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Collaboration, Compassion, & Communication within Applied Behavior Analysis

A Capstone
by
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Submitted to the Faculty of the Department of Health Professions
at Rollins College in Partial Fulfillment
of the Requirements for the Degree of

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Abstract

The reputation of behavior analysis can no longer be dismissed by behavior analysts. Appropriate dissemination, marketing, communication, and use of scientific terminology with caregivers, practitioners, and the public play a vital role in ensuring improvement of this reputation. Learning these skills and incorporating them into trainings so behavior analysts can utilize the gained knowledge into practice. Acknowledging the history of behavior analysis and the reputation it produced, collaborating with professionals, marketing behavior analysis appropriately, and the importance of behavior jargon can be done with further research and understanding of how to implement all of these in daily practice.

Keywords: communication, dissemination, jargon, marketing, reputation

Collaboration, Compassion, & Communication within Applied Behavior Analysis

The perception of behavior analysis is a highly discussed topic in the field (Dickerson et al., 2014). Negative perceptions of behavior analysis present many barriers to achieving and disseminating the knowledge and behavior expertise that practitioners can provide. People have become increasingly aware of clinical practice in behavior analysis with the rise of social media, awareness of autism diagnoses and characteristics, educational materials, and professional materials (Arntzen et al., 2010). Unfortunately for behavior analysis, practitioners often have a reputation for being difficult to communicate with and tend to be considered abrasive, harsh, and generally unpleasant, which is concerning for many in the field (Critchfield et al., 2017). Because of this, positive interpersonal interactions with practitioners, teachers, parents, and other community members that behavior analysts may encounter play a vital role in appropriate dissemination and building a more favorable reputation.

Unfortunately, training in interpersonal interactions for behavior analysts is generally deficient. Taylor, LeBlanc, and Nosik (2018) conducted a survey given to behavior analysts to gain an understanding of training in graduate programs of soft skills and establishing compassion and empathy when interacting with caregivers. The results of the study revealed that 82% of respondents feel unprepared and unaware of how to respond when engaging with family members and potentially emotional responses. Of the respondents, only 45% stated that they received training in their graduate programs on this topic, and most stated that they pursued professional development activities on the topic outside of their work and schooling.

One important area of interpersonal communication is collaboration with other professionals involved in client care. Collaborating more effectively with other disciplines is imperative to effective treatment success. This isn't an issue unique to behavior analysis; all healthcare-based sciences have a specific way of communicating both within their field and

between fields in multidisciplinary practice. However, as an empirically supported practice that often uses graphs and data to describe our methods and effects, behavior analysis can be incredibly daunting for parents and other practitioners.

Collaboration can be defined explicitly as the sharing of information regarding a treatment plan of an individual with other team members (Boyer & Thompson, 2013). For example, as stated by LaFrance et al. (2019), collaboration must involve the capacity and learned skill of actively listening to practitioners, engaging in dialogue, and ensuring that another individual's point of view is being considered and valued. Collaboration has been defined across contexts and research and can be a very broad definition among practitioners. As stated in Brodhead, Cox, & Quigley (2018), it involves individuals of other disciplines working together towards a shared goal for a mutual objective. This was further supported in Kelly and Tincani (2013) who provided the definition of collaboration of professionals working together by sharing ideas, resources, skills, and responsibilities. As pointed out, effective collaboration must involve clear objectives, defined goals, and open and honest feedback across settings. Collaboration is a learned behavior that can be interpreted into scopes of practice across professions to gain cooperation within treatment goals.

Compassionate collaboration is a vital aspect of effective treatment, yet it fails to be a priority for practitioners in practice. Rohrer et al., (2021) stated that the ability to navigate interpersonal situations for both behavior analysts and non-behavior analysts hinges on our ability to do so with compassion and humanity. Making practitioners in other disciplines and caregivers feel validated while simultaneously allowing room for transparency and vulnerability are key in establishing the humanity and compassion of behavior analysts. Communicating with care and sensitivity to other practitioners are also key to the integrity of treatment implementation, therefore ensuring the best possible care for the client receiving services. Taylor, LeBlanc, and Nosik (2018) describe that a behavior analyst's ability to

engage with empathy and compassion, as well as establish rapport with a family, are critical to the repertoire of a successful BCBA. This attributes to the possibility of a positive impact on the family which would lead to improved treatment outcomes and adherence. Using these skills with caregivers and practitioners reduces the possibility that there will be a negative impact on treatment due to caregiver mistrust.

In addition to being compassionate in practice, behavior analysts should be mindful of the words they use when communicating. How a behavior analyst discusses the field and treatment with others must be individualized based on with whom they are communicating. Ethically, behavior analysts should make services understandable for all. For example, behavior analysts must “involve the client in the planning of and consent for behavior-change programs” (BACB Code of Ethics 4.02, p. 12) and “use language that is fully understandable to the recipients of those services” (BACB Code of Ethics 1.05[b], p. 5). Unfortunately, counter to these ethical obligations, “feedback deafness” is prevalent within our field due to some behavior analysts’ inability to adjust their verbal practice to an extent where others can understand (Critchfield et al., 2017).

Negative perceptions within behavior analysis could be due to the specific scientific terminology that is spoken within the field and how it portrays itself to others. Our communication must be receptive to feedback and adjusted based on the consumer to gain social validity. Specifically, when practitioners are communicating with service recipients, behavior analysts should be sensitive to the recipient responses and avoid using technical jargon. For example, Foxx (1996) described misperceptions centering on the term extinction. Since the definition of extinction among the public involves the permanent disappearance of a species from Earth, behavior analysts’ use of this term can be quite jarring and even alarming for parents or other practitioners (Critchfield et al., 2017). This connotation of words can cause the negative perception based upon misunderstanding of the field.

Another important piece of communication for a well-rounded behavior analyst is cultural awareness. Cultural awareness can be specifically defined as the maintenance of interpersonal stances with relation and respect to another person (Wright, 2019). Fong et al. (2016) explained how to develop a capacity for cultural awareness. Behavior analysts are constantly being exposed to different cultures, which requires competency in adjusting their practice to these cultures. Practitioners must remain sensitive to cultural differences and adjust the resources used throughout treatment. Behavior analysts must learn how to be culturally unbiased and to provide socially appropriate services dependent upon the contingent cultures and characteristics of families encountered (Fong et al., 2016). Social awareness of competency and scope of practice in behavior analysis can lead to better communication within the field and similar client-focused therapies.

Cultural humility, leading with compassion, and allowing choice of all involves are fundamental principles to family centered care as discussed in (Rohrer et al., 2021). Prioritizing these principles in a treatment plan leads to ethical and individualized treatment. This can be exemplified as leading with compassion, having empathy with the way caregivers may be feeling, and respecting any cultural or religious background to allow for the caregiver to feel most comfortable with the behavior analyst and be receptive to our treatment goals. In order to gain rapport with the parent, a level of understanding must be established between how you speak to them and filter your jargon to acknowledge their concerns and background.

Beyond client-directed communication, these guidelines also apply in a different way when speaking to other highly trained professionals and service providers. Behavior analysis must emphasize marketing the potential of our services and how they can combine with others (e.g., speech skills, play skills, habilitation) to lead to progress within the field. Promoting our technology and scientific principles held within behavior analysis and the

methods we promote can lead to a higher receptiveness to our behavior analytic approach (Bailey, 1991). As professionals who practice behavior analysis, it is our job to ensure that it survives across platforms and succeeds. Behavior analysts must be trained on how to consider other practitioners and their language, as well as how to have the soft skills to ensure cooperation with combining our treatments. In order to gain this cooperation, behavior analysts must recognize how to show practitioners how valuable our procedures can be in their terms (Foxy, 1996).

Further, behavior analysts have been known to be aware of how they are perceived by the public, and for a good reason has concerned some, as the reputation of this field is not a good one (Critchfield et al., 2017). Lack of efforts to disseminate can create roadblocks to fulfilling our ethical responsibilities. The ability to collaborate and appropriately disseminate the field to the general public is not a skill many behavior analysts have been taught. Hostile environments are commonly created when attempting to disseminate and can lead to communication breakdowns, strained professional relationships, and complex issues that can damage not only our credibility with colleagues but also clients and the clinical outcomes of their progress (Slim & Reuter-Yuill, 2021). However, a transdisciplinary model of how to collaborate and create individualized approaches for collaborating and appropriate verbal language skills creates an opportunity for ample communication within the field and abilities to allow for ethical treatment.

Parents and practitioners alike select behavior analysts with whom they feel socially comfortable (Critchfield, 2017). Within the rise of behavior analysis, we must as a field ensure utilization of resources and education available to disseminate appropriately and make the field understood. Unfortunately, behavior analysis is commonly misunderstood, and caregivers often need to be informed on just precisely what the science consists of. Tackling what these downfalls of the science are specifically, whether it be jargon or lack of

compassionate soft skills, is vital to the ethical requirement we are held to as behavior analysts to encourage the science to be able to sustain the success it is capable of. Behavior analysts must prioritize the adjustment of their current interactions and correct bad practices, such as poor cultural competence, overly technical jargon, lack of marketing and dissemination, and having a dispassionate approach to the science.

The purpose of this paper is to further elaborate how to modify the terminology we use depending on to whom we are communicating while also disseminating behavior analysis, when possible, to aid in restoring our reputation. Recognizing our behavioral jargon and modifying when necessary while discussing treatment plans with both practitioners in other disciplines and caregivers alike is vital for appropriate collaboration and ethical treatment; therefore, addressing this issue and improving true collaboration is necessary for ethical practice.

History of Behavior Analysis and Reputation

The Reputation of Behavior Analysis

Behavior analysis has a problematic history that practitioners often overlook and push away with a dismissive statement that it has evolved into a new science (Milton et al., 2021). Although this perspective is accurate, there is an importance to acknowledging the history and providing proof that the field has and continues to change and develop. Anderson and Shirako (2008) state that reputation and the perception of a person, or in our case, field, is due to a learning history of behavior the public has formed. As practitioners, we must understand the link between behavior and reputation individually and familiarize ourselves with how to discuss this false perception with others.

A common criticism of behavior analysis spread by some self-advocates is that ABA tries to make kids with autism fit within neurotypical standards. When behavior analysis was first applied to clinical practice with autistic individuals, a model was followed of a “perfect

way to be,” which is acknowledged by Dr. Lord within the Child Mind Institute (Lord, 2023). However, the approach has evolved to a more individualized way of assisting the child in focusing on individual strengths and allowing them to participate in society in a manner that they are comfortable with and have choices in how they do so (Milton et al., 2021).

Behavior analysis has taken on a new role in how interventions are implemented based on the reputation we have received and adjusted based on feedback from recipients of services. Analysts consistently analyze behavior and environmental interactions by the moment, adjusting behavior protocols consistently (Shook et al., 2004). Intervention goals often focus on individualized reinforcement and early intervention programs such as expressive and receptive language, imitation and matching skills, and early social skills that the individual may be struggling with (Leaf et al. 2015). These interventions have also adopted the term incidental teaching (Fenske et al., 2001).

LeBlanc (2006) states that this form of teaching focuses on increasing spontaneous language and the stimuli that evoke the response based upon the child-selected reinforcers. These teaching moments lead to immediate contact with preferred items and/or environments, all within a naturalistic setting, allowing the child to feel in control of their day. This type of learning strategy is becoming more commonly interspersed within the field of behavior analysis and intervention programs, which is the opposite of what is conceptualized by those outside of the field to be.

Defining the problem and our ethical requirement

Defining the reputation and change required can be targeted at teaching the history of behavior analysis in graduate programs. Most programs do not require in-depth discussion on this topic, resulting in practitioners being uncomfortable discussing it and failing to advocate for behavior analysis as a science, making it progressive (Leaf et al., 2015). Lack of preparation of practitioners to respond appropriately to the discourse and problematic outlook

of behavior analysis have led to the discourse and problematic outlook of behavior analysis by the public.

For example, a lack of learning history within a behavior analyst's repertoire has led to short, quick responses when asked what we do in these situations. Analysts often paraphrase responses from saying something such as, "I apply the natural science of behavior to systematically manipulate the environment to improve the lives of others" to an easier and quicker response (e.g., "I work with kids")." This presents the importance of teaching how to respond to statements in an appropriate manner without misrepresenting behavior analysis in some way. Schlinger Jr. (2014) states that most misrepresentations are in lay language and require a strong verbal repertoire to correct this misconception appropriately. Anderson & Shirako (2008) studied the correlation between behavior and social connectedness in predicting reputation. The results of their study found that individuals who behaved in a more cooperative way were more likely to be perceived in a positive light. In contrast, those who behaved selfishly were not held as respected or trusted.

Language and responding to misconceptions

Shaping a behavior analyst's response to be flexible based upon the audience is imperative to the receptiveness of our science. According to the Association of Professional Behavior Analysts, "ABA involves using scientific principles and procedures discovered through basic and applied research to improve socially significant behavior to a meaningful degree" (APBA, p.1). Although this definition greatly describes the field of behavior analysis, it does not represent the field in a way all can understand. It is up to the analyst to tailor their response based on the audience who is asking.

According to Critchfield et al. (2017), what you are saying to someone holds more value in the delivery of how it is translated to the individual rather than the content of the statement. Prioritizing filtering behavioral jargon during this time is a crucial aspect of

appropriate dissemination. Critchfield et al. (2017) stated that most nonprofessionals view our language as harsh and abrasive. Focusing on a filtered and “politically correct” delivery when explaining behavior analysis could increase receptiveness and understanding. A better way to describe the work of a typical clinical behavior practitioner might be “I help kids who need extra support to learn how to communicate and live as independently as possible by adjusting the environment around them and providing reinforcement for any approximation of the goals they are trying to achieve based on recorded data and empirically supported interventions.

Moving forward with change

Disseminating the positive attributes field appropriately is one of the more crucial components of appropriate change within the field. It is important for behavior analysts and other professionals to continue to conduct research and share findings that support the effectiveness of behavior therapy. Doing so can help to improve public perception of the field, increase access to services, and ultimately improve outcomes for individuals with autism and other developmental disabilities.

As an example of the positive impacts of behavior analysis, one study conducted by the National Institute of Health in 1999, showed that behavior therapy can significantly improve the lives of children with autism (Rogers & Vismara, 2008). After two years of intensive behavior therapy, over half of the participants were able to attend regular schooling, compared to none of the control group. Follow-up assessments in first grade, late childhood and adolescence showed that the children who received behavior therapy were able to thrive and live well-rounded lives. Disseminating studies like this one provides proof that behavior analysis is effective and can make a significant difference in the lives of individuals with autism and helps to increase the acceptance of these techniques. With respect to educational solutions, Morris (2022) discusses the importance of educational material based on the

integrity of the field as a consistently evolving science and build a similar level of respect for similar sciences. Education on how to respond and why the reputation got to the state it is currently in is vital for a change in the field. Morris (2022) states that as of 2022, the BACB increased the contact hours from 45 hours for concepts and principles of behavior analysis to 90 hours to qualify for certification. This recent change in BACB requirements proves that the field is making an effort, and education on this topic will be standard. Facing false information in a professional manner will assist in increasing the future receptiveness of behavior analytic services.

In communicating with those outside the field, Leaf et al. (2015) emphasized the importance of focusing on the applied aspect when engaged in explanations of dissemination rather than scientific or procedural ones. Preparing appropriate responses and practicing these conversations within behavior analytic programs is imperative for a change in the reputation of the field and respect among individuals, especially helping to educate those who may have a false perception of behavior analysis.

Collaboration with professionals

Defining the problem

Collaborating effectively with other professionals is a learned skill that has not been well taught within the field of behavior analysis. Individuals and their caregivers who seek out behavior analytic services most often have an ASD diagnosis, and multiple components involved with the diagnosis show the importance of a collaborative effort for all therapeutic services they receive. Insufficient collaborative efforts may be due to simply not understanding other therapies in fields as disparate as behavior analysis, speech-language pathology, occupational therapy, and speech-language pathology (LaFrance et al., 2019).

Adjusting our standard of collaboration expectations is critical to the field's success and our client's effective treatment. However, there are barriers to effective collaboration that

first need to be dismantled. For example, Gasiewski et. al. (2021) identified that behavior analysis tends to be viewed as primarily discrete trial instruction by professionals outside of the field, behavior analysts fail to consider a plan for generalization, and they do not always prioritize the client's wants and interests. Similarly stated, occupational therapists have the perception by behavior analysts and the public that they mostly only provide sensory-based interventions. Due to these misrepresentations between analysts and other professions as mentioned in Gasiewski (2021), negative perceptions and attitudes toward others can emerge.

Educational change

A survey conducted on over 300 behavioral professionals found that 67% of them had not received any collaboration courses at the university level, and 45% had not received workforce training on the topic (Bowman et al., 2021). Without education and training on collaboration, efforts towards collaboration are unlikely to change. There is a need to establish clear collaboration standards across professions, including open communication, respect for unique knowledge, client-centered care, flexibility, and a common purpose with mutually understood language (Kelly & Tincani, 2013). Collaboration standards must be clarified across professions, such as open and ongoing communication, respect for unique knowledge, client-centered care, flexibility, and a common purpose with mutually understood language. Although, strides have been made, the *Professional and Ethical Compliance Code for Behavior Analysts* states that it is ethical behavior that behavior analysts must provide service in cooperative practice to serve clients appropriately.

Collaborating & communication

Although there is some overlap among client-focused therapeutic services, different approaches are based on differing underlying philosophies and perspectives. For example, LaFrance et al. (2019) stated that behavior analysis focuses on behavior-environment interactions and their relation, whereas psychology tests more personal characteristics to

explain concerning behaviors. Similarly, speech-language pathology focuses on the structural conditions of these behaviors, whereas occupational therapy will target based on health and skill participation in daily living (LaFrance et al. 2019). Across all professions and in behavior analysis, prioritizing understanding other sciences' scope of practice and actively listening, respecting, and reflecting on another practitioner's point of view is key to understanding the unique contributions of other professionals in similar fields.

Professionals should prioritize that communication is done in a timely fashion and monitor the compliance of the intervention they will be implementing with others already in treatment. Similar to how a doctor would check your current medications before prescribing an additional medicine, this is what the goal of the collaboration will target among professionals and comprehensive treatment plans. As a behavior analyst, it is crucial to know how to communicate effectively with other healthcare providers. One way to do this is by using clear, concise language and avoiding professional jargon. It is also important to listen actively and ask for clarification when needed. Collaboration with other healthcare providers can lead to more effective treatment for patients and improved outcomes (Greenwood, 2017).

Moving forward with change

Although the difficulty collaborating within the field of behavior analysis has been discussed, there has been a lack of research on how to fix and adjust moving forward. Welch & Polatajko (2016) recommended that practitioners collaborate to provide client-centered, occupation-focused, and behaviorally sound interventions across platforms and professions.

Moving forward, fields such as behavior analysis and similar care providers must target an interdisciplinary approach to combine and coordinate each other's expertise in areas to create a generalized treatment plan for those they serve. As stated by Choi & Pak (2007), team members can conduct their own independent evaluations but then need to target working cooperatively together to target and establish goals. By promoting collaborative

efforts, clients we treat will have better maintained acquired skills, and treatment integrity will increase across platforms.

In November 2020, The Association for Behavior Analysis International (ABAI) shared a resource titled “Interprofessional Collaborative Practice Between Behavior Analysts and Speech-Language Pathologists” written by Trinh, Arguello, and Celiberti. This resource targeted and discussed collaboration between behavior analysts and speech-language pathologists. The document discusses and outlines the scope of practice between both professionals, where there is overlap, and how to navigate the overlap. Professions must target each other’s strengths and weaknesses to achieve a rounded treatment plan.

One tool that behavior analysts might find helpful is a standards adherence self-assessment checklist to assess how professionals target collaboration within a treatment created by Bowman et al. (2021). This checklist will help practitioners to determine if their collaborative efforts are practical and if they are being used for effective and efficient treatment using a Likert scale. Within professional practice, such a resource could also be used by supervisors to ensure that efforts are being made; for example, if a supervisee’s performance scores below average, supervisees can be given resources to increase their collaborative practice. Such resources becoming standard for behavior analysts to interact with within the environment will assist in generalizing this behavior and operationally defining collaboration.

Conclusion

Applied behavior analysis (ABA) is an evidence-based intervention widely used to help individuals with various neurodevelopmental disabilities, autism, or behavioral disorders. However, there are concerns about appropriately disseminating ABA to practitioners, caregivers, and families. Dissemination can be defined as the “targeted distribution of information and intervention materials” to a specific audience (Schillinger,

2010). The awareness of lack of dissemination within the field of behavior analysis is rising due to the overwhelmingly uneven ratio of autism diagnoses to treatment availability and awareness. One important key to bridging the research-to-practice gap is effective dissemination.

Several studies have found a gap between ABA research and practice, and dissemination efforts are ineffective in reaching the intended audience. Although behavior analysis has been shown to be effective in a variety of settings and populations, there is a need for better dissemination and implementation of evidence-based practices (Triggs, Kazemi, & Wacker, 2020). Many practitioners may not have access to the latest research findings or may not have the training to effectively incorporate research into their practice.

To address this gap, Triggs et. al. (2020) suggested several strategies, including increased collaboration between researchers and practitioners, the development of user-friendly tools and resources to support implementation, and increased training opportunities for practitioners. They also emphasized the importance of ongoing evaluation and feedback to ensure that evidence-based practices are effective and sustainable over the long term. Researchers have also recommended the following strategies to address this issue (Kelly & Tincani, 2013):

1. Use plain language and avoid jargon to increase understanding and acceptability of ABA.
2. Deliver ABA training in various formats, including in-person, virtual, and self-guided learning.
3. Provide ongoing support and supervision to practitioners to ensure high-quality implementation of ABA.
4. Incorporate cultural and linguistic diversity in training programs and interventions.
5. Collaborate with stakeholders, including families, caregivers, and advocacy groups, to promote awareness and understanding of ABA.

6. Increase funding and support for research on disseminating ABA to evaluate the effectiveness and improve implementation.

Behavioral jargon plays a significant role in improving the dissemination of behavior analysis. Celiberti (2016) highlights the importance of using clear and concise language when disseminating information about ABA to parents, educators, and other professionals. When using behavioral terminology, it can be difficult for others to understand how to apply the principles of ABA in real-world settings. It's stated that behavior analysts should be prepared to explain the concepts behind technical language and that professionals should seek out opportunities to disseminate information about ABA to a wide range of audiences and tailor their language and approach to meet the needs of each audience.

As an example of one possible solution, Granpeesheh et al. (2009) compared the effectiveness of an online program between therapists with a variety of professional training on ABA principles and how to adjust behavioral jargon. The participants were separated into two groups, those who engaged in traditional training and those who received online training. Both participating groups experienced an increase in their knowledge about ABA principles and procedures; however, those in traditional training received slightly more gain than those in the online learning condition (Granpeesheh et al., 2009). The results show that self-directed instruction can better increase knowledge of ABA techniques across providers in comparison to online learning strategies. However, it is the job of the provider to learn to apply the knowledge gained into implementation.

After being trained on filtering jargon and gaining knowledge on dissemination, it is up to the practitioner to them implement these skills. A proposal made by Leaf and colleagues (2019) explored ways to improve the dissemination of ABA. The authors suggested several solutions, including creating certification programs for ABA practitioners, increasing regulation of ABA education and accreditation programs, and developing online

resources to maintain high standards in the field. Overall, the authors argued that by embracing these strategies, the ABA field could better ensure that those who use it are well-equipped to do so responsibly and ethically.

While dissemination is a priority, effective collaboration is vital to achieving effective treatment for individuals who seek behavior analytic services. Despite the importance of collaboration, there is often a lack of prioritization observed among healthcare providers. Zarcone and Kodak (2016) recommend that increased training in collaboration skills and a focus on building relationships between ABA professionals and other healthcare providers should be a priority.

One example of how collaboration can be prioritized is through the use of technology, such as teleconferencing and online collaboration tools, as well as online training for how to collaborate. This was exemplified in a study conducted by Hamad et al. (2010). Various individuals who have general knowledge in principles and procedures of applied behavior analysis (ABA) were trained online utilizing narrated slide presentations, video examples, and application exercises. The study reported that an increase in understanding of collaboration skills and requirements was present when comparing pre-and post-training (Hamad et al., 2010). Studies similar to the one conducted within this article provide information that online training that can be incorporated into CEU requirements for behavior analysts could improve collaboration in the field.

Specifically, Haine-Schlagel et al., (2018) provided specific recommendations on how to improve collaboration. The author herself is a speech-language pathologist who provides insight into how behavior analysts can improve collaboration. It is stated that both professions should work together to develop shared goals and treatment plans and communicate regularly and adjust as needed. A significant difference between professions is behavioral jargon among the professions. As Dracobly, Yeagley, and Palmer (2019) stated,

behavioral jargon can lead to confusion and misunderstanding among professionals. ABA professionals should take a more active role in promoting clear communication, especially when discussing treatment plans and progress reports.

Another resource provided in Bowman et al. (2021) for collaboration is a self-assessment for analysts to reference on how well they uphold their collaboration efforts. By implementing these checklists into practice and allowing them to become standard for behavior analytic services, it will likely increase the contingency for analysts to remain aware of their collaboration efforts.

There are several additional resources available to behavior analysts looking to improve collaboration with other professionals, including:

1. **The Behavior Analyst Certification Board (BACB) Guidelines for Responsible Conduct for Behavior Analysts:** These guidelines provide behavior analysts with a framework for ethical and professional behavior, including guidelines related to collaboration with other professionals. The guidelines emphasize the importance of respecting other professionals, communicating effectively, and collaborating in the best interest of the client.
2. **The Association for Behavior Analysis International (ABAI):** The ABAI provides a wealth of resources for behavior analysts, including conferences, journals, and webinars. The organization also offers a special interest group focused on collaboration with other professionals.
3. **Professional Development and Training:** Many universities and organizations offer professional development and training opportunities focused on collaboration with other professionals. For example, the University of West Florida offers a continuing education course on interprofessional collaboration for behavior analysts.
4. **Web-Based Resources:** There are numerous web-based resources available for behavior analysts looking to improve collaboration with other professionals. The BACB website, for

example, provides a list of resources related to interprofessional collaboration, including articles, webinars, and podcasts.

Overall, behavior analysts can use these resources to improve their collaboration with other professionals, and ultimately enhance the quality of care provided to clients. Lastly, an important highlight of all of these collaborative efforts is for professionals to remain in contact with professionals who practice outside of the United States through conferences and online group organizations.

Future research

Future research on the topics discussed could be explored to increase receptiveness and performance of the skills discussed such as collaboration and appropriate communication with other practitioners. Researchers could explore the utilization of collaboration tools such as checklists and self-assessment data on a group of professionals compared to those who do not use such resources and analyze the difference to see if there was an observable difference in collaboration. Utilizing tools such as the self-assessment checklist for collaboration created by Bowman et al., (2021) could be used in further research to evaluate the efficacy of the checklist and how it may increase the understanding of collaboration techniques among professionals. Another point of research could be targeting the educational level of collaboration and analyzing the comfortability of behavior analysts with collaboration on those who have been through accredited programs versus those who have not.

An extension of the study conducted by Granpeesheh et al., 2009, could be utilized to compare self-instruction on behavioral jargon to increase a practitioner's ability to filter jargon based on the audience and disseminate it appropriately. Lastly, continued research on the perception of the field and how to resolve the constraints that behavior analysis is currently facing is imperative to the future receptibility of the field. Assisting in creating &

utilizing tools to increase exposure and teaching these skills to established and newly certified behavior analysts will increase further compliance with collaborative techniques.

Barriers

There are numerous barriers to collaboration that are highlighted in Figure 1. While these all are not reliant upon each other, without adjusting each objective, the ability to prioritize collaboration will not improve. The figure references assist in highlighting these primary objectives and resources available to provide further guidance on how each objective can be clarified and improved. Barriers to a behavior analyst's ability to engage in collaborative skills include difficulty billing codes, education on how to collaborate, and barriers to publication within parallel fields. As stated by Friman (2014), publishing studies in other specialties' literature will assist in developing relevance in other scientific journals. Such publications come with barriers such as knowledge of filtering jargon and gaining adherence to behavior analytic ethical and scientific viewpoints. In addition, billing can be a barrier faced by behavior analysts for collaborative meetings. Oftentimes, a barrier stated by behavior analysts is a lack of billing codes given by insurance companies for collaboration meetings. Lastly, as stated by Kelly and Tincani (2013), there is a large subset of practitioners who feel uncomfortable with their collaborative skills due to a lack of educational and workplace training. Until these skills become a regular educational standard for achieving a degree in behavior analysis, the barrier to competency in these skills will continue to present itself across practicing behavior analysts.

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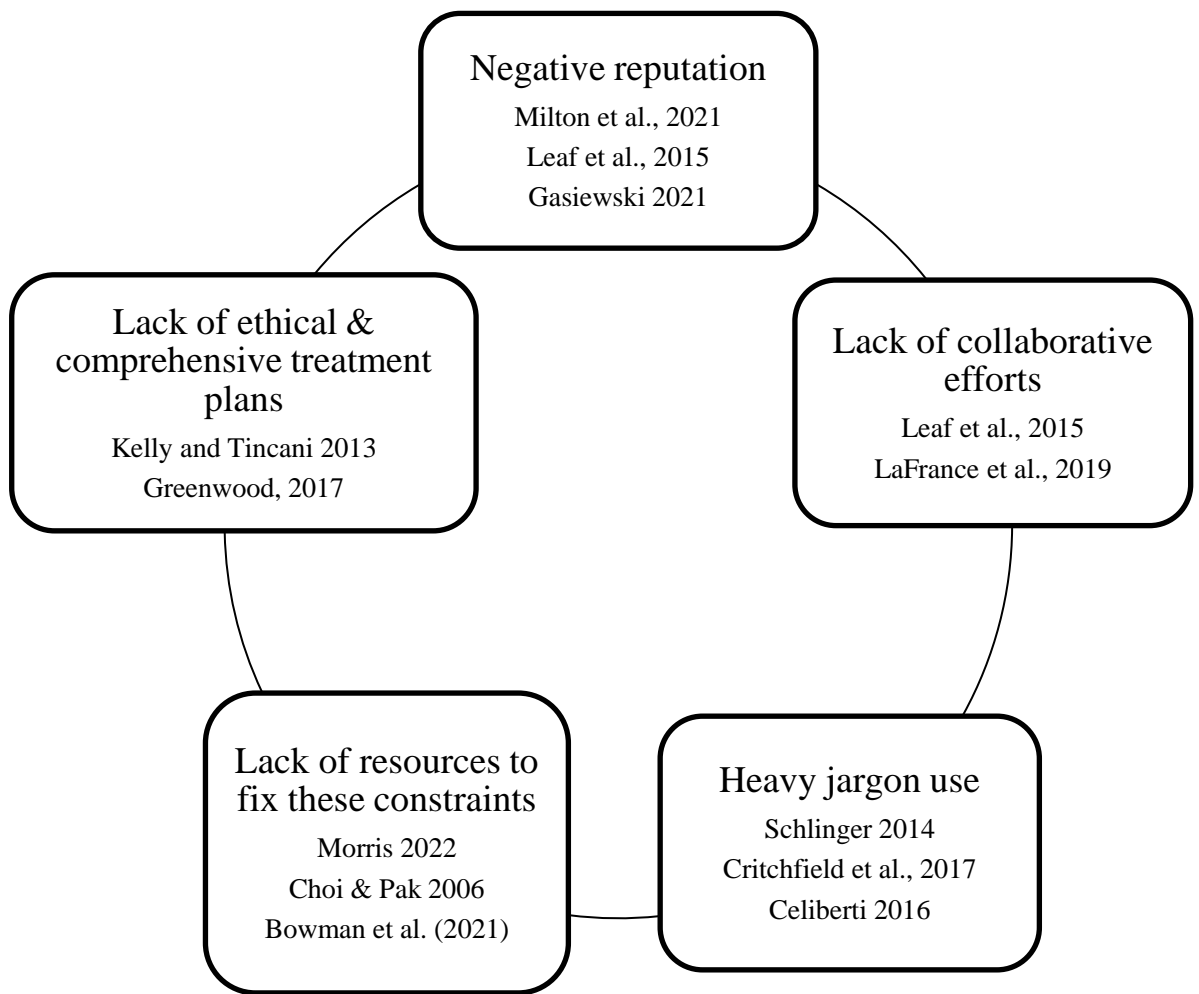


Figure 1: A breakdown of the primary objectives and their relationship with a lack of engagement in collaborative efforts