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REVIEW ARTICLE

Behavior analysts and COVID-19: A review of empirical and conceptual publications

Analistas do comportamento e o COVID-19: Uma revisão de publicações empíricas e conceituais

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Abstract

Background: The COVID-19 pandemic emphasized the need for behavioral interventions in public health. Behavior analysts worldwide responded with research and practical strategies to address emerging challenges, particularly related to prevention, telehealth, and mental health. **Objective**: This narrative review aimed to identify, organize, and synthesize behavior-analytic publications on the COVID-19 pandemic, thereby improving access to and use of this knowledge. **Method**: The review included theoretical, basic, and applied studies published in Portuguese or English, available online without date restrictions. Sources were limited to peer-reviewed journals in behavior analysis. **Results**: A total of 272 documents were screened, and 62 met the inclusion criteria. These publications addressed five key domains: the adaptation of services to telehealth, promotion of safety and prevention behaviors, general mental health, social and domestic contexts, and research proposals. Most studies emphasized remote service delivery and the implementation of protective health behaviors. **Conclusions**: The findings demonstrate that behavior analysts made timely and relevant contributions during the pandemic, particularly by adapting clinical practices and promoting behavioral adherence to public health guidelines. These insights highlight the importance of behavioral science in shaping crisis responses and indicate promising avenues for future research and intervention.

Keywords: Behavior analysis; COVID-19; Telehealth; Preventive behavior; Narrative review.

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Resumo

Contexto: A pandemia de COVID-19 evidenciou a necessidade de intervenções comportamentais em saúde pública. Analistas do comportamento em todo o mundo responderam com investigação e estratégias práticas para enfrentar os desafios emergentes, especialmente no que respeita à prevenção, à telessaúde e à saúde mental. **Objetivo**: Esta revisão narrativa teve como objetivo identificar, organizar e sintetizar publicações analítico-comportamentais sobre a pandemia de COVID-19, de forma a melhorar o acesso e a utilização deste conhecimento. **Métodos**: A revisão incluiu estudos teóricos, básicos e aplicados, publicados em português ou inglês, disponíveis online e sem restrição de data. As fontes foram limitadas a revistas com revisão por pares na área da análise do comportamento. **Resultados**: Foram analisados 272 documentos, dos quais 62 cumpriram os critérios de inclusão. As publicações abordaram cinco domínios principais: adaptação de serviços para telessaúde, promoção de comportamentos de segurança e prevenção, saúde mental geral, contextos sociais e domésticos, e propostas de investigação. A maioria dos estudos enfatizou a prestação remota de serviços e a implementação de comportamentos protetores de saúde. **Conclusões**: Os resultados demonstram que os analistas do comportamento contribuíram de forma oportuna e relevante durante a pandemia, especialmente ao adaptarem práticas clínicas e promoverem a adesão comportamental às orientações de saúde pública. Estes dados reforçam a importância da ciência do comportamento na resposta a crises e indicam caminhos promissores para futuras investigações e intervenções.

Palavras-Chave: Análise do comportamento; COVID-19; Telessaúde; Comportamento preventivo; Revisão narrativa.

Introduction

Preventing the spread of COVID-19 requires collective behavioral engagement across populations (Berkley, 2020). The pandemic, therefore, is not only a public health issue but also a profoundly behavioral one. Understanding how individuals behave—especially in conditions of uncertainty and risk—is fundamental to the design and implementation of effective prevention strategies.

Within this context, Behavior Analysis provides a robust conceptual and methodological framework for examining and modifying human behavior. The COVID-19 pandemic underscored the need for interdisciplinary collaboration and highlighted the value of behavior analysts in designing and implementing interventions to promote public health and reduce psychological distress. This study aimed to review the behavior-analytic literature on COVID-19, specifically focusing on publications in specialized behavior analysis journals.

The novel coronavirus, SARS-CoV-2 (causing COVID-19), was first identified in December 2019 in Wuhan, China. As it evolved into a global pandemic, numerous public health measures were developed and implemented to contain its spread (Schiffer, 2020), including the use of personal protective equipment, frequent hand and surface hygiene, and restrictive strategies such as physical distancing and quarantine (World Health Organization, 2020). These interventions contributed to reducing infection and mortality rates (Cruz, 2020; Flaxman et al., 2020; Prem et al., 2020).

Despite these efforts, the pandemic produced long-term consequences in multiple domains. Medically, many individuals experienced persistent symptoms and complications (Augustin et al., 2021). Economically, global and local markets suffered severe disruptions (Ponce, 2020). Psychologically, the pandemic triggered widespread emotional distress (Clemente-Suárez et al., 2021), including heightened levels fear and stress, anxiety, and depression (Elbay et al., 2020; Huang & Zhao, 2020; Meng et al., 2020;

Ornell et al., 2020; Wang et al., 2020). These effects were observed not only in the general population but also among healthcare professionals (e.g., Allan et al., 2020; Li et al., 2020; Pollock et al., 2020; Serrano-Ripoll et al., 2020).

Given the widespread psychological and behavioral impact of the pandemic, the success of mitigation strategies has depended largely on how individuals and communities behaved. Understanding and influencing behavior, particularly in high-stress, uncertain conditions, is therefore essential for both public health protection and psychological well-being.

Behavior Analysis positions behavior—not internal states—as the primary object of scientific inquiry (Skinner, 1938). This perspective allows for the quantification, prediction, and control of behavior based on its functional relationship with environmental variables (Kuroda, 2020; Skinner, 1984). Identifying and manipulating these variables enables the design of interventions that increase or decrease the likelihood of specific behavioral responses (Kanfer & Grimm, 1977). Consequently, preventive strategies are more effective when paired with behavior-analytic technologies that foster sustained engagement and reduce pandemic-related psychological distress (e.g., Confer et al., 2021; Shawler & Blair, 2021).

To illustrate how behavior-analytic technologies can support public health, Heinicke et al. (2020) demonstrated the application of habit reversal training (HRT) in establishing preventive hygiene routines. Originally used in the treatment of problem behaviors, HRT was proposed as a strategy to reduce the frequency of face-touching behaviors, which increase the risk of viral contamination. Heinicke et al. (2020) systematically reviewed studies on HRT and outlined its potential for promoting safer behavioral patterns during health emergencies.

In parallel, other behavior-analytic interventions were adapted and delivered through information and communication technologies (ICTs), ensuring the continuity of essential services during lockdowns. Remote delivery proved effective in various contexts, including education (Fairlie & Loyalka, 2020; Root & Rehfeldt, 2021; Starkey et al., 2021), healthcare (Baron et al., 2022; Haddad et al., 2021), autism services (Bailey et al., 2022; Cleffi et al., 2022), physical activity interventions for sedentary environments (Erath & DiGennaro Reed, 2022), and online psychotherapy (Andrews et al., 2022; Schieltz & Wacker, 2020). These adaptations, made possible through the use of ICTs, demonstrate the flexibility of behavior-analytic interventions across multiple domains, even under the constraints of a global public health emergency.

Behavior Analysis offers a comprehensive theoretical and technological foundation for developing effective health protocols, as it focuses on identifying and manipulating the variables that influence human behavior. By analyzing the functional relationships between environmental conditions and behavioral responses, this science allows for the design of strategies aimed at promoting adherence to preventive measures and mitigating adverse psychological outcomes.

Given that pandemic situations are experienced behaviorally—through the actions individuals take in response to evolving risks and constraints—behavior plays a central role in shaping both the trajectory and the consequences of public health crises. Thus, a science of behavior can offer not only interpretations

but also empirically grounded solutions to minimize harm and improve collective well-being across short-, medium-, and long-term horizons.

Organizing and synthesizing behavior-analytic literature supports the transformation of dispersed scientific findings into accessible and actionable knowledge for both health professionals and the broader public. In the context of a global health crisis such as the COVID-19 pandemic, timely access to evidence-based behavioral strategies can inform more effective public health responses.

Narrative reviews contribute to this process by consolidating fragmented evidence, identifying thematic patterns, highlighting gaps in the literature, and presenting interventions in formats that assist clinical and policy decision-making. For practitioners, such reviews offer a curated body of knowledge that supports evidence-informed action. For the general public, they help translate complex scientific data into insights that can promote adaptive behavior and well-being.

Given the increase of behavior-analytic publications during the pandemic and the range of topics addressed, a narrative synthesis offers a way to improve conceptual clarity and guide practical applications. Therefore, the present review aimed not merely to catalog relevant publications, but also to provide a structured, thematically organized, and accessible integration of the field's contributions to understanding and addressing behavioral challenges during public health emergencies.

Method

Eligibility Criteria and Selection of Sources

The present study was designed as a narrative review of publications on the COVID-19 pandemic in behavior-analytic journals. The objective was to identify, organize, and classify relevant theoretical, basic, and applied studies that interpreted pandemic-related phenomena through the principles and conceptual framework of Behavior Analysis. To be eligible for inclusion, publications were required to meet the following criteria: (a) address topics related to the COVID-19 pandemic, (b) be available in full text and open access on the internet, (c) be published in Portuguese or English, and (d) present a clear behavior-analytic perspective. Publications were excluded if they consisted of editorials, tributes, conference abstracts, or letters to the editor.

A behavior-analytic perspective was defined as one that emphasized observable behavior and its environmental determinants, rather than internal states or hypothetical constructs. This included analyses of behaviors such as mask-wearing, hand hygiene, adherence to physical distancing, vaccine uptake, and the spread of misinformation, interpreted in terms of antecedents, consequences, contingencies of reinforcement, and rule-governed behavior.

Search Strategy

The search for relevant publications was conducted between 2019 and 2023 and included nine peer-reviewed journals and one publication series specializing in behavior analysis. The selected journals were: *Revista Brasileira de Análise do Comportamento* (REBAC), *Revista Brasileira de Terapia*

Comportamental e Cognitiva (RBTCC), *Perspectivas em Análise do Comportamento* (PAC), *Behavior Analysis in Practice* (BAIP), *Behavior and Social Issues* (BSI), *The Psychological Record* (TPR), *Perspectives on Behavior Science* (PBS), *The Analysis of Verbal Behavior* (TAVB), and *Education and Treatment of Children* (ETC). These journals were chosen based on the indication of behavior-analytic journals described on the site of the Association of Behavior Analysis International (those that publishes articles on human behavior and social issues). In addition, Volumes 9 through 15 of the *Comportamento em Foco* collection were reviewed, as they were published from 2019 onward and include relevant behavior-analytic contributions.

These sources were selected based on their alignment with the scope of behavior analysis and their inclusion in the journal list maintained by the Association for Behavior Analysis International (ABAI), particularly those that focus on human behavior and social issues. The inclusion of Brazilian journals also reflected the dual-language scope of the review (Portuguese and English) and the relevance of these publications in the Latin American behavior-analytic community.

Search Terms and Retrieval Procedures

Searches were conducted using the journals' internal search engines when available, maintaining the scope as "all content." This applied to REBAC, RBTCC, PAC, BAIP, BSI, and TPR. Four keywords were used in English and combined using the Boolean operator OR: COVID-19, Coronavirus, SARS-CoV-2, and Pandemic. The same keywords were used to search *Comportamento em Foco* volumes through PDF reader word-search functions, applying each term individually due to the absence of a database system.

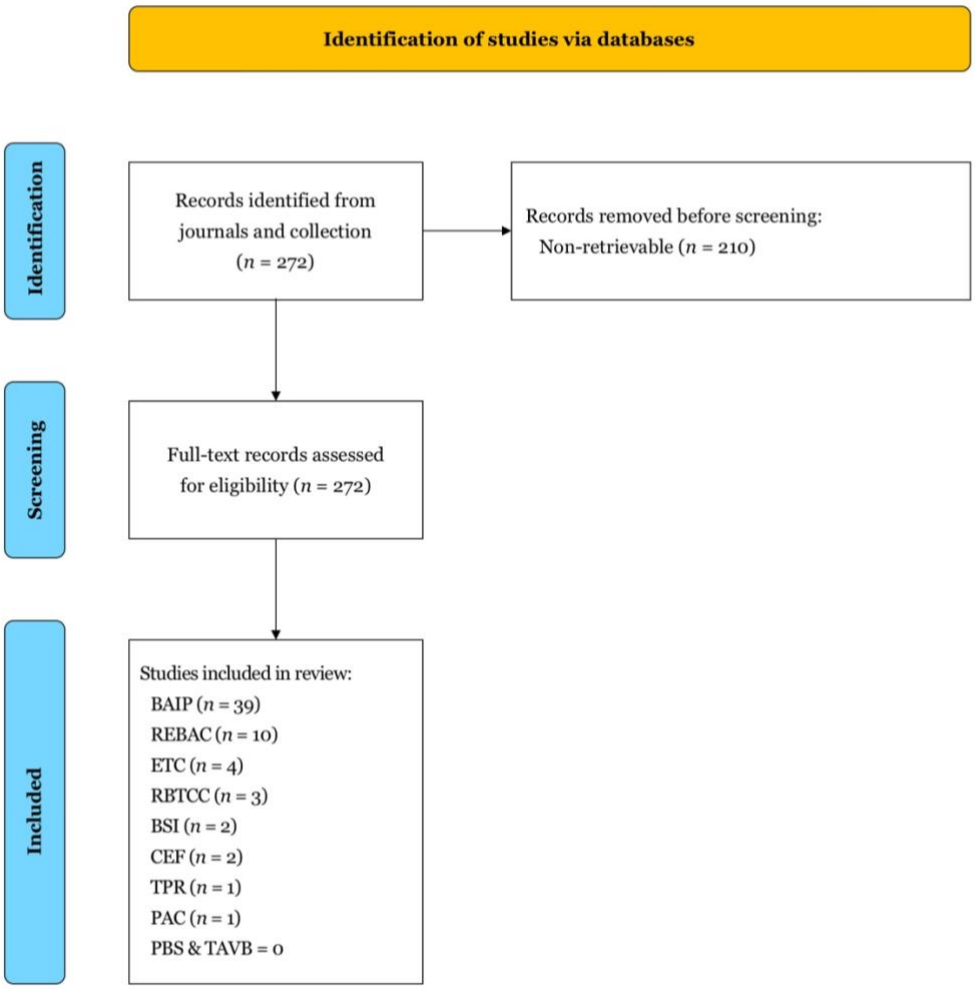
After identifying relevant publications, all documents containing at least one of the specified keywords were screened for eligibility. Texts that met the inclusion criteria were downloaded and read in full. For each eligible publication, the following information was extracted and organized into an Excel spreadsheet: (a) author(s), (b) year of publication, (c) title, (d) journal or collection, (e) type of study (theoretical, basic, or applied), and (f) primary research theme(s). These data served as the basis for thematic categorization in the subsequent analysis.

Results and Discussion

A total of 272 documents containing at least one of the selected keywords were retrieved and read in full. Of these, 210 were excluded for not meeting the eligibility criteria, resulting in a final sample of 62 publications. Most of the included studies were published in BAIP, indicating a predominance of applied contributions. In contrast, no relevant articles were identified in PBS or TAVB, suggesting limited publication activity related to COVID-19 in those domains. The selection process is illustrated in Figure 1, and the complete list of included manuscripts is presented in Table 1. The English titles, when available, were used as provided by the original authors.

Figure 1

Flow Diagram of the Publication Identification, Screening, and Inclusion Process



Note. Adapted from the PRISMA 2020 Statement flow diagram (Page et al., 2021). Sources included: Behavior Analysis in Practice (BAIP), Behavior and Social Issues (BSI), Comportamento em Foco collection (CEF), Education and Treatment of Children (ETC), Perspectivas em Análise do Comportamento (PAC), Revista Brasileira de Análise do Comportamento (REBAC), Revista Brasileira de Terapia Comportamental e Cognitiva (RBTCC), and The Psychological Record (TPR). No eligible publications were found in Perspectives on Behavior Science (PBS) or The Analysis of Verbal Behavior (TAVB).

Table 1

Descriptive Summary of Included Studies in the Behavior-Analytic Literature on COVID-19

Authors	Year	Title	Journal	Study type	Thematic Category
Amaral et al.	(2023)	Depressive symptomatology, social skills and academic competence in children and adolescents in the context of resuming face-to-face classrooms	RBTCC	Empirical	Mental health
Amorim et al.	(2020)	Promoting social isolation in the COVID-19 pandemic: Considerations of the behavioral analysis of culture	REBAC	Theoretical	Safety behaviors
Andersen et al.	(2021)	A demonstration of Caregiver-Implemented Functional Analysis of Inappropriate Mealtime Behavior via Telehealth	BAIP	Empirical	Telehealth
Araripe et al.	(2019)	New arrangements in times of COVID-19: Remote support to care for children with autism spectrum disorder	REBAC	Theoretical	Telehealth
Ávila & de Matos	(2023)	Effects of remote Behavioral Skills Training on caregivers of a child with Autism Spectrum Disorder	PAC	Empirical	Telehealth
Awasthi et al.	(2021)	Transitioning ABA services from clinic to telehealth: Case study of an Indian organization's response to COVID-19 lockdown	BAIP	Empirical	Telehealth
Batton et al.	(2022)	Telehealth training in principles of Applied Behavior Analysis for caregivers of young children with Autism Spectrum Disorders during the COVID-19 pandemic	ETC	Empirical	Telehealth
Baumes et al.	(2020)	Comparison of telehealth-related ethics and guidelines and a checklist for ethical decision making in the midst of the COVID-19 pandemic	BAIP	Theoretical	Telehealth
Belisle et al.	(2021)	Developing remote delivery of language and cognitive training for use with children with autism: A technological report	BAIP	Empirical	Telehealth
Belisle et al.	(2022)	Probability discounting in college students' willingness to isolate during COVID-19: Implications for behavior analysis and public health	TPR	Empirical	Safety behaviors
Bergmann et al.	(2021)	Adapting direct services for telehealth: A practical tutorial	BAIP	Theoretical	Telehealth
Bondy et al.	(2020)	Promoting functional communication within the home	BAIP	Theoretical	Social & domestic
Borloti et al.	(2020)	Mental health and psychological interventions during the COVID-19 pandemic: A panorama	REBAC	Theoretical	Mental health
Britwum et al.	(2020)	A University-based social services parent-training model: A telehealth adaptation during the COVID-19 pandemic	BAIP	Theoretical	Telehealth
Cameron et al.	(2021)	Telehealth for family guidance: Acceptance and commitment therapy, parent-focused preference assessment, and activity-based instruction for the support of children with Autism Spectrum Disorder and their families	BAIP	Empirical	Telehealth
Canovas et al.	(2019)	ABA service delivery for individuals with ASD: Continue in-person services during COVID-19 pandemic?	REBAC	Theoretical	Telehealth
Carneiro et al.	(2020)	Parent Training via Telehealth to Implement ABA Procedures: A Literature Review and Recommendations During the COVID-19 Pandemic	REBAC	Theoretical	Telehealth
Castro et al.	(2020)	Videos for remote instruction of caregivers of children with atypical development during the COVID-19 pandemic	REBAC	Theoretical	Telehealth
Colombo et al.	(2020)	An essential service decision model for ABA providers during crisis	BAIP	Theoretical	Telehealth
Confer et al.	(2021)	A behavior-analytic approach to antivaccination practices	ETC	Theoretical	Social & domestic
Coon et al.	(2022)	Eight months of telehealth for a state-funded project in foster care and related services: Progress made and lessons learned	BAIP	Empirical	Telehealth
Costa & De Souza	(2019)	Tutorial: construction of videos to coach caregivers in the implementation of behavior analytic interventions for individuals with autism spectrum disorder	REBAC	Theoretical	Telehealth
Cox et al.	(2020)	A proposed process for risk mitigation during the COVID-19 pandemic	BAIP	Theoretical	Safety behaviors

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Table 1

Descriptive Summary of Included Studies in the Behavior-Analytic Literature on COVID-19

Authors	Year	Title	Journal	Study type	Thematic Category
Coyne et al.	(2020)	First things first: Parent psychological flexibility and self-compassion during COVID-19	BAIP	Theoretical	Mental health
Crockett et al.	(2020)	Rapid conversation from clinic to telehealth behavioral services during the COVID-19 pandemic	BAIP	Empirical	Safety behaviors
de-Farias et al.	(2023)	Mental health in the post-pandemic world: brief analytical-behavioral considerations for a multiprofessional intervention	CEF	Theoretical	Mental health
Dubuque et al.	(2020)	Creating an automated health attestation system during the COVID-19 pandemic with Microsoft 365	BAIP	Theoretical	Safety behaviors
Dubuque et al.	(2021)	Creating an automated health attestation system during the COVID-19 global pandemic using Google's G Suite	BAIP	Theoretical	Safety behaviors
Espinosa et al.	(2020)	A model of support for families with autism living in the COVID-19 lockdown: Lessons from Italy	BAIP	Theoretical	Telehealth
Frank-Crawford et al.	(2021)	Mask compliance training for individuals with intellectual and developmental disabilities	BAIP	Theoretical	Safety behaviors
Frederick et al.	(2020)	Advocacy, collaboration, and intervention: A model of distance special education support services amid COVID-19	BAIP	Empirical	Telehealth
Frederick et al.	(2022)	Commitment, collaboration, and problem resolution to promote and sustain access to multifaceted applied behavior-analytic services utilizing telepractice	BAIP	Theoretical	Telehealth
Fronapfel & Demchack	(2020)	School's out for COVID-19: 50 ways BCBA trainees in special education settings can accrue independent fieldwork experience hours during the pandemic	BAIP	Theoretical	Safety behaviors
Gingles	(2022)	Center the margin: Equity-based assessment and response strategies to reach underserved communities using a telehealth service delivery model	BAIP	Theoretical	Social & domestic
Gotti et al.	(2019)	The use of nudges for hand hygiene as a community mitigation strategy in the face of the COVID-19 pandemic	REBAC	Theoretical	Safety behaviors
Harman	(2021)	The effects of time framing on compliance to hypothetical social-distancing policies related to COVID-19	BAIP	Theoretical	Safety behaviors
Jimenez-Gomez et al.	(2021)	Impact of COVID-19 on the applied behavior analysis workforce: Comparison across remote and nonremote workers	BAIP	Empirical	Mental health
King et al.	(2020)	Best practices: caregiver training resources derived from remote behavioral service delivery within the foster care system	BAIP	Theoretical	Mental health
Kornack et al.	(2020)	Reopening the doors to center-based ABA services: Clinical and safety protocols during COVID-19	BAIP	Theoretical	Safety behaviors
Leblanc et al.	(2020)	The role of compassion and ethics in decision making regarding access to applied behavior analysis services during the COVID-19 crisis: A response to Cox, Plavnick and Brodhead	BAIP	Theoretical	Telehealth
Luiz et al.	(2020)	A brief analysis of response-cost factors and of the use of safety equipment in preventing COVID-19 spread	REBAC	Theoretical	Safety behaviors
Luiz et al.	(2021)	Contributions of the Operant Behavioral Economics to pandemic situations: A research proposal	CEF	Theoretical	Research proposals
Maciel et al.	(2019)	Domestic violence (against women) in Brazil in pandemic times (COVID-19)	REBAC	Theoretical	Social & domestic
Marques & Almeida	(2021)	Brazilian presidential pronouncements in the pandemic: Effectiveness in crisis communication and rule properties	BSI	Theoretical	Safety behaviors
Mattson et al.	(2020)	Creating and sharing digital ABA instructional activities: A practical tutorial	BAIP	Theoretical	Telehealth

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Table 1

Descriptive Summary of Included Studies in the Behavior-Analytic Literature on COVID-19

Authors	Year	Title	Journal	Study type	Thematic Category
Moran & Ming	(2022)	The Mindful action plan: Using the MAP to apply acceptance and commitment therapy to productivity and self-compassion for behavior analysts	BAIP	Theoretical	Mental health
Ninci et al.	(2021)	Maintaining effective supervision systems for trainees pursuing a behavior analyst certification board certification during the COVID-19 pandemic	BAIP	Theoretical	Telehealth
Nohelty et al.	(2022)	Effectiveness of telehealth direct therapy for individuals with autism spectrum disorder	BAIP	Empirical	Telehealth
Nohelty et al.	(2021)	A measure for supporting implementation of telehealth direct therapy with treatment integrity	BAIP	Theoretical	Telehealth
Pelaez & Novak	(2020)	Returning to school: separation problems and anxiety in the age of pandemics	BAIP	Theoretical	Mental health
Ramírez-Cruz et al.	(2023)	Behavioral activation for Mexican woman victims of violence during the COVID-19 pandemic: A non-randomized pilot study	RBTCC	Empirical	Social & domestic
Rocha & Hunziker	(2023)	Considerations on the role of behavioral sciences in policies to combat COVID-19	RBTCC	Theoretical	Social & domestic
Rodriguez	(2020)	Maintaining treatment integrity in the face of crisis: A treatment selection model for transitioning direct ABA services to telehealth	BAIP	Empirical	Telehealth
Sampaio & Haydu	(2023)	Cultural Milieu and group-rules in an elaborated account of metacontingencies: Conceptual analysis and an illustration in a COVID-19 Psychological Support Project	ETC	Theoretical	Social & domestic
Shawler & Blair	(2021)	A proposed functional analysis of transmission prevention behaviors for a respiratory virus (SARS-CoV-2)	BSI	Theoretical	Safety behaviors
Simmons et al.	(2021)	Acceptability and feasibility of virtual behavior analysis supervision	BAIP	Empirical	Safety behaviors
Szabo et al.	(2020)	From Helpless to hero: Promoting values-based behavior and positive family interaction in the midst of COVID-19	BAIP	Theoretical	Safety behaviors
Tarbox et al.	(2021)	Taking ACTion: 18 simple strategies for supporting children with Autism during the COVID-19 pandemic	BAIP	Theoretical	Telehealth
Tomaino et al.	(2022)	An assessment of the feasibility and effectiveness of distance learning for students with severe developmental disabilities and high behavioral needs	BAIP	Empirical	Telehealth
Vascelli & Berardo	(2022)	Video self-modeling for a student with Dravet Syndrome: An intervention involving parents during COVID-19 pandemic in Italy	ETC	Empirical	Telehealth
Yi & Dixon	(2021)	Developing and enhancing adherence to a telehealth ABA parent training curriculum for caregivers of children with autism	BAIP	Empirical	Telehealth
Zoder-Martell et al.	(2020)	Technology to facilitate telehealth in applied behavior analysis	BAIP	Theoretical	Telehealth

Note. BAIP = Behavior Analysis in Practice; BSI = Behavior and Social Issues; CEF = Comportamento em Foco collection; ETC = Education and Treatment of Children; PAC = Perspectivas em Análise do Comportamento; REBAC = Revista Brasileira de Análise do Comportamento; RBTCC = Revista Brasileira de Terapia Comportamental e Cognitiva; TPR = The Psychological Record; PBS = Perspectives on Behavior Science; TAVB = The Analysis of Verbal Behavior.

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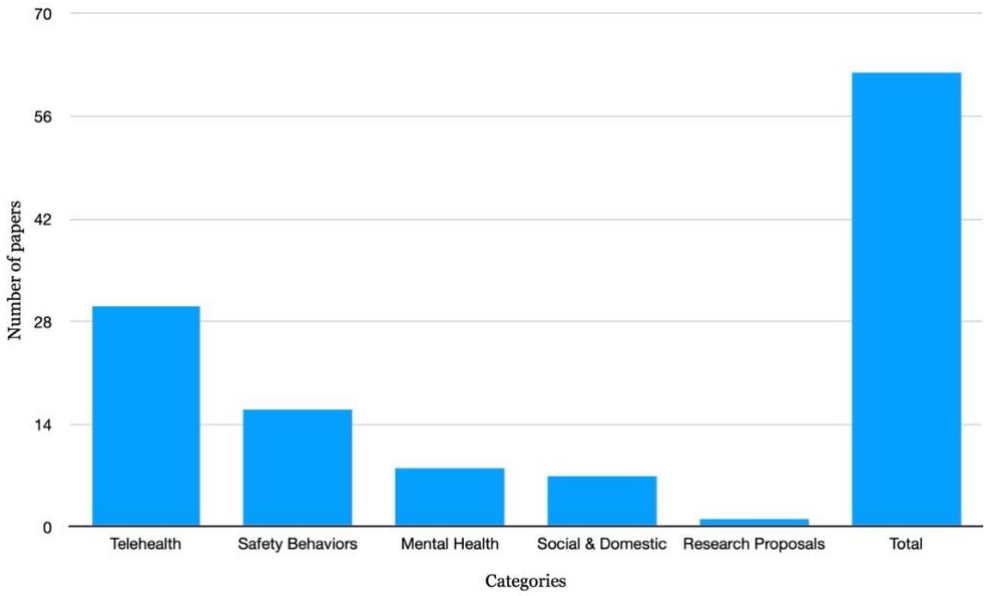
Figure 2

Distribution of Included Publications across Thematic Categories



Among the thematic categories identified in this review, remote service adaptation emerged as a dominant focus within the behavior-analytic literature on COVID-19 (Figure 2). A substantial proportion of the studies addressed the challenges and innovations associated with transitioning face-to-face behavioral services to telehealth modalities. This was particularly evident in research targeting interventions for individuals with Autism Spectrum Disorder (ASD) (e.g., Andersen et al., 2021; Tomaino et al., 2022; Araripe et al., 2019; Awasthi et al., 2021; Baumes et al., 2020; Belisle et al., 2021; Carneiro, 2020; Bergmann et al., 2021; Canovas et al., 2019) and their families or caregivers (e.g., Cameron et al., 2021; Carneiro et al., 2020; Castro et al., 2020; Costa & De Souza, 2019; Espinosa et al., 2020; Tarbox et al., 2021; Yi & Dixon, 2021). These services, typically delivered in person and requiring physical interaction, were significantly disrupted by pandemic-related restrictions. As a result, many studies focused on transitioning behavioral interventions to telehealth platforms to ensure service continuity during lockdowns.

These studies generally concluded that telehealth is a promising alternative for delivering behavioral services, especially during periods of restricted mobility. However, several limitations were noted. Chief among them was unequal access to the necessary technological infrastructure. In many regions, families lack reliable internet connections, appropriate digital devices, or sufficient privacy for conducting remote sessions. The digital divide, therefore, emerged as a significant barrier to equitable service provision. As such, although telehealth demonstrated potential for maintaining behavioral support during the pandemic, its scalability and accessibility remain contingent on broader social and structural supports.

The second most prominent theme within the reviewed literature concerned the promotion of safety behaviors to prevent viral transmission. These studies focused on strategies for increasing adherence to

public health measures such as hand hygiene, mask use, and physical distancing. From a behavior-analytic perspective, the emphasis was placed on identifying and manipulating antecedents, consequences, and rules that could facilitate the acquisition and maintenance of these preventive responses (e.g., Belisle et al., 2022; Harman, 2021; Luiz et al., 2020; Marques & de Almeida, 2021; Szabo et al., 2020).

A notable strength of this literature was its focus on the role of environmental arrangements in shaping behavior. Interventions frequently included the specification of hygiene-related actions, verbal prompts, modeling, and contingency management (e.g., Frank-Crawford et al., 2021; Gotti et al., 2019; Shawler & Blair, 2021). Some authors also addressed the potential use of punishment or negative reinforcement procedures to suppress high-risk behaviors (e.g., Amorim et al., 2020), although these approaches were generally considered less sustainable or ethically problematic.

Importantly, the studies underscored that safety behavior interventions must be culturally responsive. Factors such as trust in authorities, access to hygiene materials, community norms, and literacy levels were identified as moderators of intervention effectiveness. For example, Luiz et al. (2020) and Marques and de Almeida (2021) demonstrated that even well-designed behavioral contingencies may fail without congruent communication strategies and structural support. Accordingly, the literature advocates for an intersectional approach that considers cultural values, verbal communities, and social inequities in the design of behavior-change technologies.

The remaining three thematic categories—general mental health, domestic violence, and research proposals—accounted for a smaller but conceptually significant portion of the reviewed publications. These topics addressed behavioral phenomena with broad societal relevance and highlighted the capacity of behavior analysis to interpret and intervene in complex social contexts. Early in the pandemic, public health mandates required that individuals remain at home, which, while necessary for virus containment, intensified exposure to aversive contingencies. Several studies documented increases in domestic violence and deteriorations in interpersonal relationships during this period (e.g., Maciel et al., 2019; Bondy et al., 2020) , as well as elevated levels of psychological distress, including anxiety, depression, and fear (e.g., Borloti et al., 2020; Jimenez-Gomez et al., 2021; Moran & Ming, 2022; Pelaez & Novak, 2020). From a behavior-analytic perspective, these effects were interpreted as the result of disrupted reinforcement schedules, limited access to positive social stimuli, and heightened exposure to aversive events in the home environment. The reviewed studies emphasized the need for further empirical investigation into the contingencies maintaining these behaviors and the development of scalable interventions to reduce their occurrence. Luiz et al. (2021), for example, proposed avenues for exploring how motivational operations and discriminative stimuli function during prolonged isolation. Together, these publications underscored the relevance of behavior analysis not only in service delivery but also in generating conceptual and empirical contributions to address the psychosocial dimensions of public health emergencies.

Several reviewed studies approached domestic violence and pandemic-related mental health deterioration through the lens of behavioral contingencies. The removal of access to positively reinforcing

environments—such as workplaces, schools, and social gatherings—combined with prolonged exposure to aversive stimuli (e.g., financial instability, overcrowded housing, uncertainty) likely altered reinforcement patterns and increased escape-maintained and aggression-related behaviors (Jimenez-Gomez et al., 2021; Pelaez & Novak, 2020). In particular, coercive family dynamics may have intensified under conditions of restricted mobility, increasing the likelihood of conflict and violence in the home.

Maciel et al. (2019) emphasized that external protective contingencies—such as school attendance, workplace interactions, and legal aid access—serve as critical buffers against domestic violence. During lockdowns, these contingencies were substantially weakened or eliminated. Similarly, the literature pointed to the reduced availability of socially mediated reinforcement as a factor contributing to increased isolation and psychological distress. As such, behavior analysts have proposed interventions aimed at restoring or substituting these reinforcement sources through remote technologies (e.g., virtual support systems, teleconsultation) and through skill-based interventions such as behavioral skills training.

Luiz et al. (2021) further highlighted the relevance of investigating the role of discriminative stimuli and motivating operations in the emergence of psychological symptoms during long-term isolation. Understanding how these variables modulate behavior could facilitate the development of more precisely targeted interventions. Overall, the reviewed studies reinforced the capacity of behavior analysis to provide conceptually coherent, empirically grounded, and socially significant interpretations of psychological phenomena emerging under crisis conditions.

Because the behavioral challenges posed by the COVID-19 pandemic concern human behavior at individual, community, and institutional levels, understanding the environmental variables that promote protective actions and mitigate adverse psychological effects remains a critical scientific objective. This review contributes to that effort by systematizing the existing behavior-analytic literature on the pandemic. The thematic categorization presented in Table 2 facilitates access to relevant findings for both researchers and practitioners by organizing publications according to target populations and applied domains, such as atypical development, preventive behaviors, mental health, and domestic violence.

Limitations and Directions for Future Research

Despite its utility, the present review has a clear limitation: its scope was restricted to behavior analysis journals. While this ensures conceptual consistency and relevance to the field, it excludes important contributions published in general psychology, interdisciplinary, and public health journals. This focus may limit the visibility of potentially impactful behavior-analytic work published outside specialized outlets and underrepresents integrative or cross-disciplinary efforts. Additionally, the review was limited to publications in Portuguese and English, which may have excluded relevant research in other languages.

Future reviews should consider expanding the scope to include behavior-analytic studies published in broader psychological and interdisciplinary journals. Incorporating perspectives from other areas of psychology could enrich our understanding of how psychologists conceptualized and addressed the behavioral impacts of the COVID-19 crisis.

Furthermore, the present review revealed a relative paucity of empirical studies beyond theoretical or conceptual analyses. Although basic research during public health emergencies is inherently challenging, analog conditions can be created to simulate pandemic-related behavioral contexts—for example, through operant behavioral economics frameworks, as proposed by Luiz et al., 2021). Studies by Harman (2021) and Belisle et al. (2022) demonstrate how such research can be conducted using online survey methods to examine compliance with hypothetical public health policies.

Likewise, applied case reports documenting service adaptations (e.g., telehealth) provide valuable contributions to the development and evaluation of behavior-change technologies under real-world constraints (e.g., Awasthi et al., 2021; Belisle et al., 2021; Cameron et al., 2021; Crockett et al., 2020; Frederick et al., 2020; Jimenez-Gomez et al., 2021; Nohelty et al., 2022; Rodriguez, 2020; Root & Rehfeldt, 2021; Simmons et al., 2021; Tomaino et al., 2022; Yi & Dixon, 2021). These lines of inquiry will be essential for preparing the field to respond effectively to future public health challenges.

Conclusion

This narrative review synthesized behavior-analytic publications on the COVID-19 pandemic, with the aim of organizing existing knowledge to support both scholarly advancement and practical application. The majority of studies addressed the rapid adaptation of behavioral health services to telehealth formats and the promotion of preventive health behaviors. These emphases reflected the urgent demands placed on clinicians and researchers to sustain ethical and effective interventions during a global crisis.

The thematic analysis also revealed contributions related to general mental health, domestic violence, and conceptual frameworks for future inquiry. Collectively, these findings underscore the flexibility of behavior-analytic principles in responding to complex, real-time challenges across multiple domains. However, the review also identified a scarcity of empirical studies, particularly in basic research, and a limited integration of behavior analysis with broader psychological or public health discourses.

The insights presented here may inform the design of scalable, context-sensitive behavioral interventions in future crises. Expanding access to telehealth, leveraging culturally informed behavior-change strategies, and addressing structural barriers—such as digital exclusion and professional scarcity—will be critical. Furthermore, interdisciplinary engagement with other subfields of psychology, including community, health, and cultural-clinical psychology, may enhance both the conceptual depth and practical reach of behavior-analytic science.

Future research should explore how behavior-analytic models can be integrated with systemic approaches to improve public health outcomes in under-resourced settings. By consolidating and critically examining the field's response to COVID-19, this review contributes to building a more responsive, inclusive, and empirically grounded behavioral science.

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References

Allan, S. M., Bealey, R., Birch, J., Cushing, T., Parke, S., Sergi, G., Bloomfield, M., & Meiser-Stedman, R. (2020). The prevalence of common and stress-related mental health disorders in healthcare workers based in pandemic-affected hospitals: a rapid systematic review and meta-analysis. *European Journal of Psychotraumatology*, *11*(1). https://doi.org/10.1080/20008198.2020.1810903

Amaral, M. M., Agostini, J. M. G., & Freitas, L. C. (2023). Sintomatologia depressiva, habilidades sociais e competência acadêmica em crianças e adolescentes no contexto de retomada das aulas presenciais. *Revista Brasileira de Terapia Comportamental e Cognitiva, 25*(1). https://doi.org/10.31505/rbtcc.v25i1.1787

Amorim, V. C., Guimarães, T. M. M., De Almeida, J. A. T., Vanderlon, Y., & Abdala, M. (2020). Promoção de isolamento social na pandemia de covid-19: Considerações da análise comportamental da cultura. *Revista Brasileira de Análise Do Comportamento*, *16*(1), 31–40. https://doi.org/10.18542/rebac.v16i1.9077

Andersen, A. S., Hansen, B. A., Hathaway, K. L., & Elson, L. A. (2021). A demonstration of caregiver-implemented functional analysis of inappropriate mealtime behavior via telehealth. *Behavior Analysis in Practice, 14*, 1067–1072. https://doi.org/10.1007/s40617-021-00620-5

Andrews, M. L., Garcia, Y. A., Catagnus, R. M., & Gould, E. R. (2022). Effects of acceptance and commitment training plus behavior parent training on parental implementation of autism treatment. *The Psychological Record*, *72*(4), 601–617. https://doi.org/10.1007/s40732-022-00508-w

Araripe, N. B., Brito, A., De Sá, D. C., Ruguê, G. F. S., Machado, H. B., Bauer, J. A. T., Gonçalves Neto, J. U., Da Cruz, K. R. S., & Lacerda, L. (2019). Novos arranjos em tempos de covid-19: apoio remoto para atendimento de crianças com transtorno do espectro autista. *Revista Brasileira de Análise Do Comportamento*, *15*(2). https://doi.org/10.18542/rebac.v15i2.982

Augustin, M., Schommers, P., Stecher, M., Dewald, F., Gieselmann, L., Gruell, H., Horn, C., Vanshylla, K., Cristanziano, V. Di, Osebold, L., Roventa, M., Riaz, T., Tschernoster, N., Altmueller, J., Rose, L., Salomon, S., Priesner, V., Luers, J. C., Albus, C., … Lehmann, C. (2021). Post-COVID syndrome in non-hospitalised patients with COVID-19: A longitudinal prospective cohort study. *The Lancet Regional Health - Europe*, *6*, Article 100122. https://doi.org/10.1016/j.lanepe.2021.100122

Ávila, E. M. M., & de Matos, D. C. (2023). Efeitos do treino de habilidades comportamentais remoto em familiares de criança com transtorno do espectro autista. *Perspectivas em Análise do Comportamento, 14*(2), 001–021. https://doi.org/10.18761/paca098cda23459

Awasthi, S., Aravamudhan, S., Jagdish, A., Joshi, B., Mukherjee, P., Kalkivaya, R., Shahzad Ali, R., Nigam Srivastava, S., & Edasserykkudy, S. (2021). Transitioning ABA services from in clinic to telehealth: Case study of an Indian organization's response to covid-19 lockdown. *Behavior Analysis in Practice*, *14*, 893–912. https://doi.org/m983

Bailey, B., Sellwood, D., Rillotta, F., Raghavendra, P., & Arciuli, J. (2022). A trial of online abracadabra literacy instruction with supplementary parent-led shared book reading for children with autism. *Research in Developmental Disabilities*, *124*, Article 104198. https://doi.org/10.1016/j.ridd.2022.104198

Baron, K., Herbst, J., McNicol, M., Stephan, E., Abdel-Rasoul, M., & Wise, K. (2022). Evaluation of a remote hybrid staffing model for ambulatory clinical pharmacists in a pediatric health system during the COVID-19 pandemic. *American Journal of Health-System Pharmacy*, *79*(11), 852–859. https://doi.org/10.1093/ajhp/zxac046

Batton, B., Kaplan, R., Ellis, K., Schmidt, C., & Nudelman, E. (2022). Telehealth training in principles of applied behavior analysis for caregivers of young children with autism spectrum disorders during the COVID-19 pandemic. *Education and Treatment of Children, 45*(3), 299–303. https://doi.org/10.1007/s43494-022-00081-7

Baumes, A., Čolić, M., & Araiba, S. (2020). Comparison of telehealth-related ethics and guidelines and a checklist for ethical decision making in the midst of the covid-19 pandemic. *Behavior Analysis in Practice*, *13*(4), 736–747. https://doi.org/10.1007/s40617-020-00475-2

Belisle, J., Burke, R., Clark, L., Jepsen, R., Welch, K., Dennis, L., & Mcdonald, N. (2021). Developing remote delivery of language and cognitive training for use with children with autism: A technological report. *Behavior Analysis in Practice*, *14*, 434–444. https://doi.org/10.1007/s40617-020-00522-y

Belisle, J., Paliliunas, D., Sickman, E., Janota, T., & Lauer, T. (2022). Probability discounting in college students' willingness to isolate during covid-19: implications for behavior analysis and public health. *Psychological Record*, *72*(4), 713–725. https://doi.org/10.1007/s40732-022-00523-0

Bergmann, S., Toussaint, K. A., Niland, H., Sansing, E. M., Armshaw, G., & Baltazar, M. (2021). *Adapting direct services for telehealth: A practical tutorial. Behavior Analysis in Practice, 14*(4), 1010–1046. https://doi.org/10.1007/s40617-021-00639-8

Berkley, S. (2020). COVID-19 needs a big science approach. *Science*, *367*(6485), 1407–1407. https://doi.org/10.1126/science.abb8028

Bondy, A., Horton, C., & Frost, L. (2020). Promoting functional communication within the home. *Behavior Analysis in Practice*, *13*(2), 321–328. https://doi.org/10.1007/s40617-020-00432-0

Borloti, E., Haydu, V. B., Kienen, N., & Zacarin, M. R. J. (2020). Saúde mental e intervenções psicológicas durante a pandemia da covid-19: um panorama. *Revista Brasileira de Análise Do Comportamento*, *16*(1). https://doi.org/10.18542/rebac.v16i1.989

Britwum, K., Catrone, R., Smith, G. D., & Koch, D. S. (2020). A university-based social services parent-training model: A telehealth adaptation during the COVID-19 pandemic. *Behavior Analysis in Practice, 13*(3), 532–542. https://doi.org/10.1007/s40617-020-00450-x

Cameron, M. J., Moore, T., Bogran, C., & Leidt, A. (2021). Telehealth for family guidance: acceptance and commitment therapy, parent-focused preference assessment, and activity-based instruction for the support of children with autism spectrum disorder and their families. *Behavior Analysis in Practice*, *14*(4), 1128–1134. https://doi.org/10.1007/s40617-021-00643-0

Canovas, D. D. S., Da Cruz, M. T. M., & De Andrade, M. A. C. (2019). Serviço em aba para indivíduos com TEA: continuar o serviço presencial em tempos de covid-19? *Revista Brasileira de Análise do Comportamento*, *15*(2). https://doi.org/10.18542/rebac.v15i2.99c

Carneiro, A. C. da C., Brassolatti, I. M., Nunes, L. F. S., Damasceno, F. C. A., & Cortez, M. D. (2020). Ensino de pais via telessaúde para a implementação de procedimentos baseados em aba: Uma revisão de literatura e recomendações em tempos de covid-19. *Revista Brasileira de Análise do Comportamento*, *16*(2). https://doi.org/10.18542/rebac.v16i2.9608

Castro, R. M. L. de, Costa, M. R. C., Melo e Silva, Á. J., Souza, C. B. A. de, & Barros, R. D. S. (2020). Vídeos para instrução remota de cuidadores de crianças com desenvolvimento atípico durante a pandemia de COVID-19. *Revista Brasileira de Análise do Comportamento*, *16*(2). https://doi.org/10.18542/rebac.v16i2.99f

Cleffi, C., Su, W.-C., Srinivasan, S., & Bhat, A. (2022). Using telehealth to conduct family-centered, movement intervention research in children with autism spectrum disorder during the covid-19 pandemic. *Pediatric Physical Therapy*, *34*(2), 246–251. https://doi.org/10.1097/PEP.0000000000000880

Clemente-Suárez, V. J., Navarro-Jiménez, E., Moreno-Luna, L., Saavedra-Serrano, M. C., Jimenez, M., Simón, J. A., & Tornero-Aguilera, J. F. (2021). The impact of the covid-19 pandemic on social, health, and economy. *Sustainability*, *13*(11), Article 6314. https://doi.org/10.3390/su13116314

Colombo, R. A., Wallace, M., & Taylor, R. (2020). An essential service decision model for ABA providers during crisis. *Behavior Analysis in Practice, 13*(2), 306–311. https://doi.org/10.1007/s40617-020-00432-z

Confer, S. V., Diller, J. W., & Danforth, J. S. (2021). A behavior-analytic approach to antivaccination practices. *Behavior and Social Issues*, *30*(1), 648–665. https://doi.org/10.1007/s42822-021-00050-6

Coon, J. C., Bush, H., & Rapp, J. T. (2022). Eight months of telehealth for a state-funded project in foster care and related services: Progress made and lessons learned. *Behavior Analysis in Practice, 15*(4), 1348–1360. https://doi.org/10.1007/s40617-022-00682-z

Costa, M. R. C., & De Souza, C. B. A. (2019). Tutorial: Construção de vídeos para orientar cuidadores na implementação de intervenções analítico-comportamentais a indivíduos com transtorno do espectro autista. *Revista Brasileira de Análise do Comportamento*, *15*(2). https://doi.org/10.18542/rebac.v15i2.99g

Coyne, L. W., Gould, E. R., Grimaldi, M., Wilson, K. G., Baffuto, G., & Biglan, A. (2020). First things first: Parent psychological flexibility and self-compassion during COVID-19. *Behavior Analysis in Practice*, *14*(4), 1092–1098. https://doi.org/10.1007/s40617-020-00435-w

Cox, D. J., Plavnick, J. B., & Brodhead, M. T. (2020). A proposed process for risk mitigation during the COVID-19 pandemic. Behavior Analysis in Practice, 13(2), 299–305. https://doi.org/10.1007/s40617-020-00430-1

Crockett, J. L., Becraft, J. L., Phillips, S. T., Wakeman, M., & Cataldo, M. F. (2020). *Rapid conversion from clinic to telehealth behavioral services during the covid-19 pandemic. Behavior Analysis in Practice, 13*(4), 725–735. https://doi.org/10.1007/s40617-020-00499-8

Cruz, C. H. de B. (2020). Social distancing in São Paulo State: Demonstrating the reduction in cases using time series analysis of deaths due to COVID-19. *Revista Brasileira de Epidemiologia*, *23*. https://doi.org/10.1590/1980-549720200056

de-Farias, A. N., Isidro, H. B. T. M., Pereira, H. C. F., Oliveira, R. C. R., Lacerda, T. L., Mesquita, R. C., Silva, J. F., Siqueira, K. G. A., Souza, L. D., & Moreira, B. L. (2023). Mental health in the post-pandemic world: Analytical-behavioral considerations for a multiprofessional intervention. In A. R. Fonseca Júnior, L. F. Kirchner, & C. A. A. da Rocha (Eds.), *Comportamento em foco* (pp. 68–83). Associação Brasileira de Ciências do Comportamento.

Dubuque, E. M., Yingling, M. E., Ranade, E. S., & Dubuque, M. L. (2020). Creating an automated health attestation system during the COVID-19 pandemic with Microsoft 365. *Behavior Analysis in Practice, 13*(4), 799–810. https://doi.org/10.1007/s40617-020-00495-y

Dubuque, E. M., Franklin, B., Pritchard, J. K., & Webb, T. (2021). Creating an automated health attestation system during the COVID-19 global pandemic using Google's G Suite. *Behavior Analysis in Practice*, *14*(4), 1058–1066. https://doi.org/10.1007/s40617-020-00545-5

Elbay, R. Y., Kurtulmuş, A., Arpacıoğlu, S., & Karadere, E. (2020). Depression, anxiety, stress levels of physicians and associated factors in Covid-19 pandemics. *Psychiatry Research*, *290*, Article 113130. https://doi.org/10.1016/j.psychres.2020.113130

Erath, T. G., & DiGennaro Reed, F. D. (2022). Technology-based contingency management for walking to prevent prolonged periods of workday sitting. *Journal of Applied Behavior Analysis*, *55*(3), 746–762. https://doi.org/10.1002/jaba.917

Espinosa, F., Metko, A., Raimondi, M., Impenna, M., & Scognamiglio, E. (2020). A model of support for families of children with autism living in the covid-19 lockdown: lessons from Italy. *Behavior Analysis in Practice*, *13*(3), 550–558. https://doi.org/10.1007/s40617-020-00487-y

Fairlie, R., & Loyalka, P. (2020). Schooling and COVID-19: lessons from recent research on EdTech. *Npj Science of Learning*, *5*(1), Article 13. https://doi.org/10.1038/s41539-020-00072-6

Flaxman, S., Mishra, S., Gandy, A., Unwin, H. J. T., Mellan, T. A., Coupland, H., Whittaker, C., Zhu, H., Berah, T., Eaton, J. W., Monod, M., Perez-Guzman, P. N., Schmit, N., Cilloni, L., Ainslie, K. E. C., Baguelin, M., Boonyasiri, A., Boyd, O., Cattarino, L., … Bhatt, S. (2020). Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe. *Nature*, *584*(7820), 257–261. https://doi.org/10.1038/s41586-020-2405-7

Frank-Crawford, M. A., Hallgren, M. M., Mckenzie, A., Gregory, M. K., Wright, M. E., & Wachtel, L. E. (2021). *Mask compliance training for individuals with intellectual and developmental disabilities*. *Behavior Analysis in Practice, 14*(4), 883–892. https://doi.org/10.1007/s40617-021-00641-2

Frederick, J. K., Raabe, G. R., Rogers, V. R., & Pizzica, J. (2020). Advocacy, collaboration, and intervention: a model of distance special education support services amid covid-19. *Behavior Analysis in Practice*, *13*(4), 748–756. https://doi.org/10.1007/s40617-020-00487-y

Frederick, J. K., Rogers, V. R., & Raabe, G. R. (2022). Commitment, collaboration, and problem resolution to promote and sustain access to multifaceted applied behavior-analytic services utilizing telepractice. *Behavior Analysis in Practice*, *15*, 347–369. https://doi.org/10.1007/s40617-020-00550-8

Fronapfel, B. H., & Demchak, M. (2020). School's out for covid-19: 50 ways bcba trainees in special education settings can accrue independent fieldwork experience hours during the pandemic. *Behavior Analysis in Practice*, *13*(2), 312–320. https://doi.org/10.1007/s40617-020-00434-x

Gingles, D. (2022). Center the margin: Equity-based assessment and response strategies to reach underserved communities using a telehealth service delivery model. *Behavior Analysis in Practice, 15*(3), 981–985. https://doi.org/10.1007/s40617-022-00685-w

Gotti, E. S., Argondizzi, J. G. F., Silva, V. S., De Oliveira, E. A., & Banaco, R. A. (2019). O uso de nudges para higienização das mãos como estratégia mitigatória comunitária diante da pandemia de covid-19. *Revista Brasileira de Análise Do Comportamento*, *15*(2). https://doi.org/10.18542/rebac.v15i2.99p

Haddad, T. C., Blegen, R. N., Prigge, J. E., Cox, D. L., Anthony, G. S., Leak, M. A., Channer, D. D., Underwood, P. Y., Williams, R. D., Hofschulte, R. D., Christopherson, L. A., Coffey, J. D., TerKonda, S. P., Yiannias, J. A., Costello, B. A., Russi, C. S., Colby, C. E., Ommen, S. R., & Demaerschalk, B. M. (2021). A scalable framework for telehealth: the mayo clinic center for connected care response to the covid-19 pandemic. *Telemedicine Reports*, *2*(1), 78–87. https://doi.org/10.1089/tmr.2021.0006

Harman, M. J. (2021). The effects of time framing on compliance to hypothetical social-distancing policies related to covid-19. *Behavior and Social Issues*, *30*(1), 632–647. https://doi.org/pphw

Heinicke, M. R., Stiede, J. T., Miltenberger, R. G., & Woods, D. W. (2020). Reducing risky behavior with habit reversal: A review of behavioral strategies to reduce habitual hand-to-head behavior. *Journal of Applied Behavior Analysis*, *53*(3), 1225–1236. https://doi.org/10.1002/jaba.743

Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry Research*, *288*, Article 112954. https://doi.org/10.1016/j.psychres.2020.112954

Jimenez-Gomez, C., Sawhney, G., & Albert, K. M. (2021). Impact of covid-19 on the applied behavior analysis workforce: Comparison across remote and nonremote workers. *Behavior Analysis in Practice, 14,* 873–882. https://doi.org/10.1007/s40617-021-00640-3

Kanfer, F. H., & Grimm, L. G. (1977). Behavioral Analysis: Selecting target behaviors in the interview. *Behavior Modification*, *1*(1), 7–28. https://doi.org/10.1177/014544557711001

King, E. K., Harrell, A. R., & Richling, S. M. (2020). Best practices: Caregiver training resources derived from remote behavioral service delivery within the foster care system. *Behavior Analysis in Practice, 13*, 527–531. https://doi.org/10.1007/s40617-020-00436-9

Kornack, J., Williams, A. L., Johnson, K. A., & Mendes, E. M. (2020). Reopening the doors to center-based ABA services: Clinical and safety protocols during COVID-19. *Behavior Analysis in Practice, 13*(3), 543–549. https://doi.org/10.1007/s40617-020-00462-7

Kuroda, T. (2020). Behavior is quantifiable, predictable, and controllable. *2020 IEEE 2nd Global Conference on Life Sciences and Technologies (LifeTech)*, 370–372. https://doi.org/10.1109/LifeTech48969.2020.1570619080

LeBlanc, L. A., Lazo-Pearson, J. F., Pollard, J. S., & Unumb, L. S. (2020). The role of compassion and ethics in decision making regarding access to applied behavior analysis services during the COVID-19 crisis: A response to Cox, Plavnick, and Brodhead. *Behavior Analysis in Practice, 13*(3), 604–608. https://doi.org/10.1007/s40617-020-00446-7

Li, C., Zhao, W., He, C., Wu, D., Yue, Y., & Chen, Y. (2020). COVID-19 prevention and control strategies for psychiatric hospitals. *Psychiatry Research*, *289*, Article 112935. https://doi.org/10.1016/j.psychres.2020.112935

Luiz, A., Tsutsumi, M. M. A., & Costa, C. E. (2020). Uma breve análise de fatores de custo da resposta e do uso de equipamentos de segurança para prevenir a transmissão do COVID-19. *Revista Brasileira de Análise Do Comportamento*, *16*(2). https://doi.org/10.18542/rebac.v16i2.99t

Luiz, A., Santos, J. R., Cabeças, G. C., Costa, C. E., Holanda, A. O., Luque, P., & Tsutsumi, M. M. A. (2021). Contributions of the operant behavioral economics to pandemic situations: A research proposal. In A. R. Fonseca Júnior, L. F. Kirchner, & C. A. A. da Rocha (Eds.), *Comportamento em foco* (Vol. 3, pp. 59–70). Associação Brasileira de Ciências do Comportamento.

Maciel, M. A. L., Silva, M. A. M., & Oliveira, M. A. (2019). Violência doméstica (contra a mulher) no Brasil em tempos de pandemia. *Revista Brasileira de Análise do Comportamento, 15*(2), 140–146. https://doi.org/10.18542/rebac.v15i2.8765

Marques, N. S., & de Almeida, J. A. T. (2021). Brazilian presidential pronouncements in the pandemic: effectiveness in crisis communication and rule properties. *Behavior and Social Issues*, *30*(1), 428–445. https://doi.org/10.1007/s42822-021-00064-0

Mattson, S. L., Higbee, T. S., Aguilar, J., Nichols, B., Campbell, V. E., Nix, L. D., Reinert, K. S., Peck, S., & Lewis, K. (2020). Creating and sharing digital aba instructional activities: a practical tutorial. *Behavior Analysis in Practice*, *13*(4), 772–798. https://doi.org/10.1007/s40617-020-00440-z

Meng, H., Xu, Y., Dai, J., Zhang, Y., Liu, B., & Yang, H. (2020). Analyze the psychological impact of COVID-19 among the elderly population in China and make corresponding suggestions. *Psychiatry Research*, *289*, Article 112983. https://doi.org/10.1016/j.psychres.2020.112983

Moran, D. J., & Ming, S. (2022). The mindful action plan: using the map to apply acceptance and commitment therapy to productivity and self-compassion for behavior analysts. *Behavior Analysis in Practice*, *15*(1), 330–338. https://doi.org/10.1007/s40617-021-00660-x

Ninci, J., Čolić, M., Hogan, A., Taylor, G., Bristol, R., & Burris, J. (2021). Maintaining effective supervision systems for trainees pursuing a behavior analyst certification board certification during the covid-19 pandemic. *Behavior Analysis in Practice*, 1047–1057. https://doi.org/10.1007/s40617-021-00565-9

Nohelty, K., Bradford, C. B., Hirschfeld, L., Miyake, C., & Novack, M. N. (2022). Effectiveness of telehealth direct therapy for individuals with autism spectrum disorder. *Behavior Analysis in Practice*, *15*(3), 643–658. https://doi.org/m99x

Nohelty, K., Hirschfeld, L., & Miyake, C. J. (2021). A measure for supporting implementation of telehealth direct therapy with treatment integrity. *Behavior Analysis in Practice*, *15*, 422–433. https://doi.org/10.1007/s40617-020-00543-7

Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry*, *42*(3), 232–235. https://doi.org/10.1590/1516-4446-2020-0008

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 71*. https://doi.org/10.1136/bmj.n71

Pelaez, M., & Novak, G. (2020). Returning to school: Separation problems and anxiety in the age of pandemics. *Behavior Analysis in Practice*, *13*(3), 521–526. https://doi.org/10.1007/s40617-020-00467-2

Pollock, A., Campbell, P., Cheyne, J., Cowie, J., Davis, B., McCallum, J., McGill, K., Elders, A., Hagen, S., McClurg, D., Torrens, C., & Maxwell, M. (2020). Interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemic: A mixed methods systematic review. *Cochrane Database of Systematic Reviews*, *2020*(11). https://doi.org/10.1002/14651858.CD013779

Ponce, D. (2020). The impact of coronavirus in Brazil: politics and the pandemic. *Nature Reviews Nephrology*, *16*(9), 483–483. https://doi.org/10.1038/s41581-020-0327-0

Prem, K., Liu, Y., Russell, T. W., Kucharski, A. J., Eggo, R. M., Davies, N., Jit, M., Klepac, P., Flasche, S., Clifford, S., Pearson, C. A. B., Munday, J. D., Abbott, S., Gibbs, H., Rosello, A., Quilty, B. J., Jombart, T., Sun, F., Diamond, C., … Hellewell, J. (2020). The effect of control strategies to reduce social mixing on outcomes of the COVID-19 epidemic in Wuhan, China: A modelling study. *The Lancet Public Health*, *5*(5), e261–e270. https://doi.org/10.1016/S2468-2667(20)30073-6

Ramírez-Cruz, J. C., Santana-Cárdenas, S., Franco-Paredes, K., & Javier-Juárez, S. P. (2023). Activación conductual para mujeres mexicanas víctimas de violencia durante la pandemia de covid-19: un estudio piloto no aleatorizado. *Revista Brasileira de Terapia Comportamental e Cognitiva, 25*, 1–23. https://doi.org/10.31505/rbtcc.v25i1.1811

Rocha, C. A. A., & Hunziker, M. H. L. (2023). Considerações sobre o papel das ciências comportamentais nas políticas de enfrentamento à Covid-19. *Revista Brasileira de Terapia Comportamental e Cognitiva, 25*, 1–21. https://doi.org/10.31505/rbtcc.v25i1.1781

Rodriguez, K. A. (2020). Maintaining treatment integrity in the face of crisis: A treatment selection model for transitioning direct aba services to telehealth. *Behavior Analysis in Practice*, *13*(2), 291–298. https://doi.org/10.1007/s40617-020-00429-8

Root, W. B., & Rehfeldt, R. A. (2021). Towards a modern-day teaching machine: The synthesis of programmed instruction and online education. *Psychological Record*, *71*(1), 85–94. https://doi.org/10.1007/s40732-020-00432-z

Sampaio, A. A., & Haydu, V. B. (2023). Cultural milieu and group-rules in an elaborated account of metacontingencies: Conceptual analysis and an illustration in a COVID-19 psychological support project. *Behavior and Social Issues, 32*(1), 115–133. https://doi.org/10.1007/s42822-023-00126-5

Schieltz, K. M., & Wacker, D. P. (2020). Functional assessment and function-based treatment delivered via telehealth: A brief summary. *Journal of Applied Behavior Analysis*, *53*(3), 1242–1258. https://doi.org/10.1002/jaba.742

Schiffer, A. M. (2020). Controlling COVID-19. *Nature Human Behaviour*, *4*(5), Article 450. https://doi.org/10.1038/s41562-020-0869-y

Serrano-Ripoll, M. J., Meneses-Echavez, J. F., Ricci-Cabello, I., Fraile-Navarro, D., Fiol-deRoque, M. A., Pastor-Moreno, G., Castro, A., Ruiz-Pérez, I., Zamanillo Campos, R., & Gonçalves-Bradley, D. C. (2020). Impact of viral epidemic outbreaks on mental health of healthcare workers: A rapid systematic review and meta-analysis. *Journal of Affective Disorders*, *277*, 347–357. https://doi.org/10.1016/j.jad.2020.08.034

Shawler, L. A., & Blair, B. J. (2021). A proposed functional analysis of transmission prevention behaviors for a respiratory virus (SARS-CoV-2). *Behavior and Social Issues*, *30*(1), 666–691. https://doi.org/10.1007/s42822-021-00066-w

Simmons, C. A., Ford, K. R., Salvatore, G. L., & Moretti, A. E. (2021). Acceptability and feasibility of virtual behavior analysis supervision. *Behavior Analysis in Practice*, *14*, 927–943. https://doi.org/10.1007/s40617-021-00645-w

Skinner, B. F. (1938). *The behavior of organisms: An experimental analysis*. Appleton-Century-Crofts.

Skinner, B. F. (1984). The operational analysis of psychological terms. *Behavioral and Brain Sciences, 7*(4), 547–553. https://doi.org/10.1017/S0140525X00027187

Starkey, L., Shonfeld, M., Prestridge, S., & Cervera, M. G. (2021). Special issue: Covid-19 and the role of technology and pedagogy on school education during a pandemic. *Technology, Pedagogy and Education*, *30*(1), 1–5. https://doi.org/10.1080/1475939X.2021.1867585

Szabo, T. G., Richling, S., Embry, D. D., Biglan, A., & Wilson, K. G. (2020). From helpless to hero: promoting values-based behavior and positive family interaction in the midst of covid-19. *Behavior Analysis in Practice*, *13*(3), 568–576. https://doi.org/10.1007/s40617-020-00431-0

Tarbox, C. M., Silverman, E. A., Chastain, A. N., Little, A., Bermudez, T. L., & Tarbox, J. (2021). Taking ACTion: 18 simple strategies for supporting children with autism during the covid-19 pandemic. *Behavior Analysis in Practice*, *14*(4), 1099–1127. https://doi.org/10.1007/s40617-021-00596-2

Tomaino, A. E. M., Greenberg, A. L., Ann Kagawa-Purohit, S., Doering, S. A., & Steven Miguel, E. (2022). An assessment of the feasibility and effectiveness of distance learning for students with severe developmental disabilities and high behavioral needs. *Behavior analysis in practice, 15*(1), 243–259. https://doi.org/10.1007/s40617-021-00659-4

Vascelli, L., & Berardo, F. (2022). Video self-modeling for a student with Dravet syndrome: An intervention involving parents during the COVID-19 pandemic in Italy. *Education and Treatment of Children, 45*(1), 129–133. https://doi.org/10.1007/s43494-021-00063-1

Wang, H., Xia, Q., Xiong, Z., Li, Z., Xiang, W., Yuan, Y., Liu, Y., & Li, Z. (2020). The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID-19) epidemic in the general mainland Chinese population: A web-based survey. *PLOS ONE, 15*(5), Article e0233410. https://doi.org/10.1371/journal.pone.0233410

World Health Organization. (2020). *Contact droplet COVID-19 precautions*. https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/infection-prevention-and-control/contact-droplet-covid-19-precautions.pdf?sfvrsn=74c1a87c_2

Yi, Z., & Dixon, M. R. (2021). Developing and enhancing adherence to a telehealth aba parent training curriculum for caregivers of children with autism. *Behavior Analysis in Practice*, *14*(1), 58–74. https://doi.org/10.1007/s40617-020-00536-6

Zoder-Martell, K. A., Markelz, A. M., Floress, M. T., Skriba, H. A., & Sayyah, L. E. N. (2020). Technology to facilitate telehealth in applied behavior analysis. *Behavior Analysis in Practice*, *13*(3), 596–603. https://doi.org/10.1007/s40617-020-00449-4