Association of

Professional Behavior Analysts

Board of Directors Position Statement on the Use of Contingent Electric Skin Shock to Change Behavior

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The Association of Professional Behavior Analysts (APBA) is a nonprofit professional association whose mission is to support and advance the science-based practice of applied behavior analysis (ABA). The APBA Board of Directors sympathizes with the difficulties faced by individuals who engage in challenging behaviors that create risk of serious injuries (or worse), their families, and ABA practitioners who are charged with treating such behaviors. In response to those difficulties, contingent electric skin shock (CESS) has sometimes been used to modify challenging behaviors in some individuals with developmental and intellectual disabilities and brain injuries. Its use is rare, however, and it is important to note that *CESS is not the generally accepted standard of care in the behavior analytic treatment of severe challenging behavior.* Rather, the large majority of behavior analysts who treat such behaviors use other procedures the field has developed that do not involve the delivery of potentially painful physical stimulation (see the summary of evidence below and the *Model Coverage Policy for Adaptive Behavior Services*, ABA Coding Coalition, 2022).

The use of CESS by behavior analysts raises a number of **ethical concerns.** It goes against the profession's overarching ethical principles of maximizing benefits for clients, doing no harm, and treating others with compassion, dignity, and respect (*Ethics Code for Behavior Analysts*, Core Principles 1 and 2, Behavior Analyst Certification Board, 2020). Additionally, because many individuals who engage in severe challenging behavior have limited communication and other skills, they are at risk of being subjected to interventions that they may not understand fully and for which they may not be able to give assent (*Ethics Code* Standards 2.09 and 2.11). Another ethical issue is that when CESS results in suppression of a severe challenging behavior, caregivers and practitioners may be prone to continue using CESS for that behavior or to use it to change other behaviors without adequately considering other interventions that can maximize outcomes and minimize risks of harm to clients and stakeholders (*Ethics Code* Standards 2.01, 2.14, 2.15, 3.01).

The use of CESS is also inconsistent with the ethical obligation for behavior analysts to **rely on scientific evidence on the effectiveness, benefits, side effects, and risks of interventions** (*Ethics Code* Standards 2.01, 2.13, 2.14, 2.15, 3.01). Relatively few methodologically sound studies of the effects of CESS have been published in peer-reviewed scientific journals; most were published prior to 2000. Analyses of that literature have found insufficient evidence of effectiveness from studies using methods that allowed strong inferences about the relation between CESS and reported changes in challenging behaviors. Although there are some reports of short-term suppression of behaviors like self-injury and aggression, there is mixed evidence in the literature that CESS produced lasting, generalized reductions in challenging behavior and that it could be faded or discontinued successfully. Another limitation of the research is a dearth of careful measurement and reporting of adverse side effects. There is, however, some evidence that (a) the electrical skin stimulation can be uncomfortable, even painful, and can cause tissue damage, and (b) CESS can produce negative behavioral side effects, such as avoidance, crying, increases in other challenging behaviors, and fearful responses (for reviews, see Food and Drug Administration, 2014; Zarcone, Mullane, Langdon, & Brown, 2020).

In contrast, a large body of scientific research documents the effectiveness of a wide array of behavior analytic procedures for reducing challenging behaviors and building skills that enable people with intellectual and developmental disabilities and other conditions to function independently and successfully in a variety of settings. Most of those procedures are based on results of assessments of functional relations among challenging behaviors and environmental factors. They rely heavily on positive reinforcement of alternative adaptive behaviors (such as functional communication responses) combined with no reinforcement of the target challenging behavior (e.g., Greer et al, 2016). Those procedures do not involve the delivery of electric shock (e.g., see ABA Coding Coalition, 2022; Ontario Association for Behaviour Analysis, 2019).

Based on the foregoing, ***it is the position of the APBA Board of Directors that the use of CESS as a behavior analytic intervention is not warranted.*** Practitioners serving individuals who engage in severe challenging behaviors should take care to ensure that they have the requisite training and competencies to treat those behaviors effectively and safely with other less intrusive procedures, are well-informed about the best available scientific research and share that information with stakeholders, and coordinate care with medical professionals as needed. They should also work to increase the availability of effective treatment and other supportive services for individuals who engage in severe challenging behaviors and their caregivers.

References

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