

PERSPECTIVES: Digital Influences on Sexual Discourse in Disabled Populations

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Abstract

The industry of sex aids for disabled people has been growing and becoming more nuanced, both with workers who facilitate manual sex aid and within the growing market of automated sex aids. Agency in sexual expression is often seen as an able-bodied activity and automated sex aids have yet to be considered with due rigor for general populations, including disabled populations. Here, we employ the grounded methodological choice of using digitally mediated discourses by disabled people, service providers, and activists to guide our inquiry into conversations that we, as members of the scientific community have generally neglected. We report on the financial, legal, and health implications of emerging digital technology driven changes in the landscape of sexual discourse for disabled populations. We then call for further investigation into this neglected but vitally important topic.

Keywords

Automated sex aids; sexuality and disability; digital activism; sexual agency; sexual health; scientific research

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Introduction

Sexual function is held as a high priority among disabled people. It was, for example, the first priority for those with paraplegia and the second priority for those with quadriplegia, according to a survey of 681 participants asked about priorities for wellness in *Targeting Recovery: Priorities of the Spinal Cord-Injured Population* (Anderson, 2004). The American Occupational Therapy Association also acknowledges sex as an activity of daily living (ADL) for adults, called sexuality a “*core characteristic and formative factor for human beings*” (American Occupational Therapy Association). In contrast, sexual health in disabled populations, is by and large, ignored, not considered, or actively suppressed by the able bodied people that populate the legislative, rehabilitative, and caregiving roles that shape standards of living for disabled individuals (Hess and Hough 2012; McAlonan 1996). Presently, however, new technological forces are reshaping this reality. Digital communication is increasingly revealing and broadcasting the sexual experiences of disabled people.

The present discussion of the role of sex aids in contributing to the sexual agency of disabled populations must first be framed against the considerable reluctance to explore these issues displayed by both the popular press and scientific literature. The social taboo surrounding disability and sexuality produces an atmosphere of ignorance and suppression that extends to associated issues. Among the latter are the epidemic levels of sexual assault and abuse perpetrated by those who are supported to support disabled people in service roles. According to the Washington Coalition of Sexual Assault Programs, 83% of women with disabilities will be sexually assaulted in their lifetime. Typically, those entrusted with caregiving roles abuse the disabled person's

status and use it as leverage against them through manipulation of their access to medical equipment, mobility aids, finances, medications, disability services, access to interpersonal support networks, and communication systems, for example. Sexual agency among disabled people is further diminished by the few legal and financially accessible options for sexual expression outside of interpersonal relations, especially for persons with mobility needs. These problems occurring at the intersection of sex and disability have become more visible to the general public, due largely to the growing use of digital communication technologies by stakeholders to build community amongst themselves and produce public, activist interventions in informal and formal disability discourse. It is indeed through these channels that the present discussion of sex aids came to our attention. We believe it to be a topic we need to take seriously and engage in, both in our role as scientific researchers and in challenging a taboo we believe conceals an important concern.

Our interest lies in contextualizing the use of sex aids within public health, activist, and international discourses, with an eye to how emerging technologies are changing the landscape. The broadening of the fully and semi-automated sex aid industry, ongoing work by practitioners and service providers, recent courses and certifications for human sexual assistants, widely available access to digital communication networks, as well as recent social justice movements advocating for attention to and improvement of standards of living for disabled people domestically and abroad (not only for, but by disabled people) lend to the structural empowerment of a disabled person's ability to manage their own sexual expression and health. In this discussion paper, we will focus on those with physical, rather than mental, impairments.

This is not to imply that the intersection of these impairments do not exist nor that the methods and aids discussed within the text cannot be applied to those individuals. Instead, we will discuss industries that attend to sex aids through some sort of investment in their use, employment, production, and sale, with a focus on the discourses around physical and social access to sexual expression and to sex aid by those with non-normative mobility needs.

Methodology

The impetus for this analysis lies in the quotidian and critical discussions of sex aid employment that occur in digital spaces but have not been similarly attended to in our respective scientific disciplines. As such, we engage with discussions about sex aids on interpersonal and industry levels – specifically, that of sex assistance, including aid provided by sex workers and sex assistants as specified legally by region, and automated sex aids within digital communities. We reviewed articles from Lesbian, Gay, Bisexual, Transgender, Questioning, and other marginalized sexual and gender identity groups (LGBTQ+) outlets, critical discussions by clinicians about disability-informed sexual education and services, and the work of groups comprised of providers and clients around legality and industry, such as sale of items, production of items, and service provision. Our goal in sourcing this discussion within these communities was to call the attention of scientific and interdisciplinary researchers to a continuing and important dialogue about sex aids, while simultaneously introducing key terms, such as manual and automated sex aids/assistance, that provide a framework for discussing the industries that work in this specific intersection of activity.

We made choices about how to use and include sources. Informal conversations with disabled people who have employed sex aids in some way, as well as article comment sections, forums, and other personal stories posted online, were used to guide this work. We understand that including transcriptions of these contributions within this text is problematic. In realizing the sensitive nature of these discussions, we drew insights from these conversations to guide further research and to locate more explicitly public discussions to include as citations. Secondly, we were concerned with the nature of 'public'; while recognizing that citing claims and conversations is a necessary component in producing rigorous research, understanding what is or is not a public contribution to this ongoing conversation was a high priority for choosing the texts below. Thus, we have chosen published articles both within and outside of the academy. This includes texts produced from businesses and political associations. However, and in order to not privilege the contributions of texts produced in more formal settings, we have also cited postings shared for activist reasons. Activism is not necessarily a public activity, but certain activist work is produced for general, that is public, audiences. Lastly, in our focus on sex aids, we position our discussion at the nexus of disability, industry, sex, and health discourses in order to produce a text that attends to the interests of multiple stakeholders. These include clinicians who serve as a formal resource for access to accessible technologies for disabled populations; service providers who practice in emergent and changing legal fields; and researchers who must consider a diverse array of discourses when assessing and stating their intended interventions. In drawing attention not only to industry movements but also to

quotidian, digital discourses that shape and respond to industry movements, we wish to situate the above parties as integral participants in these discussions.

Manual Sex Aid

For our purpose, manual sex aid will refer to sex assisted by non-mechanical means, specifically human sex assistance, and this section will include specific examples of manual aid and available resources for disabled people. Clinicians, who are available to address and improve upon the sexual health of disabled people include sexual medicine physicians or psychologists (MD), occupational therapists (OT), physiotherapists (PT), nurses (RN), social workers (SW), sex rehabilitation psychologists, recreation therapists, and peer counselors (Naphtali, MacHattie, Elliott, & Kraussioukov, 2009). However, at least within the US, the institutionalization of attention to the sexual needs of disabled patients is a fledgling practice in medical and therapeutic fields, which we discuss later in this paper. Sex workers are a more widely accessible service provider for this function. Simultaneously, sex work is criminalized in many nations and regions (Amnesty International).

Location-specific law shapes both the operation and resulting discussions of service providers involved in industries that pertain to the sexual expression of disabled populations. In New South Wales, Australia where sex work has been decriminalized since 1979, an organization called Touching Base has been created with the goal of connecting sex workers and disabled clients. The group's ideology holds that access to sexual expression through relationships and sex, is an intrinsic right that should not be infringed upon by means of systematic or personal restrictions; not only this, but they propose that personal and systemic supports should be readily available for practicing

this right (Touching Base). Their website seeks to be a resource for disabled people to find support organizations, to help sex workers find training programs to work with clients with varying sets of accessibility needs, and also to raise public awareness around the current environment of disabled people's access to sex industry services, with referral systems for both clients and sexual service providers. In the US, and in many other countries where sex work is criminalized, organizing among service providers is entrenched in this context, and so understanding of manual sex aid is more veiled. Digital publishing platforms increasingly mean that it is nonetheless available.

Documentation and stories of sex work employment are by no means uncommon, even in countries where sex work is criminalized. In *Out* magazine, a popular publication for LGBTQ+ centric media, Andrew Gurza, founder and co-director of Deliciously Disabled Consulting and the Deliciously Disabled podcast, wrote an article about his experience hiring a sex worker (Gurza, 2016). In his article, Gurza, who has cerebral palsy, discusses the invisibility of disabled people, physically as well as sexually, in mainstream LGBTQ+ communities. McRuer discusses the intersections of queer identity and disability in their article, *As Good as It Gets: Queer Theory and Critical Disability* (2003), speaking of the added invisibility in normative space experienced by those whose queer identity intersects with their disability. McRuer states that heteronormativity and ableism are often not thought of as an issue as they form a hegemonic basis of existence and need. Being able-bodied is seen, even more so than heterosexuality, as a non-identity, a default state of existence (McRuer, 2003). The intersectional needs of a disabled individual's sexuality have been a recent topic of interest in occupational therapy as well, according to the American Occupational

Therapy Association (American Occupational Therapy Association). Sexuality is an activity of daily living (ADL) for adults, and they suggest that occupational therapists must seek a holistic approach to addressing each person's whole identity, specifically speaking of disabled LGBTQ+ patients (American Occupational Therapy Association). The fact sheet where this information was found on their website was added in 2013 and stands in stark contrast to reports occurring within just the last 20 years of physical therapists ignoring their patients' sexual needs, not to mention sexual and gender identities, or regarding sexual expression as a "luxury" (Anderson 2004).

Sex assistants, focusing upon disabled populations, are legal in some countries where sex work is still criminalized, with said countries also differentiating between the two in legislation. In some European countries sexual assistance has been legalized to the point of institutionalization, with training courses in the field being available and the occupation itself having government oversight. For example, in Spain, the 2006 UN Convention on the Rights of Persons with Disabilities and the law on sexual and reproductive health by Former Prime Minister Zapatero in 2010, produced methods and methodologies for professionals to be educated in and create legislation regarding the sexual rights of disabled people (Abbadessa 2014). However, the economic crisis in Spain halted these efforts, with implementation resuming some three years later in March 2014, in a sexual assistance course for physiotherapists and social workers (Abbadessa 2014). In 2015, the Association Pour la Promotion de l'Accompagnement Sexuel (APPAS) began courses for sexual assistants in March involving a sex therapist, a lawyer, a specialist in massage, and a person with a disability as facilitators (Credi, 2015). In Italy, Max Ulivieri, creator of the website *lovegiver.it* and editor of the book,

LoveAbility: L'assistenza sessuale per le persone con disabilità, collected stories of disabled people's issues when seeking sex as part of an initiative to bring the professionalization of sex assistants to Italy (Ulivieri 2016). Abbadessa, in their article for *West*, an online magazine focused on welfare policies in Europe, reports that regulating sex assistance as a profession has begun in Switzerland, with certifications, monthly meetings, and refresher courses. In Denmark, Sweden, Holland, Belgium and Germany, sexual assistance services for disabled people exists in varying degrees, with Belgium tolerating but not legislating the practice (Abbadessa, 2014).

This section has provided a brief overview of legal, interpersonal, and industry discourses around networks of people, and specifically disabled clients and the practitioners and providers who serve as resources for assisting sexual expression in US and European contexts. This overview is meant to draw attention to discursive intensities and movements that can provide a broader context for the dialogic practices of framing stakeholders, interested parties and opportunities for inquiry when discussing industrial engagements in disability-centered sexual expression. In the following section, we will discuss the mechanical market for attending to sexual expression for disabled populations.

The Rise of Automated Sex Aids

Automated sex aids will refer to any tools used for sex or sex acts performed using tools, including the burgeoning area of sex robots (Sharkey et al., 2017). This section is largely informed by Naphtali, MacHattie, Elliott, & Kraussioukov's manual, *PleasureABLE: Sexual Device Manual For Persons with Disabilities* and the University of Illinois at Urbana-Champaign's Division of Resources & Educational Services

webpage on “sexability” resources (Naphtali, MacHattie, Elliott, & Kraussioukov, 2009; Sexuality Resources). Naphtaliet et al.’s manual includes information on items which serve as prostheses or orthotics for sexual expression, divided by headings concerning which physical accessibility needs one has and a corresponding item to use for the desired function, such as harnesses and positioning furniture (Naphtali, MacHattie, Elliott, & Kraussioukov, 2009). Sections include information about lubricants, positioning, ability-specific items (including details on price, cleaning, use, and other item-specific considerations for use), including items for hands-free use (Naphtali, MacHattie, Elliott, & Kraussioukov, 2009). Launched in 2011, Disability Horizons magazine, the UK’s fastest-growing disability lifestyle publication, published an article in 2014 about sex toys. It features more recently produced sex items, producers of specific types of items, such as retailers of sex furniture and support equipment, such as Kinkster’s Paradise, a business that will adapt toys and furniture for a client’s accessibility needs, sex shops in the UK, referral websites for sex workers, and audio erotica for people with visual impairments (Disability Horizons, 2014). In the US, Good Vibrations, a popular sex shop in San Francisco, similarly has a section for accessible sex aids and literature on their website (Good Vibrations).

Automated sex aids would, at an initial inspection, seem to represent an opportunity to simplify or entirely ameliorate many complications surrounding manual sex aid. Consider, for example, the proliferation of virtual reality (VR) and augmented reality (AR) pornography, and parallel developments the accompanying haptic technology of teledildonics. This combination has the potential to allow pornography actors, a profession legal in many municipalities where manual sex aid is illegal, to

provide sex aid to people with disabilities. Furthermore, such digital tools could allow sex assistant services to be rendered worldwide while originating in countries where the profession is legal. However, in the United States serious questions have already emerged as to whether first amendment protections on the auditory and visual portions of pornography extend to haptics (Lewis, 2018). Moreover, as with many emerging digital sexual technologies, VR is overwhelmingly produced for male viewers, a complication that affects the medium's ability to arouse female viewers (Elsey et al., 2019). Indeed, the male focus of this technology transcends its use in sexuality and permeates every facet of the ecosystem, right down to the design of the consumer headsets themselves (Munafò, Diedrick & Stoffregen, 2019), which are more likely to evoke nausea in women. In the context of the present discussion, such gender effects are symptomatic of a larger fact: commercial ecosystems are developed for narrow groups of consumers. As such, there can be little expectation that automated sex aids, however promising, will be well suited, or even safe, for disabled populations.

The taboo around automated sex indeed includes the potential for dangerous situations. Biesanz's work, *Dildos, Artificial Vaginas, and Phthalates: How Toxic Sex Toys Illustrate a Broader Problem for Consumer Protection* (2007), discusses how taboos around sex have allowed for a market of sex toys to proliferate to a growing audience of consumers without accompanying quality controls or adequate testing of products for sexual play. Biesanz especially expresses concern around sex toys with phthalates (Biesanz, 2007). His text specifically discusses the presence of di(2-ethylhexyl)phthalate (DEHP), a known carcinogen and cause of congenital disabilities when handled at length, especially orally. The presence of DEHP has been legally

addressed in children's toys and water but has been found in sex toys that are available to the public (Biesanz, 2007). A website launched in 2011 *Saferproducts.gov*, hosted and maintained by the U.S. Consumer Product Safety Commission (CPSC), allows consumers to report issues with sex toys; though, the results of those reports are unclear (SaferProducts). A *Scientific American* article takes up the issue of sex toy-related injuries and the lack of CPSC reports on safe use or sex toy specific safety (Nuzzo, 2011). This discussion of sex toy-related injury also has gender related implications. Herbenick et al., in a nationally representational study of women and vibrator use, found that 52.5% of their participants had used vibrators before (Herbenick, D., Reece, M., Sanders, S.A., Dodge, B., Ghassemi, A., & Fortenberry, J.D., 2009). These texts discuss how reports, litigation, and oversight of sex toy composition, use, and sale are sparse and are not formally centralized; however, they also seem to assume a normative, that is able bodied, consumer. There is, therefore, risk to disabled populations implicit in the adoption of automated sex aids, and above and beyond the risk assumed by the general population.

Disability-informed sexual education, especially with informed automated aid use, also presents problematic potentials for the health outcomes of disabled users, even without consideration of hazardous chemical interactions. The lack of disability-specific sexual education available to users of automated aids, whether they be sex workers/assistants, partners, or disabled persons themselves, can lead to scenarios of severe harm to the disabled user, including spasticity, bowel evacuation and ulcers, among other issues. A serious potential risk of uninformed sexual play in users with spinal injuries is autonomic dysreflexia, which can cause a significant rise in blood

pressure that can be fatal and is commonly triggered by ejaculation. Autonomic dysreflexia can occur without any symptoms and uninformed play, especially with a partner, can severely impact a disabled user's health (Hess and Hough, 2012). Hess and Hough suggest that this context of taboo, lack of centralized research and murky legal precedent alludes to a probable field of unrecognized injuries that can only be heightened by the lack of readily-available information on disability-informed play, especially with automated aids. Indeed, the positive fact that rapid advances being made in automated sex aids will allow disabled consumers to expand their sexual agency is accompanied by the worrisome fact that this will presently happen in the absence of sufficient and relevant sexual education.

Though the market industry for accessible sex items and sex assistance is booming, this should not be conflated with the social inclusion of disabled people, but rather an attending to disabled people's potentiality for economic productivity. According to US census data, workers with disabilities earn 37 percent less than their able-bodied peers and earn 63 cents for every dollar paid to workers without disabilities. Wage gaps between similarly-educated disabled and non-disabled populations reach about \$6,500 per year for those without high school diplomas, \$13,000 per year for those with a bachelor's degree and over, and \$20,000 per year for individuals with master's or other more advanced degrees (Diament 2015). In 2015, *The Hill* discussed the plight of those with disabilities in the workforce at length, speaking about the issues of under payment and underemployment that recent laws against discrimination and affirmative actions have done little to ameliorate (Yin, 2015). However, the revised Rehabilitation Act of 2014 requires both federal contractors and subcontractors to recruit, hire, retain and

promote disabled workers through affirmative actions. The Workforce Innovation and Opportunity act of 2014 aims to create financial independence for disabled workers by easing access to services that prepare workers for competitive employment (Yin, 2015). We include these examples to point out that economic factors must foreground a discussion about access to industry-plied sexual expression, especially in the context of disability.

Summary and Future Directions

The ability of the disabled community to assess and provide solutions to problems that they are subjected to should not be understated or undervalued. Many of the most insightful and informative sources for this document have been procured from online communal spaces and the affinity-based forums within. Use of these digital spaces to discuss the lived experiences of disabled populations as well as to advocate for the rights of disabled people, especially self-determined advocacy, as expressed by disabled writers and activists, have done much to influence legislative and economic changes concerning disability. The practical, everyday challenges in the use of sex aids, manual and automated, is still fraught with unresolved issues. In manual employment, specifically work around sex assistance, legality is muddled and the contextual situation of providers organizing within this field leads to troubled access to services and creates dangerous implications for an individual who attempts to seek said services as well as for a service provider. In terms of automated use, although the market for automated aids is bustling, such a market is still accessible only to a minority of disabled people due to poverty, pay gaps and underemployment. Indeed, the 80 million baby boomers presently contemplating decades of a remaining healthy lifespan (Coughlin, 2017), and

accompanying desire for sexual agency, are also planning according to their individual circumstances. This evokes certain questions about the race, age, gender identity, sexuality, and other characteristics of those who can afford these items, as levels of income associated with intersections between disability and these other facets of identity can vary. These economic concerns only highlight how the lack of systemic support for the sexual health of disabled people greatly impedes access to sex as an Activity of Daily Living (ADL). Furthermore, the current cultural climate around sex acts, sex work, and disability creates a taboo that impedes the growth of research, therapeutic methods, and useful health information for sexual partners. This leads to an overall lack of common knowledge about how sex aids can affect the health of their users and growing markets of people making use of items that are potentially dangerous, especially without training.

In the future, specific sexual education and systemic access to safe sexual expression is needed, with legislation that does not interfere with disabled adults' sexual agency. The industry of sex aids and assistance would also benefit from internal and communal organizing that attends to the experiences of disabled people. Further research into educational methods and the effects of these emergent sexual practices would be invaluable to the sexual health, safety, and agency of people with disabilities. The approach taken in this review also contributes some ideas around future methodology. In attending to discourses generated by disabled people themselves, gaps in scientific literature and future directions for academic inquiry become clear. As a scientific community, we must listen to these discourses and form coalitions with those

speaking about their specific experiences navigating and advocating for their needs to contribute to safety and autonomy in sexual play and healthy expression.

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