TRAINABA SUPERVISION CURRICULUM SERIES

Volume 1: BCBA Reference Manual

Second Edition

Ben Theisen

Free and Open Source Community Edition Cumulative Records Documentation Society

Copyright © 2019. Second Edition.

Updated: July 9, 2019.

This book may be downloaded as a free PDF at (website). This text-book is also available under a Creative Commons license. Source files hosted on Github.

Los Angeles, California, USA.

Contents

1	\mathbf{Adi}	ninistration	13
	1.1	Behavioral Data Table	14
2	Abo	out This Book	17
	2.1	History of the TrainABA Supervision Curriculum Series	18
	2.2	Publisher	18
	2.3	Author	18
	2.4	Collaboration Tools	19
		2.4.1 Creating New Materials from This Book	19
		2.4.2 Online Documentation	20
	2.5	Versions	20
3	A-0	1	21
	3.1	Concept	21
	3.2	Examples	22
	3.3	Relevant Literature	
	3.4	Related Tasks	
In	dex		27

4 CONTENTS

List of Figures

1.1	A nice space										13
1.2	A nice simple diagram										15

List of Tables

1.1	A simple	behavioral	data	$_{ m table}$															1	4
-----	----------	------------	------	---------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---

About the Author

Ben Theisen is an independent behavioral consultant working in the California Community Care Facilities system. Dr. Theisen is an adjunct professor of Industrial-Organizational/Business Psychology at The Chicago School of Professional Psychology in Los Angeles. Working in behavioral services since 2006, Dr. Theisen has been a Board Certified Behavior Analyst since 2010.

9

Preface

This book is a labor of love. It serves as an excuse to incorporate GNU/Linux command line tools into the soul-crushing Microsoft workflow of many behavioral service providers.

Anyone is welcome to participate in the development of this book and other projects like it. All of the source code, including the latest PDF version, is publicly available.

The code is maintained through Cumulative Records Documentation Society (CRDS), a 501c3 nonprofit. GitHub, a software development organization, has generously provided CRDS with lifelong sponsorship for projects like this one.

The technology choices for this book were a form of artistic expression. These tools promote community in the century-long development of behavior analytic services as a profession. The act of using these tools was meant to be rebellious, if not subversive, against the way large books are usually developed. The technology for this book reflected the do-it-yourself spirit of Skinner's hands-on work with operant chambers. It was pure hip-hop with two turntables and a sampler. It was grunge rock singing love songs in an old garage. It was a \$200 single-subject design study at a university where other departments held out for seven figure grants.

The computers used to build this book were a nod to the traditional applied behavior analysis studies, which could be conducted for cheap with a clipboard and some doctoral students. The best example was an old Lenovo ThinkPad X200, purchased second-hand from Craigslist with cash. This was a statement against consumerism. It said no to "upgrading" to next-generation CPUs that ran the telemetry nightmare known as Windows 10.

For this statement, the X200 was perfect. It was golden-era hip hop in all its sound sampling glory. The laptop had a battery life of 23 minutes and came pre-installed with Hello Kitty stickers on certain keys. The stickers said things like, "return," "shift," and "a." And yes, all stickers were placed correctly. The X200 ran a free and open source operating systems powered by GNU/Linux and approved by the Free Software Foundation.

This book was proudly typeset using I^AT_EX, a free and open source software (FOSS). FOSS was chosen as a nod to B.F. Skinner's writings

on culture, in which he voiced the difficulties of communicating non-physical technologies to new audiences. Rather than create a book to be released on a bookshelf, this book was designed from publicly available code. The version control notes were public, so anyone could see the process of creating the book. The goal of these tools was to add a layer of physical technology to a book whose subject was a non-physical technology. Hence, it built on Skinner's vision of better communicating the technology of behavior analysis to general audiences.

LATEXallowed modularization of the book's files. It keeps all the writing separate from the files that generate the formatting. This was a nod to the stories of Skinner's lab. As the legends tell, one could hear the operant chambers clacking from various experiments, happening simultaneously though measured and analyzed as separate phenomena. In this book's modular design, each file held its own content. Any content file could easily be removed, modified, or replaced without any impact on other pages.

The books were assembled and written using Vim, a free and open source command line text editor. It was compiled using custom shell scripts in a Bash terminal. Git and GitHub were used for version control. The decision to use a command line editor was a nod to an operant chamber. One need only peck at the keys to write, assemble, and distribute this book. No mouse, trackpad, eyes, or graphic user interface is involved. An experienced operator could complete the process blindfolded. The author suffers from tendonitis and frequent eyestrain from extensive computer use, so the command line technology is a welcome option.

While the specifics of the technology choices for this book may seem gratuitous, the purpose was to inspire behavior analysis professionals to indulge their curiosity in computer programming. The intended message is, roughly, that even an English major can learn to write code if the project is interesting. Perhaps others from non-programming backgrounds will consider this project as an invitation to download and tinker with code.

Please submit errors, additions, improvements, and suggested omissiongs using the GitHub Issue Tracker. Nothing posted in the modern day mead-halls of Facebook Groups will be read by those who maintain this book.

LIST OF TABLES 11

All readers may use, copy, modify, and distribute this book and its files. Hard copies are available. Custom builds are available for companies, universities, and others. Please contact CRDS for more information about how to use intellectual property for this book or make content contributions. The contact is postmaster(at)cumulativerecords.org.

The Behavior Analyst Certification Board provided a copyright license for use of the BCBA/BCaBA Task List, 4th and 5th editions. No reprinting of those materials are allowed without the express written consent of the BCBA/BCaBA. Statements of free and open source licensing of this book do not apply to the BCBA/BCaBA Task List, which is the sole property of the Behavior Analyst Certification Board. For more information, visit www.bacb.com.

Some of the content in this book builds upon work from contributors to its first edition. This book represents significant revision, rewriting, and reorganization, to the point that it is a completely different book representing original content. The first edition continues to be available through the GitHub repositories. It has been made publicly available under a Creative Commons 4.0 - Attribution - Sharealike - Noncommercial license since 2017.

Chapter 1

Administration

This is a whole chapter about administration for supervisors. None of it is dependent on implementing procedures of certification or licensing entitities. For example, Fourier series gets indexed for no apparent reason.

Say, do you remember that image of space from last chapter? Here is the image, presented as a figure. Look how pretty a figure can be!



Figure 1.1: A nice space.

As you can see in the figure 1.1, the function grows near 0. Also, in the page 13 is the same example.

All of this continues to another page, which includes a bulleted list.

- fun
- sun
- rock

- roll
- okay

The most important consideration is the use of power when microwaving burritos. Whether at a concert or anywhere that sells gasoline, burritos and microwaves are your friends. These are the friends you want to keep. Parents encourage their kids to have these lasting relationships.

It's never too early to start thinking about tabular presentation of data. Yes, we're talking tables.

1.1 Behavioral Data Table

Behavior	AR18	Q1	Q2	Goal	Change	Met?
Physical Aggression	0	0	0	0	+	No
Self-Harm	0	0	0	0	+	No
AWOL	0	0	0	0	-	Yes
Fabricating Stories	0	0	0	0	-	Partial

Table 1.1: A simple behavioral data table

A TikZ figure will be rendered below this line. It has to get to the next page first. Be sure to hold your excitement for the moment. It really will be ready to show momentarily. Any old moment. Could be this one. Maybe now?

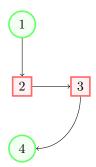


Figure 1.2: A nice simple diagram

Chapter 2

About This Book

A typical book is mostly written by the author whose name is on the cover. The book is completed by staff members at a publishing company. The person in charge of typesetting is usually not an expert on the subject the book presents, which can lead to typesetting decisions that confuses readers. An ebook is available if the publisher can secure digital rights management (DRM) procedures to prevent the book from being shared. The materials are copyrighted such that only the publisher can give permission for its content to be printed elsewhere. It is sold and distributed for a profit. The author is paid a royalty.

This is not a typical book. It was written by the author whose name is on the cover, though it was openly workshopped using a version control system allowing anyone to give input. The book was completed by a staff of one at a nonprofit. Mostly, their job was to program free and open source software to handle the publishing process automatically. The typesetting was programmed by the author, leading to typesetting decisions that were congruent with the contents. An ebook was compiled using the same code base as the paper copy. It was made freely available to others, along with the source code, without DRM, to promote sharing.

The materials were copyrighted using a Creative Commons 4.0 - Attribution - Sharealike - Non-commercial license, to provide readers with the freedom to use, copy, modify, and distribute the book

non-commercially. These modified or copied versions retain the same freedoms as the original work. There is no need to ask the publisher for permission to reprint the book's contents. The book is distributed freely with paper copies sold at a reasonable price. The profits go to a public charity that advances the contents of the book. The author is not paid a royalty.

2.1 History of the TrainABA Supervision Curriculum Series

This book originated from a project from TrainABA, a startup organization from 2013-2016. Its goal was to function as a publisher and resource for behavior analysis supervision. It was unsuccessful. When TrainABA closed, the publisher released its works under a Creative Commons 4.0 - Attribution - Sharealike - Non-commercial license. Some of its works survived as a project, such as the free Moodle Course, manuscripts, and SAFMEDs app. These works were donated to Cumulative Records Documentation Society, to be developed and archived for public use.

2.2 Publisher

This book was published by Cumulative Records Documentation Society (CRDS), a 501(c)3 nonprofit based in Los Angeles, California, USA. CRDS produces archive-quality continuing education materials for public use. CRDS employs technical producers and project maintainers to develop and distribute works such as this. CRDS survives on the generosity of its members. To make a donation, or to become a member, please visit http://cumulativerecords.org.

2.3 Author

This book was written by Benjamin Theisen. He has a PhD in Business Psychology and MBA, both of which he earned while working full-time in Los Angeles, California. He is a Board Certified Behavior Analyst (#1-10-7323) specializing in organizational behavior

management. Dr. Theisen is an adjunct professor in the Industrial-Organizational/Business Psychology Department at The Chicago School of Professional Psychology's Los Angeles Campus. Dr. Theisen is a consultant at Defensible Personnel Systems, Inc. and contributes 30 hours per week of time to CRDS. He researches personnel in the applied behavior analysis profession. His hobbies include dance, music, mathematics, computers, and exercise.

2.4 Collaboration Tools

CRDS built this book using collaboration tools from software developers. Anyone can contribute or suggest changes for free. There will be a permanent public record of any such collaboration. We encourage readers to report errors using the Issue Tracker on our GitHub repository. The location is: https://github.com/cumulativerecords/TrainABA-Vol1-BCBAReferenceManual/issues

2.4.1 Creating New Materials from This Book

Readers may notice opportunities to use/extend the book's contents (e.g., build a slideshow to be used where one works or teaches). All readers are invited to suggest changes to this book using the GitHub repository. For readers who have modified the contents to be used where they work or teach, we ask that you submit your materials to CRDS so that we can make them available to other readers. We believe this will afford us the opportunity to have one or two well-developed versions of a work, which are compatible with the original book. We believe one organized version is better than multiple partially-developed, incompatible but similar works.

Readers who create materials retain credit for their contributions. In many cases, CRDS will supply content creators with a technical producer who will help them organize the materials for larger audiences at no charge. Organizations who use CRDS materials regularly for personnel development provide donations.

2.4.2 Online Documentation

The materials in this book will likely be distributed as online documentation from https://ReadTheDocs.org. More information about this project will be made available at a later release.

2.5 Versions

The typesetting system used to compile this work is very flexible. It can compile a similar version for nearly any page size with a very simple change in code. It is designed to provide maximum flexibility to readers, who are often supervisors and educators with a need to use only certain sections of this work. By downloading the source code, readers are able to pick and choose which sections of the book to compile. They can rebrand the book to indicate that they modified the original version. We encourage readers to tinker with the source code to download modified versions of the work. It is surprisingly easy to make a mobile-friendly version of this book. One can also make a new version for each month in a supervision setting, for example. It is very flexible. CRDS will provide a version sized for standard typing paper (A4 or 8 1/2" X 11") as well as a small version designed for mobile phones. To request a custom size or version, contact us through our website at http://cumulativerecords.org/contact.

Chapter 3

A-01

A-01 Identify the goals of behavior analysis as a science (i.e., description, prediction, control).

3.1 Concept

Definition and/or description goes here. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

is an observable or measurable response.

3.2 Examples

Ex1: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean

3.2. EXAMPLES 23

faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

Ex2: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis

vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

3.3 Relevant Literature

[1] Donald M Baer, Montrose M Wolf, and Todd R Risley. "Some still-current dimensions of applied behavior analysis". In: *Journal of Applied Behavior Analysis* 20.4 (1987), pp. 313–327.

3.4 Related Tasks

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus.

25

Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Glossary

 ${\bf Applied} \ \ {\bf Refers} \ {\bf to} \ {\bf selection} \ {\bf of} \ {\bf socially} \ {\bf significant} \ {\bf behaviors} \ {\bf when} \ {\bf designing} \ {\bf interventions}. \ \ {\bf 26}$

Behavior Refers to an observable act or response from a living organism. 26

CAT A sleepy animal. 26

Bibliography

[1] Donald M Baer, Montrose M Wolf, and Todd R Risley. "Some still-current dimensions of applied behavior analysis". In: *Journal of Applied Behavior Analysis* 20.4 (1987), pp. 313–327.

30 BIBLIOGRAPHY

Index

Behavior, 22

 $\mathrm{TikZ},\,14$

Fourier series, 13