantages which might arise from neurodiversity. Additionally, other research has suggested that neurodiverse people have different sensory perceptions of the world around them and different strategies to engage with them (see, e.g., [6] for ADHD or [2] for Autism).

Within the field of Human-Computer Interaction (HCI), Dalton has discussed neurodiversity as a concept that calls for a range of different research topics relevant to the field [1]. Among them are:

1. Methodological research appropriate to address neurodiverse populations, especially in participatory research
2. Strategic inclusion of neurodiverse designers
3. Designing for neurodiverse goals (instead of mitigating perceived deficits), which includes going beyond traditionally assistive technologies

As neurodiverse populations are currently excluded from many aspects of neurotypically dominated societies they are effectively perceived as disabled and subsequently non-sexual beings [7]. Essentially, the discourse around sex systemically excludes disabled people, othering them as abnormal¹. Even within sexuality discourses in HCI, disability is absent (e.g., [8]). If, as a community, we aim to look at sexual well-being for (neuro)diverse populations, it is essential to not exclude them from our work.

¹For discussion on othering, and the construction of abnormality, see [3] and [5], but encourage interested readers to follow up on those by themselves or through our references

Sex Toys

There is some work available that includes disabled people, specifically those with motor-impairments, in the design of sex toys [12]. Morales et al., acknowledge disabled people as potentially sexual beings, but still have a restricted understanding of accessibility as an ergonomic issue. Pleasure is not in the focus of their design, it is a by-product. In that regard, similar stories exist for commercially available sex toys. For example, the Tantus Rumble² may be accessible to some, e.g. people with arthritis, due to its ergonomic design but at the cost of losing some of its potentially pleasurable qualities³. Focusing on ergonomics alone does not necessarily make sex toys accessible to neurodiverse populations either. They might seek different kinds of sensory stimulation than are provided by classical toys [10].

We conceptualise sex toys here as objects providing sexual pleasure to the people who appropriate them in solitary or shared sexual activities. This definition renders sex toys inherently playful. Instead of tools for the coital imperative [11], we understand them as playthings [13] for procedural pleasure. Their purpose is not so much to provide physical, ergonomic access to sex, but a playful sense of sexual well-being. Designing sex toys for neurodiverse people then means going beyond an understanding of assistive, corporeal technologies. It opens up new perspectives on technologies for neurodiverse populations.

Open Questions

The subject 'Sex Toys and Neurodiversity' raises several potential research and design questions. First, how does the discourse on disability and sex, sex toys and sexual well-being shaped and what are its blind spots? Address-

²<https://www.tantusinc.com/pages/tantus-rumble>

³as described, for example, in this review <https://www.ohjoysextoy.com/rumble/> [graphic]

ing this question allows us a more holistic understanding of the political, discursive and design space. Second, who is catered to by these concepts and can they be appropriated for neurodiverse experiences? Investigating sex toys for neurodiverse population does not only allow us to interrogate a range of needs and desires beyond the kind of pleasure currently catered to. It also allows us to rethink how to design for pleasure in the first place. Third, addressing sexual well-being beyond neurotypical desires requires investigating the situated experiences of neurodiverse audiences: Are they even different? If so, in what way?

This raises new questions on suited design processes, collaborations, and artefacts. How do we design for this neurodiverse pleasure space? How can we avoid falling into the trap of othering⁴? One strategy might be to include neurodiverse people in intimate design.

Another question is what kind of technological artefacts might result from participatory design with neurodiverse audiences. Exploring sexuality as playful process in this way can help criticise dominant ideas around sex toys. Maybe they can even add a playful way to facilitate consent and continuous checking in⁵.

We plan to conduct preliminary steps in this direction by including adults with ADHD in participatory design research about sex toys. For people with ADHD (as an example for a neurodiverse condition), every activity is inherently playful as they – at least mentally – dip in and out of it and make novel connections between previously unconnected topics. We see this as an opportunity to bring the playfulness of

⁴As at least two authors of this paper identify as neurodiverse themselves; we see one starting point in including neurodiverse researchers.

⁵As consent might occasionally be difficult to give for neurodiverse populations due to different modes of communication or simply a lack of adequate sexual education [9].

adults with ADHD into sex as an individual or shared activity. Their sensory experiences during sex might be different and in sharing them with others either directly or indirectly through artefacts might expand the notion of what a sex toy can ultimately be. In our upcoming project, we will conduct a series of three co-design sessions. In the first we aim at getting to know each other, discuss pleasurable experiences in sexual activities and review existing sex toys in a design critique. During the second, we immerse ourselves in a space of material and technological opportunities for design. In a third, we sketch potential sex toys and create low-fidelity prototypes as tickets to talk about the design space of sex toys for and from adults with ADHD. One expected outcome of our research are initial design suggestions for how sex toys can be designed to be pleasurable for neurodiverse populations.

Conclusion

Designing sex toys with and for neurodiverse populations allows us to address Dalton's points above. We can develop methods for participatory research with neurodiverse populations, include their creative potential in co-design and design for an inherently playful activity.

Understanding neurodiverse people as sexual beings allows us to fully embrace the concept of neurodiversity as a modifier of sexual perceptiveness. We deem it promising to address both in terms of differences and similarities to established notions of sexual pleasure. Hence, in the tradition of social justice research in HCI [4], this research can lead to further consequences on how society at large conceptualises sex toys and neurodiversity. Attending to sex toys and designing them specifically for neurodiverse populations then understands disabled sexuality as yet another experience worthwhile catering to through playful design.

REFERENCES

1. Nicholas Sheep Dalton. 2013. Neurodiversity & HCI. In *CHI '13 Extended Abstracts on Human Factors in Computing Systems (CHI EA '13)*. ACM, New York, NY, USA, 2295–2304. DOI : <http://dx.doi.org/10.1145/2468356.2468752>
2. Hanne De Jaegher. 2013. Embodiment and sense-making in autism. *Frontiers in Integrative Neuroscience* 7 (2013), 15. DOI : <http://dx.doi.org/10.3389/fnint.2013.00015>
3. Fred Dervin. 2015. Discourses of Othering. In *The International Encyclopedia of Language and Social Interaction*. John Wiley & Sons, Inc., Hoboken, NJ, USA. DOI : <http://dx.doi.org/10.1002/9781118611463.wbie1si027>
4. Lynn Dombrowski, Ellie Harmon, and Sarah Fox. 2016. Social Justice-Oriented Interaction Design: Outlining Key Design Strategies and Commitments. In *Proceedings of the 2016 ACM Conference on Designing Interactive Systems (DIS '16)*. ACM, New York, NY, USA, 656–671. DOI : <http://dx.doi.org/10.1145/2901790.2901861>
5. Michel Foucault. 2007. *Abnormal: lectures at the Collège de France, 1974-1975*. Vol. 2. Picador, New York, NY, USA.
6. Ahmad Ghanizadeh. 2011. Sensory processing problems in children with ADHD, a systematic review. *Psychiatry investigation* 8, 2 (2011), 89–94.
7. Godfrey Kangaude. 2014. Disability, the stigma of asexuality and sexual health: A sexual rights perspective. *Review of Disability Studies: An International Journal* 5, 4 (2014).
8. Gopinaath Kannabiran, Jeffrey Bardzell, and Shaowen Bardzell. 2011. How HCI Talks About Sexuality: Discursive Strategies, Blind Spots, and Opportunities for Future Research. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '11)*. ACM, New York, NY, USA, 695–704. DOI : <http://dx.doi.org/10.1145/1978942.1979043>
9. Robin Mackenzie and John Watts. 2013. Sexual health, neurodiversity and capacity to consent to sex. *Tizard Learning Disability Review* 18, 2 (2013), 88–98. DOI : <http://dx.doi.org/10.1108/13595471311315119>
10. Robbin Mandell. 2016. Sexuality, Relationships, and Neurodiversity. (2016). <http://readysexyable.com/ready/2016/07/21/sexuality-relationships-and-neurodiversity/>
11. Kathryn McPhillips, Virginia Braun, and Nicola Gavey. 2001. Defining (Hetero)Sex: How imperative is the “coital imperative”? *Women's Studies International Forum* 24, 2 (2001), 229 – 240. DOI : [http://dx.doi.org/https://doi.org/10.1016/S0277-5395\(01\)00160-1](http://dx.doi.org/https://doi.org/10.1016/S0277-5395(01)00160-1)
12. Ernesto Morales, Véronique Gauthier, Geoffrey Edwards, Frédérique Courtois, Alicia Lamontagne, and Antoine Guérette. 2017. Co-designing Sex Toys for Adults with Motor Disabilities. *Sexuality and Disability* (17 Oct 2017). DOI : <http://dx.doi.org/10.1007/s11195-017-9506-8>
13. Miguel Sicart. 2014. *Play matters*. MIT Press, Cambridge, MA, USA.
14. Judy Singer. 1999. Why can't you be normal for once in your life? From a problem with no name to the emergence of a new category of difference. In *Disability Discourse*. Open University Press, Maidenhead, UK, 59–70.