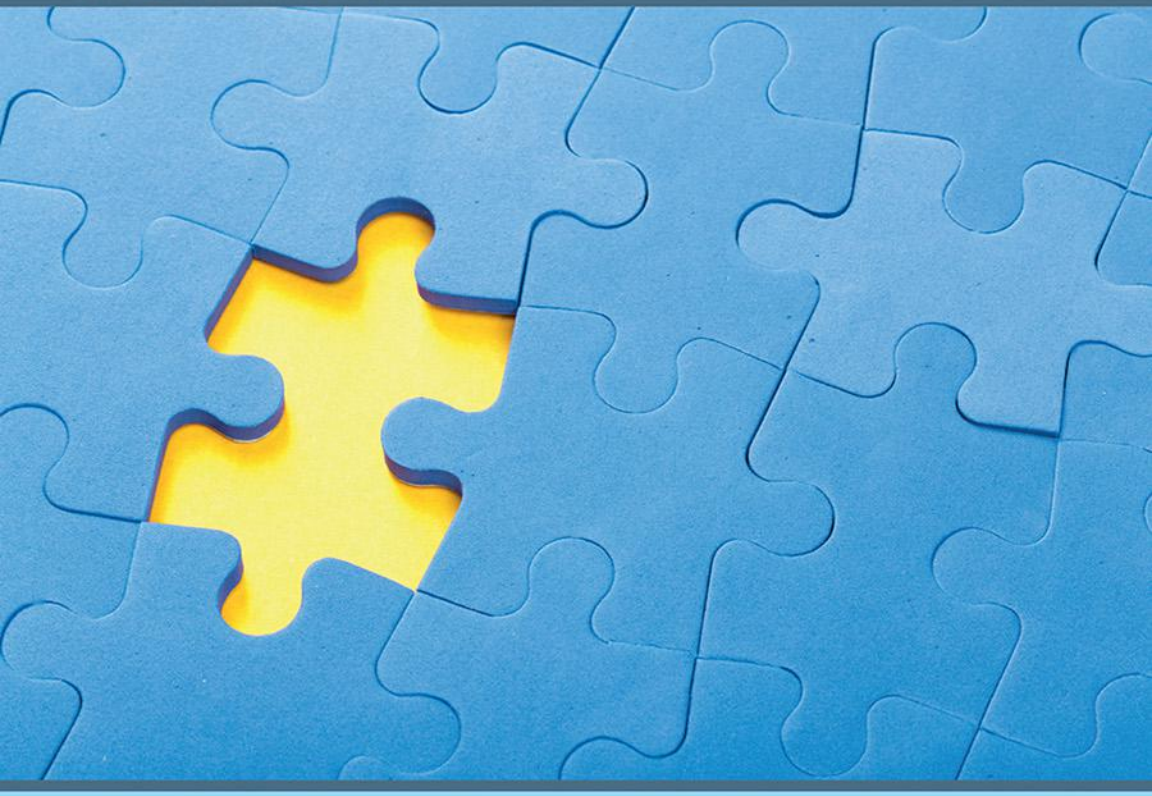
CRITICAL SPECIALTIES IN TREATING AUTISM AND OTHER BEHAVIORAL CHALLENGES

SERIES EDITOR: JONATHAN TARBOX



Practical Ethics for Effective Treatment of Autism Spectrum Disorder

Second Edition

Matthew T. Brodhead
David J. Cox
Shawn P. Quigley

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Critical Specialties in Treating Autism and Other Behavioral Challenges

Series Editor
Jonathan Tarbox

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SECOND EDITION

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SERIES FOREWORD

Critical Specialties in Treating Autism and Other Behavioral Challenges

Purpose

The purpose of this series is to provide treatment manuals that address topics of high importance to practitioners working with individuals with autism spectrum disorders (ASDs) and other behavioral challenges. This series offers targeted books that focus on particular clinical problems that have not been sufficiently covered in recent books and manuals. This series includes books that directly address clinical specialties that are simultaneously high prevalence (i.e., every practitioner faces these problems at some point) and yet are also commonly known to be a major challenge, for which most clinicians do not possess sufficient specialized training. The authors of individual books in this series are top-tier experts in their respective specialties. The books in this series will help solve the problems practitioners face by taking the very best in practical knowledge from the leading experts in each specialty and making it readily available in a consumable, practical format. The overall goal of this series is to provide useful information that clinicians can immediately put into practice. The primary audience for this series is professionals who work in treatment and education for individuals with ASD and other behavioral challenges. These professionals include Board Certified Behavior Analysts (BCBAs), Speech–Language Pathologists (SLPs), Licensed Marriage and Family Therapists (LMFTs), school psychologists, and special education teachers. Although not the primary audience for this series, parents and family members of individuals with ASD will find the practical information contained in this series highly useful.

Series Editor

Jonathan Tarbox, PhD, BCBA-D

FirstSteps for Kids

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READ ME (PREFACE)

"An innocent bystander, somehow I got stuck, between a rock and a hard place."

—***Warren Zevon***

You may be reading this book because it is required for a course. Or, perhaps this book has been assigned as part of your supervisory experience. Maybe you are just curious about the topic and you want to learn more about it. You may have opened this book because you have found yourself in an ethical dilemma, stuck between a rock and a hard place, and you are looking for a way to wiggle yourself out. Or, maybe you consider yourself an ethics and behavior analysis nerd (like us), and you are just trying to learn all that you can so you can be better at what you do and what you know. However you got here, we are glad you made it.

Before diving into the content of the book, we find it prudent to place this book in context. Behavior is best understood by analyzing the environments in which it does and does not occur. In this book, ethics, behavior analysis, and autism are the subject matter, and you will understand it best by understanding the context in which this book sits.

What this book is?

This book is an exercise in expanding dialog. Although an increasing amount of published literature exists on the topic of ethics and behavior analysis, it is far from exhaustive. This book seeks to continue adding to our understanding of ethics and behavior analysis by highlighting several practically relevant, reoccurring, and seldom discussed ethical topics practicing behavior analysts face in helping individuals with autism. We hope to expand the dialog about ethics and behavior analysis to these topics. We also hope other behavior analysts recognize and begin expanding the dialog to other topics in ethics and behavior analysis that they feel are important and seldom discussed.

We followed a structured approach to expanding ethics-related dialog in this book. First, we considered these topics, and potential solutions, in the context of the Behavior Analyst Certification Board's (BACB) *Ethics Code for Behavior Analysts* (2020) (hereafter referred to as the BACB Code). Second, and where relevant, we considered these topics in the context of published peer-review literature from behavior-analytic journals (e.g., *Journal of Applied Behavior Analysis, Behavior Analysis in Practice*). Whenever possible, we also tied in the published peer-reviewed literature from other healthcare disciplines facing similar problems. Rather than proposing solutions from scratch, we explore how behavior analysts can benefit from the hard work and solutions developed by others. In the end, all analyses, stories, and recommendations are rooted in the BACB Code, peer-reviewed scholarly literature, and our collective competencies and experiences. Though we have included a variety of case studies throughout our book, we enthusiastically recommend Sush and Najdowski's (2021) *A Workbook of Ethical Case Scenarios in Applied Behavior Analysis* for additional examples and instructional resources.

So who might be interested in the topics we discuss? Primarily, it will be people for whom the BACB Code applies, or will apply at some point. As such, this book is written for Board Certified Assistant Behavior Analysts (BCaBA), Board Certified Behavior Analysts (BCBA), Board Certified Behavior Analysts with a doctoral designation (BCBA-D), as well as those pursuing certification. This book is also written for instructors and supervisors of people who hold or are pursuing a credential offered by the BACB. To keep things simple, we primarily refer to behavior analysts and BCBAs throughout the book. But, know the content and recommendations likely apply to BCaBAs, BCBAs, and BCBA-Ds and sometimes Registered Behavior Technicians (RBTs).

Of final note is the tone of the book. We have read more than our fair share of books over the years. During that time, we have come to appreciate the value of an engaging text. Therefore we have attempted to write this book with you in mind. We have made every effort to write in a way we hope you find engaging, fun, and informative. We consider ourselves to have a decent sense of humor and hope that translates in our writing. If something reads like it might be a bad joke, it probably is.

What's new in this edition?

Since the first edition was published in 2018, the research that informs the field of ABA has changed (along with the research in other related professions). The BACB also published a new ethics code. We would be negligent to ignore those changes (and hypocritical since we go to great lengths to emphasize the importance of staying current with the research literature). Further, there are so many more authors writing about ethics now than there were even a few years ago. We think that's fantastic, and we've done our best to incorporate those additions to the literature into this edition of the text.

As far as the three of us go … we are a *little* bit older, a *little* more weathered, but (we hope) are still with it. We've grown a lot over the past few years, with job changes, life changes, and the many curve balls that life has thrown us (and not all were swings and misses!). The feedback from our readers (you!) has helped us to write this much improved second edition, and we hope the material we have changed, added, and kept lives up to what you expected.

Now, to some specific things that have changed (though not exhaustive because, as we said, we are a little older and it's harder to remember things). First, we've revised the book to reflect the new BACB Code, which includes the nifty preamble and frontmatter to that revised code. Second, we've revised the writing to reflect more gender-inclusive language (we thank Leland & Stockwell, 2019, for their helpful advice here). Third, we have bolstered the previously existing content throughout the book with new citations and descriptions based on advancements in the research literature and new things we've learned along the way. Finally, we have included two new chapters to reflect advancements in our own work, as well as advancements in the field of ABA for individuals with autism.

How this book is organized?

So what are these topics ambiguously referred to throughout the preface? Chapter 1 begins with an overview of the *core ethical principles and paradigms* that form the foundation of the BACB Code. Chapter 1 asks: What are some of the assumptions we make when it comes to ethics and behavior analysis? How might those assumptions help us

when we are caught between a rock and a hard place? And, what are some questions we want or need to answer as a field that result from these assumptions?

Chapter 2 is about *contextual factors* that influence the ethical decisions we make. Many different factors have repeatedly been shown to influence the choices organisms make—whether they are aware of it or not. Chapter 2 grabs a few of these factors from basic research on choice and research on clinical decision-making and asks: How might these factors apply to ethical behavior?

Chapter 3 continues the exploration from Chapter 2—but at the organizational level. In addition, Chapter 3 flips the script and asks: What can I do about the variables that will impact my ethical behavior? Many answers likely exist. We offer one in the form of *Behavioral Systems Analysis*. A tried and true behavior-analytic approach for accomplishing organizational goals.

Chapter 4 also discusses what we can do as behavior analysts. But, we focus more on the limits of our abilities and the thorny issue of *scope of competence*. Questions asked in Chapter 4 include: What is *scope of competence*? How does the definition of *scope of competence* relate to my own behavior-analytic abilities? And, what things am I actually competent to perform?

Chapter 5 starts to look at combining behaviors. Once assumptions are assumed, factors are considered, policies and procedures in place, and limitations identified, we then provide Applied Behavior Analysis (ABA) services. This involves a lot of things. Chapter 5 asks: How can I combine behaviors together to meet my obligations to *evidence-based practice*?

No behavior occurs in a vacuum. Chapter 6 focuses on *interdisciplinary collaboration*. All of us not only have to account for everything discussed to this point in the book. But, we will have to do so while interacting with others who likely have different assumptions, different influencing contextual factors, different policies and procedures to follow, different abilities, and different definitions of what constitutes appropriate practice. Collaborating can be challenging. So, in Chapter 6 we ask: How do I combine my behaviors to interact well with others?

Chapter 7 is the first chapter of fresh content. To this point, we focused a lot on you and the ethical behavior of individual behavior analysts. But with the amount of variability in how behavior analysts deliver ABA services, how can we—as a field—understand what decisions are best in different contexts? Standardizing decision-making is one answer to taking a more objective, data-based approach to analyzing our clinical decision-making as a field. There are many benefits and ways to ethically justify standardizing decision-making in ABA. But, standardizing decision-making comes with field-wide challenges, too. We try to get into the nitty-gritty here to broach a topic that looms large but still is in the shadows. In Chapter 7 we ask: What considerations should I make when standardizing the delivery of ABA services? We hope we shed just a bit of light on this important topic.

Chapter 8 is also new to this edition and discusses another topic that appears to be coming full-steam at the field of ABA: "quality measurement" and what exactly this might look like in ABA. In this chapter, we attempt to ethically justify why providing, measuring, and managing the quality of ABA services is likely obligatory in most contexts. Though observing, measuring, and improving the quality of your services sounds like a no-brainer, practically pulling it off is more challenging than it appears at first glance. We use this chapter to give you a basic background on the quality measurement landscape and how it might influence all of us as a field of well-intentioned practitioners. With that, in Chapter 8 we ask: What is quality measurement, why should I care, and how can it help me be a better behavior analyst?

Finally, we conclude with Chapter 9 (formally Chapter 7 in the previous edition), an analysis of common errors and mistakes that we have observed, with regards to ethics and behavior analysis. We provide these additional points of consideration to help prepare you, as much as possible, to avoid the errors of the ways of those who have come before you. Chapter 9 asks: What can I do to ensure my ethical analyses are accurate and complete?

What this book is not?

There is a lot this book is not. This book is not an analysis of every standard of the BACB Code. That book has been written and written

well (Bailey & Burch, 2016, see also newer editions of the Bailey and Burch text that may exist). This book is also not an official statement or opinion of any organization. This book also does not constitute any formal advice, whether practical or legal. You should contact your supervisor or a trusted colleague if you are looking for ethical advice. You should seek legal counsel if you are looking for legal advice. Finally, this book is not a primer on ethics, autism, and behavior analysis. We assume the reader has basic background knowledge of all three topics. We recommend you familiarize yourself with these if you have not already done so.

Key terms

Many of the topics and how one might precisely define terms could be book long treatments in themselves. However, we think it is important to define a few terms before we get started. Just to make sure we are all on the same page.

Behavior Analyst. Throughout the book we often use the term behavior analyst. We define a behavior analyst as any individual who (1) holds a BCaBA or BCBA credential, or a BCBA credential with a doctoral designation (BCBA-D); (2) is seeking certification as a BCaBA or BCBA; (3) uses the science of behavior analysis to help a client with socially important behavior change; or (4) uses the science of behavior analysis as their primary approach to researching and understanding a phenomenon of interest. If you consider yourself a behavior analyst but do not fit in one of the above categories, no worries—consider yourself included.

Ethical Behavior. Defining this term has kept a lot of really smart people busy for centuries. We are not looking to pick any fights. But, we need to define this term so we can talk about it practically. We define ethical behavior as "…the emission of behavior in compliance/coordination with the verbally stated rules and behavior-analytic cultural practices guiding practitioner behavior that are espoused by the BACB Code" (Brodhead, Quigley, & Cox, 2018).

We chose this definition because what is defined as ethical and appropriate behavior by one cultural group may be inappropriate and unethical behavior by another cultural group. To avoid these metaethical discussions (and the dozens to hundreds of pages that may be

needed to defend our position), we sought to keep things simple and practical. Most behavior analysts work with individuals with autism, are board certified or seeking certification, and are held accountable to the BACB Code. We recognize people may consider behavior that contradicts the BACB Code as more ethical or that there is ethical behavior relevant to their practice that is not covered by the BACB Code. These further support the point of this book—there are a number of areas of behavior analysis where dialog about ethics and behavior analysis can be expanded.

Ethical Dilemma. Ethical behavior is one thing. But, facing a dilemma can be a whole other ball of wax. We define an ethical dilemma as any situation that meets three criteria. First, the behavior analyst has to make a choice between incompatible behaviors. Second, the behaviors the behavior analyst has to choose from are each supported by the BACB Code. Finally, by engaging in one of the behaviors the behavior analyst violates a different part of the code.

We chose this definition because it seems to capture the relevant components of an ethical dilemma. It involves ethical behavior as defined above. It also contains a dilemma—a choice between two good (or bad) options that you cannot wiggle out of and meet all your obligations. If this seems a bit ambiguous, no worries. We provide many examples throughout the book.

Moving forward

We hope you find this book useful in your practice. Whether you are a professor, trainer, or a BCaBA, BCBA, BCBA-D, or RBT working with individuals with autism, we hope our book impacts and transforms you and those around you. And, we hope it leads to greater ethical dialog on the many important and seldom discussed topics of ethics and behavior analysis.

Matthew T. Brodhead, David J. Cox, & Shawn P. Quigley

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Thanks to David and Shawn for being the best coauthors I could ever ask for. Thank you so much for your astute writing and revisions and for hammering away in the face of pressing deadlines, much of which came at the expense of your leisure time (I hope your families will forgive me). I am grateful for our continued friendship and I am excited for what the future has in store for us.

Thanks to my parents, Thornton and Christine, for letting me grow my hair long. To my brother, Drew, who also grows his hair long from time to time, thanks for getting me and pushing me to do better. Thanks to my grandfather, Tony Kuchta, and my late grandmother, Mary Lee Kuchta, for inspiring me to live a meaningful and impactful life and I give my upmost love and thanks.

And finally, words cannot express my gratitude to my loving wife, Hannah, and my children, Diane and Wilder: you give me the strength and courage to overcome any obstacle I face in life, and I dedicate my efforts in this book to you.

Matthew T. Brodhead

I would like to first thank my loving and beautiful wife—Sara Bollman. She continues to be the definition of support and tolerance without whom I would be half the person I am today.

Thanks to Matt and Shawn for pushing me to think about ethics in unique ways and turning fanciful theoretical ideas into practical approaches people can actually use.

Thanks to basic and applied behavior analytic researchers and practitioners, the time since the first edition of this book has witnessed an exciting uptick in voices, ideas, and perspectives on what it means to live a good life both personally and professionally. Thank you for your hard work. Your influence looms large in my life.

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David J. Cox

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Shawn P. Quigley

CHAPTER 1

Introduction to applied behavior analysis, ethics, and core ethical principles

"Every way of seeing is a way of not seeing."

—***Kenneth Burk***

What defines the difference between right and wrong; good and evil? Few topics in recorded human history have received as much discussion as what differentiates right from wrong and good from evil. For thousands of years, humans have been killed, imprisoned, sanctioned, and received limited access to resources if they fail to conform to dominant versions of what is right (Harari, 2015). Humans have simultaneously provided various forms of reinforcement (e.g., social attention and material resources) to those who do conform to their version of what is right. These behaviors continue today. The ubiquity of labeling human behavior "right" and "wrong" can be observed through a close look at any group of humans who work together toward a common goal (e.g., members of health professions) or compete for the same resources (e.g., laws regarding theft and market manipulations).

In this chapter, we provide some historical context for different approaches to distinguishing "right" from "wrong" behavior. By the end of the chapter, you should have a better sense of (1) the assumptions that underlie claims of what is "right" conduct for Board Certified Behavior Analysts (BCBAs), (2) theoretical conflicts between different claims to what is "right" conduct for BCBAs, and (3) that applied ethics within applied behavior analysis (ABA) is far from being comprehensive and complete—just like all areas of our science.

The above three points may seem inconsequential to your everyday work as a BCBA. However, this could not be further from the truth. Many BCBAs may not know the philosophical assumptions used to justify the ethical decisions they make. Also, many practitioners may

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not have realized that there often are multiple pathways to what may be called an "ethical decision," and those pathways are guided by different ethical assumptions. Without a working knowledge of these assumptions, it can be easy for BCBAs to misinterpret and/or misapply the Behavior Analyst Certification Board's (BACB) *Ethics Code for Behavior Analysts* (hereafter referred to as the BACB Code, 2020).

It is important to describe the historical and philosophical context behind the recommendations that will be provided throughout this book and from which the BACB Code is grounded. From this framework, we can then review practical applications of the BACB Code in autism services. Consider it this way: a behavior analyst is more likely to effectively treat challenging behavior if they understand the context (e.g., environmental variables) in which that behavior was acquired and continues to occur. Likewise, a BCBA is more likely to engage in accurate ethical analysis if they understand the context in which their ethical principles are founded.

Paradigms of clinical ethics: providing the groundwork

Behavior analysis as a science and practice emphasizes the importance of consequences in affecting behavior (e.g., Catania, 2013; Skinner, 1938). Although the effects of consequences on behavior have been studied scientifically for over 80 years (e.g., Skinner, 1938), the importance of consequences for "right" behavior has been recognized for thousands of years (e.g., Code of Hammurabi; Hammurabi & Johns, 2008). A quick review of any cultural group will yield rules spanning etiquette, ethics, regulation, and law. In addition to outlining correct conduct, these rules may explicitly state the relevant consequences (e.g., reward or punishment) for following or not following the laws (Foucault, 1990).

The preferred rules of conduct and the resulting consequences are not the same for all humans. For example, taking another person's life could result in the death penalty and/or time in prison. However, taking another person's life could also result in positive social recognition. Both outcomes depend on a host of variables such as the dominant cultural group in the geographical location one resides and the context in which the act occurred (e.g., premeditated mass murder vs. enemy soldier in war). Understanding how the application of consequences is justified based on the larger social context is important for understanding claims of "right" and "wrong."

Dominant paradigms in clinical ethics

Four paradigms within the realm of clinical ethics are most commonly used to answer *why* different claims to "right" and "wrong" are justified (Jonsen, 1998). They are *virtue ethics*, *consequentialism*, *deontology*, and *contract theory*.

Virtue ethics

Virtue ethics argues that moral excellence, or virtue, is the proper focus or reflection on ethics and rules for behavior (Hursthouse, 1999; Hursthouse & Pettigrove, 2016). That is, certain behaviors are ethical, "right," or "good" in and of themselves—regardless of context or outcomes. For example, honesty and patience are often considered virtuous (i.e., "right" or "good") behaviors regardless of the context and what may happen as a result of being honest and patient. Virtue ethicists label behavior "right" or "wrong" based on what the behavior looks like (i.e., the behavior's formal properties). For example, honesty is considered good behavior because it has the formal properties of a truthful statement. Famous philosophers, such as Lao Tse, Plato, and Aristotle, are credited for popularizing virtue ethics (Marino, 2010).

From this perspective, one may label an individual as virtuous if two conditions are met. First, the virtuous individual tends to emit behavior consistent with the socially agreed-upon virtuous label (e.g., honesty and generosity). For example, when documenting and submitting hours spent on billable services to an insurance company, a virtuous BCBA only reports the true type and amount of services provided. Second, the individual's virtuous response should be fluent in their repertoire (Binder, 1996) and maintained by nonsocial reinforcement. A virtuous individual would reliably behave in a manner labeled as "honest," regardless of any socially mediated consequences that may or may not occur. Given that "virtue" is a social construct, behaviors labeled as virtuous can vary between, and within, different cultures (for an operant analysis of virtuous labels see Skinner, 1957; for discussion on differing virtues between cultures, see Prinz, 2009).

Consequentialism

The second dominant paradigm is *consequentialism* (also known as utilitarianism). Consequentialism argues the outcomes of a behavior determine whether that behavior is right or wrong (Marino, 2010). Consequentialism arose primarily through the work of philosophers

Jeremy Bentham, John Stuart Mill, and Henry Sidgwick. These classical consequentialist philosophers argued for what is today called *total hedonistic consequentialism*, which is a combination of *act consequentialism* and *hedonism*. Therefore we describe consequentialism with these two theoretical components in mind.

Act consequentialism argues that a behavior is deemed "right" or "wrong" if and only if that act maximizes the good.[1] For example, whether it is "right" or "wrong" to lie on my tax returns depends on whether I use the money owed in taxes in a way that benefits more people than would have benefitted from the government using my taxes. *Hedonism* claims that pleasure is the only "right," and that pain and aversiveness are the only "wrong." Using a consequentialist paradigm, a behavior is deemed ethically appropriate if and only if the behavior causes "the greatest happiness for the greatest number."[2] Stated differently, we can justify that a behavior is ethical by appealing to what maximizes the good and what minimizes the bad for all relevant parties. For BCBAs, this would be whatever maximizes the overall amount of reinforcers a client contacts in their life relative to the aversive experiences needed to teach them to obtain those reinforcers. Included in the comparison is the amount of reinforcers that would have been contacted without intervention.

Deontology

The third dominant paradigm is *deontology*. Deontology comes from the Greek word for duty, *deon*. Deontologists primarily define what is "good" or "right" as following rules derived from those in power and that consider the context in which that behavior occurs. Deontologists establish the central components of this paradigm by highlighting weaknesses in virtue and consequentialist theories.

Deontologists argue that *virtue theory* is wrong because virtue theory claims specific behaviors are always "right" or "wrong." As a result, virtue theory cannot account for instances where you should not behave

[1] An act maximizes the good only if the total amount of good for all minus the total amount of bad for all is greater than this net amount for any incompatible behavior that the individual could have emitted in that moment of choice.

[2] It should be noted that there are technically many different utilitarian or consequentialist theories, arguments, and considerations (e.g., actual consequentialism; evaluative consequentialism; aggregative consequentialism). However, the discussion of each of these nuanced versions of consequentialism is beyond the scope of this chapter. Interested readers are referred to Sinnott-Armstrong (2015).

virtuously (e.g., lying to your significant other about where you are going to get them to a surprise party organized for them). Deontologists argue that the context in which behavior occurs is also relevant in determining what is "right" and "wrong." Behavior should not be labeled "right" or "wrong" based only on what the behavior looks like (i.e., the behavior's formal properties).

Deontologists argue that consequentialism is wrong for three reasons. First, deontologists believe the consequences of our behaviors are often outside of our control. As a result, consequences are ethically insignificant. For example, it seems unfair to say someone behaved unethically by purchasing coffee that is produced through illegal child labor conditions if they do not know about those labor conditions. Second, deontologists believe that consequentialism places impractical demands on people because you would have to consider all potential consequences for all potential behaviors for all potential people before making a choice (Marino, 2010). Not only would this require a tremendous amount of time and effort, but it also is not clear how all the potential consequences could be included and appropriately compared. Third, deontologists argue that consequentialism fails because it can result in extreme permissiveness. In certain circumstances, consequentialism seems to demand that innocent people be killed, beaten, lied to, or deprived of resources as long as it results in greater benefits for others.

To summarize, deontologists argue that the context within which a behavior occurs has to be considered when determining what is "right" and "wrong"—not just what the behavior looks like. In addition, deontologists argue that the environmental change resulting from a behavior cannot be used to justify a behavior as ethical or unethical. Rather, a behavior is right or wrong based on whether it conforms to a derived rule on how to behave in the specified context (i.e., a socially derived norm of behavior; Alexander & Moore, 2016; see also the BACB Code, 2020).

Deontology can also be critiqued. One critique of deontology relates to who decides the norms of behavior. Often the people who decide these norms are people who have power of some kind (e.g., religious leaders, governmental officials). However, there is no reason to assume those individuals have any greater ability to decide what is right than other members of society. Second, deontology can

potentially lead to posthoc justification for many different behaviors. If what is considered the correct behavior depends solely on following a rule in a context, then one could argue the reason they behaved in a certain way was based on contextual factors that others did not observe or consider.

Contract theory

Contract theory takes a bit of a different approach than the theories mentioned above. Specifically, the previous three theories assume that there is an objectively "right" or "wrong" way to behave as defined by the criteria laid out by the respective theory. Contract theorists, however, often assume that there is no such thing as an objective right or wrong. Rather, behaviors are defined as "right" or "wrong" based on the extent to which the behavior aligns with a social contract willingly entered by two or more people (Dienstag, 1996). For example, a BCBA may sign a contract with a client and an insurance company wherein the BCBA promises to increase the client's ability to appropriately request their wants and needs and interact socially with their peers. The BCBA also agrees to fulfill that agreement through 20 h a week of ABA services at a reimbursement of $65/h.[3] In this scenario, the behaviors that are "right" are the set of behaviors that allow the BCBA to efficiently teach functional communication and social skills within the allotted time.

Like all other ethical theories, contract theory can also be critiqued. In the idealized version of contract theory, contracts are derived and specified "under a veil of ignorance" (Rawls, 1971). That is, the people who derive the contract and specify the details do not know in advance which role they will play. For our example, this would be akin to three people specifying a contract for the delivery of ABA services where each person does not know in advance whether they would end up as the individual receiving services, the BCBA, or the third-party payor. The idea is that—under these conditions—everyone would work to derive a contract that is fair to all relevant parties.

[3] Under this arrangement, the client, their caregivers (if applicable), and the insurance company also have ethical obligations that result from the agreed-upon contract. The client is ethically obligated to show up for the agreed-upon number of hours each week and to participate in their sessions. The insurance company is ethically obligated to pay the provider at the designated rate and for a maximum amount of $1300/week (20 h × $65/h).

As you can imagine, contracts are rarely specified under a veil of ignorance. Usually, in nonlaboratory situations, the parties differ in the knowledge they bring to the table. For example, insurance companies have expert information on agreed-upon reimbursement rates and hours delivered with all ABA providers and how the cost of ABA services compares to other areas of healthcare. BCBAs have expertise allowing them to help the client mitigate dissatisfaction associated with the reason for referral. Unfortunately, the recipients of ABA services are often in the most challenging spot as they cannot choose what and how the insurance companies will reimburse, and they are unlikely to have the clinical expertise to critically examine BCBA recommendations and treatment approaches. Thus the contracts often developed in nonlaboratory settings are not made "under a veil of ignorance" and may work to the advantage of some parties and the disadvantage of others. Stated differently, there is no reason to suspect contracts are derived in a fair manner. So, justifying ethical conduct relative to a potential unfair contract seems challenging to accept.

Western clinical codes of ethics

The above paradigms used to approach ethical dilemmas can influence *how* you justify what is "right" or "wrong." However, these paradigms do not say *what* is right. Therefore formalized codes of ethics and principles are often used to guide *what* is right. Similar to the development of ethical paradigms, *what* has come to be considered "right" or "wrong" behavior in healthcare professions has developed over the centuries.

Formal codes of clinical ethics

Most modern codes of clinical ethics can be traced back to medicine, one of the oldest clinical helping professions (Edelstein, 1996). Clinical ethics, as it is known today, arguably began in 1803 (Jonsen, 1998) and stems from the Hippocratic Oath that originated between the third and fifth centuries BCE. The early writings of Hippocrates and colleagues focused on the qualities of a good physician and appropriate behavior that physicians should display toward their patients (e.g., gentle, pleasant, discreet, comforting, firm). The writings also included oaths to perform duties required of "good" physicians (e.g., benefit the sick and do them no harm, maintain confidentiality, refrain from monetary, and sexual exploitation; Jonsen, 1998). Although what is

considered appropriate behavior and duties of good physicians have changed over time, the primary duties from early writings came to be condensed into the Hippocratic Oath and have been adopted by generations of Western medical practitioners.

The first book with *Medical Ethics* in the title was written by Thomas Percival in 1803 (Jonsen, 1998). Percival summarized virtues and duties of physicians with the primary goal of developing rules of conduct that would establish medicine as a profession worthy of public trust. To further formalize these rules, the founders of the American Medical Association issued a *Code of Medical Ethics* at the Second National Medical Convention in May of 1847. In addition to a formal adoption of Percival's text, the original code forbade advertising medical services to the public, consultation with practitioners using nonevidence supported treatments, and other behavior labeled as dishonest or as occurring without proper education and training (Jonsen, 1998)—many of which continue to be present in modern clinical codes of ethics such as the BACB Code (2020).

Following decades of revisions and name changes, the *Code of Medical Ethics* was published under the title *Principles of Medical Ethics* in 1966. This document had been revised to roughly seven principles. These principles include: (1) respecting the rights of patients, (2) demonstrating ongoing competency and improvement in skills, (3) accepting and respecting the discipline of the profession, (4) obtaining consultation when necessary, (5) maintaining client confidentiality, (6) being a good citizen, and (7) practicing and accepting payment only within one's medical competency (Jonsen, 1998).

Increasing market share through codification

One of the original goals of establishing an ethical code of conduct for medical practitioners was to demarcate how medical practitioners differed from other healthcare professionals (Jonsen, 1998). Medical practitioners were one of many different professions that claimed to provide healthcare. Medical practitioners sought to create public trust by distinguishing themselves from others who took alternative routes to medical practice. Since this time, medical practice has been remarkably successful in moving from one of many approaches to curing disease and illness to the dominant approach in nearly all areas of healthcare (Farre & Rapley, 2017).

Creating, enforcing, and publicizing that medical practitioners adhered to specific rules of conduct played a role in increasing the size and overall healthcare market share owned by medical practitioners.[4] Many other helping professions subsequently imitated medicine and established their own code of ethics. This allowed them to build public trust and promote their own services (e.g., practices) to distinguish themselves from other practitioners who offered similar services. In fact, creating enforceable rules of conduct as an approach to distinguish professions from one another is so widespread that it is now considered an identifiable benchmark in a traditional route to professionalization (Baker, 2005, 2009; Cox, 2013).

Principles of bioethics: the material for building

A variety of historical events led to the modern field called bioethics (Jonsen, 1998). These included advances in medical technologies beyond what traditional medical ethics had encountered, increased interaction between distinct healthcare professions (e.g., physicians and nurses), and increased focus on applied ethics (i.e., ethical dilemmas pertaining to practical everyday life choices; Petersen & Ryberg, 2016). Due to these advancements, there emerged a need to establish basic ethical principles, and an approach to justify those principles, that transcended multiple healthcare professions (Jonsen, Siegler, & Winslade, 2010). The most well-known attempt to establish basic ethical principles and an approach to ethical justification is known as The Belmont Report (Office of the Secretary—OS, 1979).

The Belmont Report

The Belmont Report was written in response to social reactions and problems that arose from the Tuskegee Syphilis Study (Sims, 2010). The Tuskegee Syphilis Study was conducted by the United States Public Health Services from 1932 to 1972. The subjects of that study were 600 men who identified as African American or Black (CDC, 2017). Approximately two-thirds of the men had syphilis, and the other one-third did not (CDC, 2017). Importantly, this study was conducted without the consent of the men and under coercive conditions to participate.

[4] It should be noted that it was not just the publication of the rules per se. Adhering to these rules likely reduced variability in medical practice between physicians and also improved the quality of the medical services provided. The consequences from following the rules cannot be separated from the rules themselves.

Furthermore, the men with syphilis were never told they had the disease or that a treatment was available (CDC, 2017). The many disturbing and unethical facets of the Tuskegee Syphilis Study prompted the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research to establish guidelines for conducting ethical research, which resulted in the Belmont Report. Although originally written to outline standards for ethical research practices, the basic principles outlined in the Belmont Report are also widely regarded as the basic principles of clinical ethics (Veatch, 2016).

The three basic principles described in the Belmont Report are *respect for persons*, *beneficence*, and *justice* (OS, 1979). It is worth noting that the authors of the Belmont Report explicitly indicate that none of the three basic ethical principles are superior to, or carry more weight than, the other principles for influencing clinical decisions. Rather, when making an ethical decision, you should consider how each principle applies to the situation, and then choose the path that upholds each principle to the greatest extent (i.e., ethical principlism; Beauchamp & Childress, 2001).

Respect for persons

There are two central tenets in the *respect for persons* principle. First, individuals should be treated as independently functioning individuals that have a fundamental right to *autonomy*. That is, each individual (or their caregiver) is the most appropriate person to determine what does and does not happen to their body. Clinically, respecting an individual's right to autonomy comes by healthcare practitioners fulfilling their deontological duty to offer choice in treatment alternatives and treatment goals, and to gain the individual's consent via an ongoing informed consent process.

The second tenet of *respect for persons* is that people with diminished autonomy are entitled to protection (OS, 1979). Stated differently, "not every human being is capable of self-determination" (OS, 1979). An inability to appropriately determine what happens to one's self may be the result of an accident, "illness, mental disability, or circumstances that severely restrict liberty" (OS, 1979). For example, an individual might request a treatment alternative or treatment goals that place undue burden on someone else—including their future self (e.g., requesting amputation of my limbs because of severe pain that

will subside in a few weeks). In these instances, the person is entitled to protection from their own harmful decision (e.g., the healthcare team can refuse to amputate their limbs).

Each individual's capacity to make independent health care decisions can be present to varying degrees.[5] Therefore the degree of protection may vary by each individual. Protection comes in the form of a proxy decision-maker for those unable to provide consent. Often a parent or legal guardian, the proxy decision-maker is assumed to have the individual's best interests in mind and be capable of independently making appropriate health care decisions. That is, individuals with autonomy are assumed to make decisions that maximize their benefits gained and minimize harms. Proxy decision-makers are assumed to fulfill these consequentialist actions for the people they are making decisions for. Note, however, that diminished decision-making capacity and the presence of a proxy decision-maker do not negate obligations that professionals have for conducting appropriate assent procedures where applicable.

Beneficence

The second basic ethical principle is *beneficence* (OS, 1979). The colloquial description of the principle of beneficence, and its companion nonmaleficence (i.e., do no harm), is that healthcare practitioners have an obligation to improve the well-being of others. Fulfilling one's duty to beneficence occurs by engaging in two consequentialist actions.

The first consequentialist action is *primum non nocere*, first, do no harm. This is one of the most fundamental principles in medicine and has guided physicians since the Hippocratic Oath (OS, 1979). The basic premise of this maxim is that healthcare practitioners should avoid harming clients whenever possible. Examples include recommending risky and unproven treatments that have a low likelihood of being successful or conducting an invasive surgery when taking medicine would be equally effective.

Maximizing benefits while minimizing harm is the second consequentialist action. This arose because many healthcare treatment goals often involve short-term discomfort, but long-term benefits to the

[5] A large volume of literature has been written on this from the fields of medical ethics and bioethics. However, these authors have yet to come across a behavior analytic approach to making this decision. As such, it is an area potentially ripe for behavior analytic translation and research.

individual. For example, individuals with autism that receive ABA intervention within the home environment may have to engage in initially nonpreferred learning activities instead of spending that same time engaging in more preferred free play. However, the nonpreferred nature of these activities is likely offset by the skills gained through ABA therapy and an increase in the individual with autism's ability to access a greater amount of preferred activities and social interactions in the future.

Justice

The final basic ethical principle outlined in the Belmont Report is *justice* (OS, 1979). Relative to healthcare, justice suggests the benefits and costs of health care as a resource should be fairly or justly distributed. No resources are unlimited—including behavior analytic services and the time of the behavior analyst. As a result, practical decisions have to be made as to how the benefits and costs of health care should be fairly distributed.

Applied behavior analysis and ethics: what we have built so far

Multiple theories influence the Behavior Analyst Certification Board Code

The current BACB Code has evolved from the ethical paradigms of *virtue theory*, *consequentialism*, *deontology*, and *contract theory*. It also uses the main guiding principles of *respect for persons*, *beneficence*, and *justice*. In isolation, each of these paradigms and principles can be helpful to guide what behavior is considered "right" and why we think so. However, things become a bit more complicated when different paradigms and principles are combined into a cohesive document.

Influence from virtue theory

The BACB Code contains ethical principles and standards based on, or justified through, virtue theory. For example, BACB Standard 1.01 states that "*Behavior analysts* are truthful and arrange the professional environment to promote truthful behavior in others" (BACB, 2020). Here, it is noted that being truthful is good. A virtue ethicist may say that a BCBA is truthful because their behaviors are maintained by nonsocially mediated reinforcement. A virtue ethicist may say this BCBA is more ethical than a BCBA who is truthful only to avoid

punishment or to gain social praise. Other examples of virtue-based standards include: 1.08—Nondiscrimination; 1.09—Nonharassment; 2.01—Providing Effective Treatment; 2.06—Accuracy in Service Billing and Reporting; and 6.11—Accuracy and Use of Data.

Influence from consequentialism

The BACB Code also contains codes justified through consequentialism. For example, BACB Standard 2.13 states that "Before selecting or designing behavior-change interventions behavior analysts select and design assessments that are conceptually consistent with behavioral principles; that are based on scientific evidence; and that best meet the diverse needs, context, and resources of the client and stakeholders." (BACB, 2020). Here, a BCBA would have an obligation to advocate for the use of Functional Communication Training to teach verbal behavior rather than Facilitated Communication. Other examples of consequentialist-based standards include: 1.03—Accountability; 1.05—Practicing within Scope of Competence; 1.07—Cultural Responsiveness and Diversity; 1.10—Awareness of Personal Biases or Challenges; 2.01—Providing Effective Treatment; 2.09—Involving Clients and Stakeholders; 2.10—Collaborating with Colleagues; and 2.12—Considering Medical Needs; 2.15—Minimizing Risks of Behavior-Change Interventions; 2.17—Collecting and Using Data; 2.18—Continual Evaluation of the Behavior-Change Intervention; 2.19—Addressing Conditions Interfering with Service Delivery; 3.14—Facilitating Continuity of Services; 3.15—Appropriately Discontinuing Services; 3.16—Appropriately Transitioning Services; Section 4—Responsibility to Supervisees and Trainees; and 6.06—Competence in Conducting Research.

Influence from deontology

The BACB Code also contains standards justified by deontology. For example, BACB Standard 1.04 states that BCBAs have a duty to "provide behavior-analytic services only in the context of a defined, professional, or scientific relationship or role." One could easily think of scenarios where positive and negative outcomes arise from strictly fulfilling this duty. For example, it may take several days or weeks to obtain an authorization from an insurance company that allows a behavior analyst to begin assessment and treatment for severe aggression. The time spent refusing to provide service or advice may damage the relationship with a family in desperate need of services, or cause

them to seek other nonbehavioral providers that will provide services right away. To avoid this, some BCBAs may choose to start with the client before a funding authorization is in place that defines services to be provided. This can be a slippery slope. The behavior analyst is unable to financially afford to provide free services to all clients in need of services and without current funding. What are the criteria by which some clients get free services and others not? And, how are those criteria justified? The point being that some obligations and duties required of behavior analysts may lead to positive or negative outcomes depending on the context. Other examples of deontological obligations include: 1.02—Conforming with Legal and Professional Requirements; 1.11—Multiple Relationships; 1.12—Giving and Receiving Gifts; 1.16—Self-Reporting Critical Information; 2.09—Involving Clients and Stakeholders; 3.11—Documenting Professional Activity; 5.03—Public Statements by Behavior Analysts; 5.04—Public Statements by Others; Standards 5.07, 5.08, and 5.09 on Testimonials; and 6.01—Conforming with Laws and Regulations in Research.

Influence from contract theory

The BACB Code also contains standards justified by contract theory. For example, BACB Standard 1.04 states that behavior analysts "provide services only after defining and documenting their professional role with relevant parties in writing." In so doing, the ethical conduct and interactions between all relevant parties become whatever roles and resulting duties stem from the documentation agreed upon by all relevant parties. Other examples of contract theory based standards include: 2.11—Obtaining Informed Consent; 2.16—Describing Behavior-Change Interventions Before Implementation; 3.02—Identifying Stakeholders; 3.04—Service Agreements; 3.05—Financial Agreements; 3.07—Third-Party Contracts for Services; 3.11—Documenting Professional Activity; 6.04—Informed Consent in Research; and 6.10—Documentation and Data Retention in Research.

The consequences of influence from multiple ethical paradigms

A BCBA's job would be easy if the BACB Code used a single ethical paradigm to guide it. If that were the case, a behavior analyst could determine whether one's behavior is justifiable based on the paradigm espoused by the BACB Code. But, as described earlier, the BACB

Code arguably invokes several paradigms to justify different standards for ethical behavior. Using multiple paradigms does create flexibility in applying and justifying behavior in compliance with each standard. However, using multiple ethical paradigms to justify behavior can result in confusion and variability in justified ethical behavior (Cox, 2021a). Confusion may occur because the theoretical divisions between ethical paradigms are assumed by most philosophers to be deep and fundamental (Scheffler, 2011).

Using only one approach (e.g., consequentialism) to justify ethical behavior will directly contradict claims to what is "right" and "wrong" made by other paradigms (e.g., virtue theory and deontology). For example, consider two individuals with autism who are both 13 years old, Casper and Alder. Casper is considered to require very few hours of treatment per week for social and communication skills. Alder also needs treatment for social and communication skills, but to a much greater degree. Casper has a much higher likelihood of living their adult life independently and holding down at least a part-time job. Alder has a much higher likelihood of living their adult life in a residential facility.

Between Casper and Alder, Casper is more likely to contribute economically and socially to society. Therefore the consequentialist position suggests that Casper should receive more of a behavior analyst's time and attention. However, fulfilling one's duty to uphold the principle of justice (i.e., deontological argument that resources should be allocated fairly) suggests the behavior analyst may have a duty to provide more time and attention to Alder.

Of greater difficulty are the instances wherein two different principles or standards conflict (i.e., an ethical dilemma), and each is justified by different paradigms. For example, consider an ethical dilemma in which a behavior analyst contemplates lying to a caregiver in order to advocate for the most effective treatment procedure. How does the behavior analyst decide between BACB Standard 1.01 which requires honesty and Standard 2.01 which requires maximizing client outcomes? Once a decision is made, how does the behavior analyst know if it was the "right" decision? And, how does this decision influence justifications in future ethical dilemmas?

One might argue that whether the behavior analyst should choose BACB Standard 1.01 or 2.01 will depend on the unique characteristics

of the context in which the ethical dilemma has arisen. That is, in one context, honesty should be upheld. But, in another context, the most effective treatment should be pursued and honesty should be withheld. The problem with taking this approach is it could lead to justifying any behavior based on the opinion of the individual (i.e., *ethical subjectivism*, which has problems of its own). That is, the individual could justify any behavior by claiming the nuances of the context seemed to justify their action (e.g., "I lied, because it is in their best interest not to know the truth"). This could make moot any rationale for having ethical standards, like the BACB Code, to begin with.

In summary, all four paradigms described here are used to justify ethical behavior within the BACB Code. Generally, each standard can be argued as justified by a different paradigm. This is not problematic when a single standard applies to a situation. However, this can limit the generality of the BACB Code to novel ethical dilemmas and lead to different ethical behavior by different BCBAs in the same situation (e.g., Cox, 2021a).

It is unclear which ethical paradigm a behavior analyst should use if they are in an ethical situation that is not covered by the BACB Code. Similarly, it is not clear which standard should be followed if two different standards conflict and are each justified by different ethical paradigms. One solution is to say that different variables in a given situation will lead to one theory being "more right" than the others. However, this seems to result in extreme permissiveness without a formalized manner to resolve this issue.

Applied behavior analysis and ethical theory: why Board Certified Behavior Analysts should care

The history of ethical paradigms and the difficulties they create are important for two reasons. Analyzing ethical behavior is not like fine dinnerware, wherein you only pull out the fine China for a holiday dinner. Ethical analysis is not initiated only on rare occasions when something atypical has occurred. Rather, BCBAs engage daily in behavior that fits within the principles or standards espoused by the BACB Code or by ethical rules and standards outside the BACB

Code. As a result, ethical analysis occurs on an ongoing basis and includes a need to justify why one is doing what they are doing.

Second, the field of behavior analysis will benefit by BCBAs understanding how ethical paradigms inform the BACB Code. All BCBAs provide a service under the label of "ABA Therapy." The BACB Code provides standards for appropriate behavior when providing that service. If one of the ethical paradigms helps BCBAs engage in more appropriate behavior and provide better services, then more emphasis should be placed on that ethical paradigm. Similarly, if adhering to one ethical paradigm negatively affects service delivery and the quality of services, then less emphasis should be placed on that ethical paradigm to guide the practice of BCBAs. BCBAs can only begin to engage in the conversation of how to improve appropriate service delivery by understanding the underlying ethical paradigms of the standards they are asked to follow.

Chapter summary

Theories aimed at justifying why a behavior is "right" or "wrong" have been around for centuries. In our current Western ethical context, several dominant ethical paradigms exist. Examples we described are *virtue theory*, *consequentialism*, *deontologicalism*, and *contract theory*. Each of these paradigms logically conflicts with each other. In a movement toward creating a practical framework for ethical decision-making, three ethical principles are often used. These include *beneficence*, *respect for persons*, and *justice*. Depending on how these principles are used, different underlying ethical theories may be invoked as justification.

The BACB Code (2020) seems to justify various standards for conduct using a mix of all four ethical paradigms we discussed and using all three ethical principles. This blending of paradigms and principles can create difficulty when BCBAs are confronted with ethical dilemmas. Nevertheless, a composite of multiple ethical theories has been the approach used by most healthcare professions to date. This is likely because each ethical paradigm fails to account for all ethical behavior in all situations. BCBAs should be cognizant of how the BACB Code fits with the rich history of ethical thought and different ethical paradigms because it can benefit them individually as well as the field of ABA as a whole.

Questions to help you incorporate this chapter into your practice

1. What cultural frameworks of "right" and "wrong" did you grow up with? How do those influence your interpretation of the BACB Code?
2. Pick any BACB Standard. Is there a context you would feel justified to violate the standard? Why do you feel the context justifies that action?
3. Think of an instance you followed a BACB Standard in the past few days. Why do you think your action was justified? Does your justification fit more with virtue theory, consequentialism, or deontology?
4. How does adhering to the BACB Code distinguish BCBAs from other "behavioral" providers? How does adhering to the BACB Code distinguish BCBAs from other helping professionals?
5. How do you promote *respect for* autonomy in your current practice? Are there ways you could improve?
6. How do you promote beneficence in your current practice? Are there ways you could improve?
7. How do you promote justice in your current practice? Are there ways you could improve?
8. Have you faced a situation where two different BACB Standards suggested conflicting courses of action? How did you resolve the issue? How did you justify your response?

CHAPTER 2

Contextual factors that influence ethical decision-making

"I did not direct my life. I didn't design it. I never made decisions. Things always came up and made them for me."

—**B.F. Skinner**

Ethical *decision-making* is behavior (Newman, Reinecke, & Kurtz, 1996). As such, the ethical decisions you make are a function of the same laws and principles that govern all other behavior. Ethical decision-making involves a *choice context*. A choice context occurs when you must choose between two or more different responses in a situation. For example, you may observe a coworker lie on their monthly report of billable applied behavior analysis (ABA) services. Do you confront them directly, tell your boss, tell the insurance company, or some combination? Or, do you do nothing at all? Analyzing choice serves as a foundation for understanding why humans do the things they do in different situations.

Choice has been studied extensively. In basic behavioral science, researchers have examined the behavioral processes that may affect the likelihood people choose one response over another (e.g., matching law—McDowell, 1989; discounting—Mazur, 1987; effort relative to the amount gained—Hursh & Silberberg, 2008). In applied behavioral sciences, researchers have examined the processes and contextual factors that increase the likelihood that practitioners and clients choose one treatment option over another (e.g., *Journal of Medical Decision Making*) and how behavior analysts make decisions during visual analysis of time-series data (Cox & Brodhead, 2021). At the organizational level, researchers have examined how structuring organizational policy around *ethical behavior* can impact business success (e.g., Sethi & Sama, 1998).

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Despite the abundance of behavioral research on choice, little attention has been given to understanding the variables that influence ethical choice in practicing Board Certified Behavior Analysts (BCBAs; e.g., Cox, 2021a). This highlights an important and open area for future research at the basic, applied, and organizational levels. Understanding how different factors affect ethical choice may inform how we train our employees to be ethical behavior analysts, prevent ethical dilemmas from occurring, and improve our ability to appropriately respond to ethical dilemmas when we are faced with one (i.e., an ethical choice context).

In this chapter, we synthesize research in choice and ethics to provide a framework of ethical behavior as a choice. The chapter is broken into two sections. The first section focuses on basic behavioral processes that have been shown to influence choice and how these processes may influence the ethical decisions of practicing BCBAs. The second section focuses on important topics from the clinical decision-making literature and how those factors may influence ethical decisions made by practicing BCBAs. In turn, using a choice framework will allow you to understand why ethical behavior may or may not occur, and to modify it accordingly. In the next chapter, we discuss variables that influence ethical behavior in organizations. Together the next two chapters provide an analysis of ethical behavior at the basic, individual, and organizational levels.

Basic research on choice

Basic research on choice is often studied in the laboratory. Often, concurrent schedules are used as the context in which choice is examined. At any moment in time, an organism can make one response from two or more concurrently available response options (Catania, 2013). Each option is typically associated with a different schedule of reinforcement. For example, two different keys may be presented to a pigeon in an operant chamber. Pecking the key on the left results in access to grain on a VI 30s schedule. Pecking the key on the right results in access to grain on a VI 60s schedule. One often used dependent variable in the operant chamber is how many times the pigeon pecks each key each minute. This arrangement therefore allows researchers to examine what variables (e.g., schedules of reinforcement) influence choice between available options (e.g., allocation of pecks to each key).

Different reinforcers for different behaviors

Different schedules of reinforcement will affect how organisms allocate responding between two available responses. Organisms tend to allocate more behavior to the response that results in greater amounts of reinforcement. Conversely, organisms tend to allocate less behavior to the response that results in lesser amounts of reinforcement.

Consider an example of a BCBA with multiple clients on their caseload. That BCBA's time is compensated in the form of money by hours billed to an insurance company. At any point in time, they can spend time analyzing data, updating skill acquisition or behavior reduction programs, or supervising staff—for one client. The length of time spent working each week is a finite resource and they cannot bill their time (i.e., services) for two different clients at the same time. Therefore a BCBA's allocation of time to the clients on their caseload is a daily decision. The matching law suggests the length of time a behavior analyst spends on each client's case will be influenced by the amount of reinforcement gained from working on each client's case. More specifically, the matching law predicts the ratio of time spent on one client compared to all other clients will equal, or match, the amount of reinforcement gained from working on that client's program compared to the amount of reinforcement gained from working on all other clients' programs (McDowell, 1989).

It is important to note the money that results from hours billed are not the only reinforcers that may affect how a BCBA allocates their time. Social interactions occur with the unique set of employees and caregivers associated with each individual with autism. Also, different individuals with autism likely require different amounts of effort based on the skill set of the BCBA and the problems presented by the individual with autism. As a result, the length of time and amount of effort spent will differ across individuals with autism even though the same amount of money might be earned for each individual (e.g., 2 h of billable indirect time per month).

Allocation of billable time is analogous to responding to different schedules of reinforcement that are present at the same time. For some individuals with autism, only 2 h of work per week and behavior-analytic skills already within a BCBA's repertoire are needed to make the changes to improve a client's programs. These clients require little

relative effort. For other clients, the same BCBA may need 3–4 h of work per week (even though they may be able to bill for only 2 h), and they may have to learn new skills (e.g., approaches to implementing preference assessments) or review the research literature to make necessary changes to improve a client's programs. In the former situation, the BCBA contacts a denser schedule of reinforcement because low effort is put into only 2 h of work. In the latter, the BCBA contacts a leaner schedule of reinforcement because more effort is put into 3–4 h of work. If each situation represents a different individual with autism on the BCBA's caseload, the matching law predicts the BCBA will spend more time on the first case (i.e., the one with low response effort but pays the same as the one with high response effort). However, arguably, the BCBA should be spending more time on the latter case (i.e., the one needing more work to result in the same quality of programming). Such differences in reinforcement schedules that follow from ABA service delivery may result in an unethical allocation of time and resources to individuals on one's caseload (see Chapter 1, for ethical arguments on the allocation of scarce resources; see BACB (2020), Section 3.0 for Responsibility to Clients and Stakeholders).[1]

A second example of how different schedules of reinforcement may affect ethical behavior involves client intake. It is hardly a secret that different funding agencies pay different hourly rates for BCBA and Registered Behavior Technician (RBT) services. Basic research on choice suggests organizations will likely accept more individuals with autism from funding sources that pay the best (e.g., the highest) rates. From a business standpoint, this may seem like commonsense practice. However, individuals with autism whose insurance companies reimburse at rates lower than other providers have no less need of services than individuals with autism whose insurance companies reimburse at high funding rates (see Chapter 1 and principle of *justice*).

As an overly simplified example, Medicaid often pays less per hour of service than private insurance companies (Accelify Education Resources, 2016). Relatedly, approximately 20.4% of the current US population is covered by Medicaid, 66.8% are covered by private

[1] Arguably this is one reason why receipt of gifts becomes a slippery slope. Reinforcers are being added to the treatment context that may result in a BCBA spending more time with a client than was agreed upon in a specified contract. However, as noted elsewhere in the book, other contextual factors are also present with gifts that must be considered (e.g., cultural variables associated with a gift exchange—see Witts, Brodhead, Adlington, & Barron, 2020).

insurance, and the remaining 12.8% are covered by other mechanisms or are uninsured (CDC, 2017). If an organization serves clients funded by only Medicaid and private insurance, selecting clients based on a random draw from the population would suggest 76.6% of their clients would come from private insurance and 22% would come from Medicaid.[2] Research on choice with concurrent ratio schedules indicates people will allocate most-to-all of their responses to the ratio schedule with lower requirements (Bailey & Mazur, 1990; Herrnstein & Loveland, 1975). This would suggest the organization would exclusively accept and serve clients funded by private insurance because they pay more. This would leave clients with Medicaid disproportionately underserved.

The current BACB *Ethics Code for Behavior Analysts* (hereafter referred to as the BACB Code) does not directly address the ethics of establishing caseloads based on the reimbursement rates you receive. As a result, BCBAs and organizational leaders can choose clients in whatever manner they prefer. If organizational leaders are unaware of how different schedules of reinforcement impact their behavior, basic behavioral processes suggest intake allocation will lean toward an exclusive preference for higher-paying clients. It seems difficult to ethically justify failing to provide services to certain clients because their funding rates are lower than other clients with private insurance.

The above is a highly simplified analysis. We recognize there is a difference between not preferring a funding agency because it pays less, and being unable to afford using a funding agency because the amount of money an organization loses through the contract is not fiscally sustainable. We also recognize the amount of work required to submit billable time to some funding agencies is another influential factor (e.g., paperwork, clinical processes). Relatedly, this does not include ongoing changes in reimbursement rates and other variables that influence interactions between organizations and funders. But, see Djulbegovic, Hozo, and Ioannidis (2015) who show how insurance companies and providers can reduce overall cost and maximize profits by approaching healthcare contracts from a game theory framework. Thus the same point of this section holds even when the complexity of

[2] Basic population frequencies: $\frac{\%\text{Insurance}}{(\%\text{Insurance})+(\%\text{Medicaid})} = \frac{66.8\%}{(66.8\%+20.4\%)} = \frac{66.8\%}{87.2\%} = 76.61\%$ would be insurance.

everyday settings is considered—understanding basic research on choice is helpful for understanding and modifying ethical decisions.

Understanding how different schedules of reinforcement influence ethical behavior will allow BCBAs and organizational leaders to actively ensure they can ethically justify the choices they make. Continuing the client intake example, it is easy to justify serving a client distribution of approximately 76.61% private insurance, 20.4% Medicaid, and the remaining from alternative funding sources. That is the distribution you would expect when serving all people equally (i.e., just allocation of services to those in need). Deviations from this distribution would mean one group was receiving more services than expected. Organizational leaders could then determine why. Perhaps more of one group seek services from the organization, or the proportion of people from different funding streams differ from national distributions in the areas served by an organization. These would be fair reasons to serve a different distribution of clients because the organization would be serving all people in their area or that seek their services equally. However, if a reason could not be found, it is likely some other basic behavioral process is impacting choice that may not be ethically justifiable.

Delayed and probabilistic outcomes

Not all outcomes in life come immediately after a behavior. In fact, many important and significant outcomes come at some delay. For example, the negative health impact of smoking cigarettes may not come for years or decades following any one instance of smoking. As a result, the delayed negative impacts on health may not play a significant role in the decision of a smoker to smoke each individual cigarette. The relatively small impact of the delayed and negative health consequences on one's decision to smoke is further mitigated by the immediate and reinforcing physiological effects of nicotine. Physical activity provides a second example. The benefits of physical activity do not occur for some delayed period. The relatively small impact of the delayed and positive health consequences is further mitigated by the immediate and aversive discomfort resulting from many physical activity routines.

Relatedly, many outcomes in life are uncertain. For example, there is no guarantee you will experience the health impacts from smoking

and physical activity. Both depend on how regularly you engage in the behavior, genetic predispositions, and multiple other behaviors that also impact health (e.g., diet). A second example is billing insurance companies for ABA services provided. As many ABA providers can attest, there is no guarantee you will get reimbursed for the full number of hours of services you provided to each client. Hundreds of millions of medical insurance claims are denied every year for a variety of reasons (e.g., insufficient medical necessity, lack of precertification; Mayer, 2009). There are some things BCBAs can do to increase the probability they will get reimbursed. However, there always is a possibility that BCBAs will not be reimbursed. Reimbursement is an uncertain outcome of providing services.

Basic research on choice has sought to understand how the delay to an outcome, and the probability of it occurring, affects choice. These areas of research are referred to as delay discounting and probability discounting, respectively (see McKerchar & Renda, 2012; Odum, 2011 for reviews). The basic idea behind delay and probability discounting is straightforward. Consider an example where an outcome resulting from a response, or series of responses, is worth $100. People will exert more effort for that outcome, worth $100, if that outcome is delivered immediately. If the outcome is delayed 5 years, or if there is only a 5% they will actually get the $100, they will exert much less effort. The more delayed or uncertain the outcome becomes the less people are willing to work for it (the less value it has). The more immediate or the more certain the outcome becomes the more people are willing to work for it (the greater value it has). This pattern of behavior tends to hold for outcomes that could be considered reinforcers and punishers.[3] Below, we provide a few examples of how delay and probability discounting likely play a role in ethical behavior.

Insurance billing

Consider an example of a BCBA who is responsible for billing insurance companies at the end of each month. That BCBA is likely under at least some sort of administrative pressure to ensure they bring in more money than that organization spends (e.g., payroll, facilities overhead, etc.). Due to the inherent variability in clients served and delays to receiving payment from insurance companies, some agencies

[3] Practitioners may consider using the PIC/NIC (Positive Immediate Consequence – Negative Immediate Consequence) Analysis (Daniels & Bailey, 2014) as a practical business tool for assessing competing contingencies impacting employee ethical behavior.

may be put in a situation where that organization is unable to bring in enough money to cover all costs. The BCBA now must make an ethical decision and choose whether to engage in behavior that is unethical (e.g., lie about services provided to the insurance company; increase services where two clients are billed at the same time) or that may compromise services and might be unethical (e.g., increase caseload sizes; decrease nonbillable services such as treatment planning or employee supervision).

As one example, lying to an insurance company will result in a short delay to reimbursement and will result in highly probable access to enough money to cover bills. Lying to an insurance company is also associated with the delayed and uncertain chance of getting caught and contacting the negative consequences of insurance fraud. In contrast, honestly reporting time will result in more immediate consequences which are the highly probable shortage of money and being unable to pay employees or utility companies.

The basic assumption of discounting is that an individual will choose to either lie or honestly report time, depending on what behavior results in the greater overall amount of net gain, or minimized loss, at the moment that the choice is made. For example, the ABA organization may face a $10,000 fine if caught billing fraudulently. However, if there is no audit mechanism and the probability of getting caught is near 0%, then the amount of that loss is unlikely to influence choice in this context.

Balancing harm with intervention effectiveness

In another example, BCBAs balance the probability of harm from a functional analysis, with the delay to the benefits gained from identifying a more effective intervention (see also our discussion in Chapter 7 about standardizing the functional analysis process). Choosing a descriptive assessment, instead of a functional analysis, may reduce the time to starting an intervention and the serious harm experienced from engaging in the problem behavior. But, this option has to be balanced with the possibility the BCBA may not correctly identify the function of behavior through the descriptive assessment. Thus the time it takes to identify the correct function and implement an effective intervention may be longer than if a functional analysis had been conducted originally.

Whether the BCBA chooses a functional analysis or descriptive assessment likely depends on several variables related to benefits and harms. For example, the severity of the problem behavior and ability to modify functional analysis conditions directly impacts the harms experienced through a functional analysis. The total harms experienced are less for disruptive vocal behavior compared to poking one's own eyes. The ability to modify the functional analysis conditions to analyze precursor behaviors or latency to occurrence will also impact the severity of harms experienced by the client (Hanley, 2012).

In these examples, the behavior analyst makes a choice between benefits and harms contacted from the descriptive assessment or the functional analysis. Each involves a different delay to the benefits from effective intervention and different amounts of harm from problem behavior during assessment. In addition, each is associated with a different probability an effective intervention will be identified. Each of those outcomes is uncertain (i.e., occurs with some probability). This is an ethical decision because the outcomes of each option directly involve standards set forth by the BACB Code (e.g., BACB Standard 2.01).

Balancing time spent on program development

It takes more time and effort to develop programs with greater detail than it does to create programs with less detail. Increasing the detail and nuance of intervention procedures can reduce the probability people will implement the intervention. The more complicated an intervention is, the more work is required for an individual to understand and learn to implement the intervention. Related is the background with behavior analysis for each member of the intervention team (e.g., BCBA vs. parent of newly diagnosed child with autism). The more work required to learn about an intervention and how to implement it, the more motivation will be required to implement the intervention (e.g., Mitchell, 2017). For example, there is a lower probability that an intervention will be implemented if it requires a parent of a newly diagnosed child with autism to spend 20 h learning about behavior analysis and 4 h/day of direct observation and data recording—and they already work 50 h/week and have three other children in the home.

Increasing the detail and nuance of intervention procedures also can impact treatment fidelity. The more complicated an intervention is, the less likely people will be to perfectly implement the intervention

(Atreja, Bellam, & Levy, 2005; Muir, Sanders, Wilkinson, & Schmader, 2001). Relatedly, increasing the detail and nuance of intervention procedures increases the delay to when staff and individuals in nontreatment settings are trained with sufficient skill to implement the procedures. For example, consider a differential reinforcement of alternative behavior procedure that reinforces appropriate and varied spontaneous conversation initiation on a FI 60s plus 5s limited hold lag four schedules through token delivery and the backup reinforcers include a therapist jumping on a pogo stick while making horse noises. The probability a parent new to ABA understood the previous sentence and will accurately implement the intervention is much lower than an intervention where high-fives and social praise are provided for all conversational statements. Thus the level of procedural detail should be considered in light of the probability and delay to high treatment integrity. This is important because treatment integrity has been shown to influence overall treatment effectiveness (i.e., two benefits gained from the intervention; e.g., St. Peter Pipkin, Vollmer, & Sloman, 2010).

Summary

Each of the earlier examples highlights how contextual factors explored in basic behavioral research will influence ethical decision-making. We discussed how different schedules or amounts of reinforcement will impact the ethical choices people make. We also discussed how the delay and probability that outcomes occur will impact the ethical choices people make. Being aware of these variables can help BCBAs and organizational leaders implement safeguards so the behavioral processes that occur outside of our awareness do not lead employees to make unethical decisions. If you are looking for a framework to follow, in Table 2.1 we have provided a step-by-step process for approaching a clinical ethical dilemma. We hope this table helps to illustrate the specific steps that are likely necessary to engage in a thorough analysis of an ethical dilemma (although be sure to keep in mind the variables described in this chapter and how they interact with the steps in the table).

Factors that affect clinical decision-making

Every year an estimated 250,000 people die prematurely from medical errors in the United States, making errors in medical decision-making

Table 2.1 How to approach a clinical ethical dilemma.

Step number	Action
1	Collect *all* relevant data that could help with resolving the matter
2	Identify the basic ethical principles involved and explain how they relate to the case
3	Consider whether ethical principles conflict in this situation OR whether there is uncertainty about what a particular principle (e.g., beneficence, respect for autonomy) directs you to do
4	Formulate a question that reflects the conflict
5	Decide which principles should have priority in this case and support that choice with factors relevant to the case, OR find an alternative that avoids the dilemma
6	When uncertainty persists, note whether there is some missing information that would help you resolve the dilemma. Which information? How will it help resolve the dilemma?
7	Evaluate your decision by asking if it is what a consensus of exemplary BCBAs would agree to do
8	Plan the practical steps that you should take, focusing on the details of the case and the future issues that you foresee

Adapted from Rhodes, R., & Alfandre, D. (2007). A systematic approach to clinical moral reasoning. Clinical Ethics, 2, 66–70.

the third leading cause of premature deaths (Makary & Daniel, 2016). Being a medical patient is as dangerous as bungee jumping or mountain climbing (Leape, 2000)! As a result, a significant amount of research has been conducted to understand medical decision-making processes and how to improve patient safety (we discuss this in a bit more detail in Chapter 7).

It is unlikely the clinical decisions you make with your clients will result in fatalities. Nevertheless, it is safe to assume that you and all other BCBAs do not make optimal decisions all the time. By optimal, we mean a decision that will maximize benefits and minimize harms. Below, we describe some important factors that affect decision-making so that you can further maximize benefits and reduce harm to clients you serve.

Length of time to make a decision

The length of time that a clinician has to make a specific decision will affect the quality of that decision (Thompson, Aitken, Doran, & Dowding, 2013). As the length of time to make a decision increases, so does the likelihood that the decision will be optimal. Decreasing the length of time you have to make a decision will also decrease the likelihood that your decision will be optimal.

Consider an example where an RBT is asked to babysit a client at the home after a therapy session while the parent goes to the grocery

store. The RBT may be caught off guard and accept the parent's request if they are asked at the end of a therapy session, have little time to analyze the situation, and are not prepared to be asked that question. However, the RBT would have more time to consider their options, consult organizational policy, their supervising BCBA, and the BACB Code if the parent leaves a message on the RBTs cell phone asking them to watch the child after therapy tomorrow afternoon. In the latter situation, the RBT is more likely to make an optimal decision and politely decline to avoid creating multiple relationships (see BACB Standard 1.12).

The length of time available to decide is also relevant for other ethical decisions. An RBT has to decide within seconds whether to accept a gift presented to them by an individual with autism or their caregiver who they are meeting for the first time. Similarly, an intake coordinator has to decide within a day or two whether or not to take on a new client with severe behavior and low reimbursement rates. A BCBA has to decide within a few weeks or months how to avoid services being interrupted due to employees providing notice they will be leaving. These varied time frames to make a decision will impact the ability of the individual to consider the outcomes of each choice and how each available option fits with the BACB Code. The more time one has, the more likely one can consider all their options within the framework of the BACB Code (or ethical rules that may govern their behavior).

Amount of information available

A second contextual factor that influences clinical decision-making is the amount of information available to the person making that decision (Thompson et al., 2013). Generally speaking, the more relevant information that is available, the greater the likelihood an optimal decision is made. The less relevant information that is available, the lower the likelihood an optimal decision is made.

Consider a BCBA who needs to choose an intervention to reduce aggressive behavior for an individual with autism. They will likely select the most effective intervention if they have the results of a functional analysis completed last week by a BCBA from a nationally respected severe behavior program. In contrast, they will likely choose a less than optimal intervention if they have no previous information about the individual with autism, were allotted no assessment time,