



# Center the margin: Equity-Based Assessment and Response Strategies to Reach Underserved Communities Using a Telehealth Service Delivery Model

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## Abstract

While the COVID-19 pandemic has initiated drastic personal, social, organizational, and governmental level changes, it also sparked a unique opportunity. More Behavior Analysis providers had the option to respond to this crisis by offering telehealth services. As providers address their ability to conduct sessions using electronic delivery methods, there is also a need to prioritize those who historically have been forgotten in the formation of systemwide change: Black Indigenous People of Color (BIPOC). This paper outlines barriers to accessing telehealth treatment and includes options for individual providers and organizations to address disparity and other relevant contextual variables within their telehealth models.

**Keywords** Equity · Disparities · Telehealth · COVID-19 · Assessment · Response strategies

## Introduction

COVID-19 exposed limitations in our healthcare system and sparked the call for a new digital strategy (Keesara et al., 2020). A revolution in the USA advances change on personal, organizational, and governmental levels that were unfathomable before that specific moment in history. The era of social distancing consequently created a need for immediate personal, organizational, and governmental changes (a new revolution). In the face of the COVID-19 pandemic, many providers within the field of behavior analysis resorted to a telehealth model to follow the Centers for Disease Control and Prevention (CDC) guidelines to flatten the curve of this infectious disease. Behavior analysts have witnessed a new moment in history that allows providers to radically envision what therapeutic care looks like in the digital sphere. Given the rapid change, providers scrambled to gain competency in this area, as in-person services overwhelmingly took precedence due to the nature of our direct service delivery methods. Behavior analysts now have a unique opportunity, not only to try new methods, but to

create significant change in areas considered unfathomable prior to this crisis.

Previous literature available to analysts in the telehealth arena currently address ethics, parent training, and supervision (Ferguson et al., 2019; Lindgren et al., 2016; Pollard et al., 2017). Therefore, the extent of training offered in telehealth service delivery falls predominantly within those areas. As behavior analysts gain a knowledge base and add to the digital health revolution, there is an opportunity to reflect upon additional strategies to yield socially valid and equitable care to clients under this new model. The purpose of this paper is to begin providing behavior analysts with general guidance to respond to disparities that hinder participation in telehealth for various cultural groups. Addressing equity in service delivery will need to include both assessment and response strategies. A method of assessment to determine the feasibility of an equitable model of telehealth, as well as response strategies to address disparities, are reviewed in this article.

## Revolutionary Consequences to Telehealth Delivery

Medical and behavioral health service providers boasted the use of telehealth as a strategy to reduce patient costs, address access disparity, and promote health equity (Graves, 2012; Hilty et al., 2020; Shea et al., 2013). In theory, this model provides consumers who may not otherwise seek services

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access to care due to the high response effort required and low availability of service providers in their geographic area. Although the creation of a telehealth option provides an opportunity for underserved communities, this model alone has been shown to be an imperfect solution with apparent gaps to treatment access. A generic version of telehealth without the examination of sociocultural variables leaves room for disparate outcomes. Providers who wish to meet the needs of their clients will be challenged to confront factors that leave groups in or pushed past the margins of society and further from equitable access to treatment. Historically, a person's access to equitable treatment varies based on social classification(s) such as race, gender, religion, age, socioeconomic status, and more. Currently, telehealth, with its challenges and barriers that are unaddressed in the more extensive healthcare system, can be conceptualized as being similar to "the haves versus the have-nots."

Since the COVID-19 pandemic governmental response left many behavior analysts and relevant service delivery organizations with decisions to pivot their care model, conversation related to an equitable method of telehealth delivery remained unapproached in the behavior analysis literature. Equity variables (i.e., racial analysis, socioeconomic disparity, linguistic diversity, and other individualized and cultural variables) impact in-person services; therefore, it is reasonable to anticipate these variables may also impact electronically delivered care as well as access to and acceptability of the telehealth model for our clients. Therefore, intentional assessment in this area is necessary before offering and delivering this model to applied behavior analysis clients.

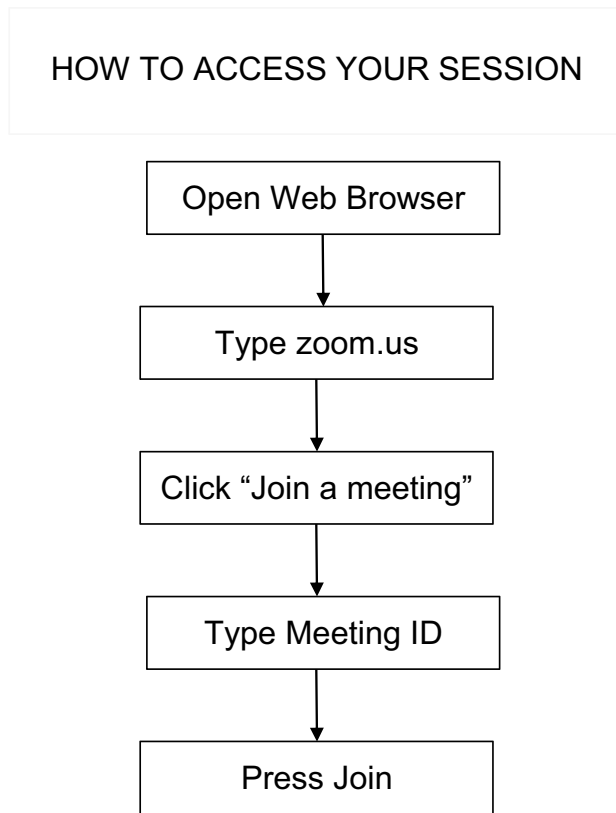
### **Disparate Broadband Internet Access**

Over 90% of American adults access the internet in some capacity (Anderson, 2019). At the onset of the COVID-19 era of social distancing, the conversation quickly shifted to encouraging businesses and relevant stakeholders to opt-in to an online provision of services (Health and Human Services, 2021; US Centers for Medicare and Medicaid Services, 2020). There was an assumption that online methods were a safe way for consumers to fulfill their needs. Online provision was also the suggestion for those in education, medicine, and behavioral health, in which we observed the rapid implementation of local, state, and nationwide changes to ensure the availability of teleconferencing and e-learning (Keesara et al., 2020). Not addressed with the concurrent change to multiple industries was a method to reach those who do not have access to the internet. Though a 90% statistic could infer widespread availability to access telehealth and online services, it is misleading at face value. Creating policies around the assumption that most American adults have access to the internet, especially

when the populace is expected to stay home, leaves many approximately 24 million people without options (Federal Communications Commission, 2018).

Access to home internet varies based on sociocultural variables. In line with historical oppression, access to certain privileges, including home internet, vary depending on age, education level, race, socioeconomic status, and community locations. Individuals who are older adults, racial minorities, have lower levels of education, rural residents, and fall into lower-income brackets are less likely to have access to the internet in their homes (Anderson, 2019). Recognizing the nature of our work and the call to stay safe during the Covid pandemic, telehealth providers likely will deliver their services to clients who are in their home at the time of service. With the provided information on access disparity, it is fair to assume numerous current and potential clients who are in need of behavior analytic services will be ineligible to receive telehealth services. With the increasing demand for telemedicine in the Covid pandemic (Demeke et al., 2021), this serves as a barrier and limitation to treatment. Providers have an option to address the gap in access to the internet when beginning a telehealth model. If clients are interested in this form of treatment but do not have a stable internet connection at their disposal, providers can seek culturally relevant solutions such as partnering with a mutual aid network, to help reduce access barriers through the provision of hot-spots. Mutual aid networks, otherwise considered collective care, reduces the need to rely on inequitable systems (Béhague & Ortega, 2021) and have emerged specifically in response to the digital divide for children undergoing remote instruction (e.g., Covaid.co, Serve Your City, and Ward 6 Mutual Aid).

Given the lack of consistent access to the internet, those who begin services may additionally experience a learning curve to engage in telehealth sessions. Delivering care through an electronic format will potentially require pre-training for clients and caregivers. Proficiency in technology may not be a skill each client or their caregiver displays, and accessing telehealth sessions require many different technological competencies. For example, clients will need to know how to enter a session, manipulate the screen, schedule sessions, modify meetings, and end the sessions when necessary. Providers will need to assess the consumer's baseline knowledge required to use their chosen technology platform. Once a baseline level of understanding is determined, appropriate behavioral strategies necessary to tailor the training of stakeholders can be considered. Providers may use behavior skills training to track performance and competency (see Parsons et al., 2013, for more details about behavioral skills training). Providers may also prepare textual task analyses or visual charts in the client's preferred language and in simple lay person's terms to aid understanding (Fig. 1). A visual or



**Fig. 1** An example of a textual task analysis to access telehealth sessions via Zoom

textual task analysis can be placed near the recipient's device to assist with accessing sessions initially.

### Socioeconomic Disparity

Socioeconomic status is a substantial barrier to both the telehealth and in-person model. According to Zhai (2020), the implications of inequity and telehealth may be far-reaching. As previously described, socioeconomic status impacts the virtual model due to limited or lack of access to home internet. Additionally, some clients with a lower socioeconomic status who do have some form of access may not have updated technologies and devices that are deemed necessary by the provider organization (e.g., high-speed broadband).

To start, behavior analysts should consider the personal costs to their clients interested in accessing their telehealth model as this also may impact help-seeking behaviors from potential clients. At a minimum, telehealth requires access to the internet and an electronic device to access their sessions. Providers will need to examine the feasibility of this model if clients do not have access to a computer. If providers allow the use of a smaller device (e.g., tablets and cell phones), the quality of treatment and any potential differences that could emerge should be considered and outlined

before the start of treatment. Also, if clients share access to devices with multiple family members, providers should consider the impact on their session scheduling, completion, and secure data transmission. If there are any other organizational requirements (e.g., specialized camera equipment and microphones), providers will need to consider if this request is reasonable for all clients, including those who are classified as lower-income earners. Providers should consider seeking lower- to no-cost equipment options if there are financial responsibilities placed on consumers.

Another consideration for telehealth should be the home environment. Providers will need to assess the type of environment clients will use during synchronous sessions. If clients do not have access to a quiet area or use a shared space, providers may allow flexibility with their treatment model, planning for potential disruption. Additionally, if clients are in a shared space, providers may also consider discomfort in exposing private elements of their home to a new provider or engaging in therapy with distractions present.

### Intersection of Race

Black Indigenous People of Color (BIPOC) experience severe disparities in healthcare (George et al., 2012). Providers should assess stress factors related to the provision of telehealth therapy services. If clients are required to increase their response effort (such as providing 1:1 therapy to their child) to adhere to a telehealth model, consider the potential overlap of external stressors and increased demands while also amid an international health crisis. Adding a telehealth model with the requirement of increased effort could potentially increase stress levels for our consumers, parents, or caregivers. While stress is a general phenomenon that impacts living beings, a racial lens will occasion relevant information during a provider's assessment. Discriminatory racial encounters, defined as unfair treatment and experiences related to an individual's racial demographic, have been identified as a marker of increased stress in comparison to non-racial minorities (Anderson & Stevenson, 2019). Additionally, racial differences are evident for parents of children with unique needs, including autistic children, who report heightened stress (Hinojosa et al., 2012; Iadarola et al., 2019). Though beyond the scope of this article, given the background of differential stress levels according to race, providers should take parental concerns of lacking capacity for the telehealth model seriously.

Another area of concern is our client's work status during the pandemic. Evidence has shown that BIPOC represent a large sample in the essential worker category (ACLU, n.d.). Telehealth requires a time commitment. Some consumers not only engage in ABA therapy but adhere to additional therapies concurrently (LaFrance et al., 2019) while working, likely more hours, as an essential worker to respond to

the needs of the broader population. In line with this notion, BIPOC, specifically American Indian, Black, and Latinx individuals in America, displayed higher trends of a positive COVID-19 diagnosis (Centers for Disease Control and Prevention, n.d.). Providers will need to assess their strategies to meet the needs of families who present with competing contingencies and struggle to meet medically necessary hours during the crisis due to work, positive COVID-19 status, potential grief associated with the loss of a loved one, and other potential stress-associated behaviors that may require flexibility in provider responding.

## Linguistic Differences

Clinicians who provide services to linguistically diverse individuals should weigh strategy options to address language differences using the telehealth. Accessing healthcare in the USA is less likely for individuals who do not speak English (Jang et al., 2017). Limited English proficiency is correlated with misdiagnosis, increased testing, and lower social validity in an English-dominated healthcare industry (Masland et al., 2010). Another potential issue is a consumer's lack of understanding related to informed consent via telemedicine. There is evidence that the translation of telehealth and informed consent documents are more likely to be misunderstood when providers do not share the same language (Jack et al., 2014).

Providers using telehealth with individuals who are not proficient with their client's dominant language should seek interpretation services. Consumers who receive care outside of their dominant language are more likely to report higher treatment satisfaction when provided with telephonic or video interpretation. Providers may attempt to address this concern by using app-assisted interpretation such as Google translate. Applications are not considered as replacements for professional interpreters, though they are useful in everyday conversation (Panayiotou et al., 2019). When providers rely on applications alone for translation services, errors in translation could occur unbeknownst to the provider and could harm the client; therefore, use of applications alone to replace appropriate translation is inadvisable. Linguistic diversity is an area that needs further research regarding its implications for behavior analysis telehealth providers.

## Discussion

There are many factors for providers to consider before the commencement of telehealth services. While behavior analysts and organizations assess their tools and capacity for the model, they will also need to evaluate the needs of their clientele. Sociocultural factors may present as a barrier for clients to access care. If providers wish to yield an equitable

model of care, assessment of social factors will be a useful place to begin planning. Conceptualization of client barriers should be assessed on an individual basis and providers should exhibit flexibility in meeting the needs determined through their assessment.

The answer to clients who lack access or present with greater needs should not be "good luck." As providers, we can maintain a commitment to addressing the barriers that hinder clients' ability to access and continue care. Sometimes it is not about what response will be the quickest or cheapest, but which answer will uphold the dignity of each of our consumers and place equity on the top of our decision-making models. The strategies listed in this paper are not necessarily quick or inexpensive fixes; however, they are necessary fixes to begin an attempt to address inequity. Should providers deny clients the ability to access their care based on lack of resources, a shift from equitable care occurs. Should behavior analysis providers meet their clients in the margin, addressing concerns of disparity, the revolution of equitable care will begin.

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## Declarations

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**Consent to Participate** Not applicable.

**Consent to Publication** Not applicable.

**Conflicts of Interest** None.

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