

A Baseline of Injury and Psychosocial Stress for Applied Behavior Analysis Workers

Supporting Statement B

Request for Office of Management and Budget Review and Approval

for Federally Sponsored Data Collection

June 1, 2022

Project Officers: Oliver Wirth, Ph.D.

National Institute for Occupational Safety and Health

Health Effects Laboratory Division

1095 Willowdale Road, MS-4050

Morgantown, West Virginia 26505

[owirth@cdc.gov](mailto:owirth@cdc.gov)

Penelope Allison, Ph.D.

National Institute for Occupational Safety and Health

Health Effects Laboratory Division

1095 Willowdale Road, MS-4050

Morgantown, West Virginia 26505

[pallison@cdc.gov](mailto:pallison@cdc.gov)

## 1. Respondent Universe and Sampling Methods

The sampling frame for the survey will include workers who are currently credentialed by the BACB (~129,000). As of October 2020, there were 42,272 board certified behavior analysts (BCBAs), 4,579 board certified assistant behavior analysts (BCaBAs), and 82,978 registered behavior technicians (RBTs). The sampling method will be a convenience sample. Non-probability sampling was chosen due to the BACB preference for non-disclosure of certificate information needed for a probability sample. The sampling unit will be individual ABA workers. The unit of analysis will be ABA workers as a group. Analyses will also be detailed by type of credential and work setting.

Acceptable response rates have been achieved with this population in the past using email for survey dissemination. The BACB administered an online survey to BCBAs in February 2016 and obtained a response rate of approximately 36%. There are no reported surveys of RBTs at the current time (the certification was created in 2014). Based on the response rate in the BCBA survey and typical response rates for online surveys, we anticipate a response rate of at least 10-20% of the population or approximately 12,900-25,800 ABA workers. We will estimate prevalence with a 95% confidence interval of 0.01 (1%) width or less. With a sample size of 12,900 and assuming  $p=0.5$  as the prevalence of injury provides a 95% confidence interval of 0.491-0.509. A sample size of 25,800 and  $p=0.5$  prevalence provides a confidence interval of 0.494-0.506. A sample of this size would clearly be sufficient for the planned analyses. For example, with a 95% confidence interval, a population size of 129,000, and +/-5% margin of error, the sample size could be as small as 384. There are also specific circumstances with this survey. Several factors may increase the response rate. Occupational injury is a salient topic among ABA workers. The survey has the support of ABA professional organizations. Our strategy to administer the survey directly to all ABA workers, as opposed to receiving it through their work organization, will likely increase the response rate by providing an opportunity to respond discretely without the fear of reprisal or loss of privacy.

## 2. Procedures for the Collection of Information

The sampling method will be a convenience sample. Selection of a random sample of ABA workers is not possible. Instead, all credentialed ABA workers will be invited to participate. Non-probability sampling was chosen due to the Behavior Analysis Certification Board's preference for non-disclosure of certificate information needed for a probability sample. The sampling unit will be individual ABA workers. The unit of analysis will be ABA workers as a group. Analyses will also be detailed by type of credential and work setting.

The survey will be distributed in an email with a brief message and a webpage link to the online survey (see the email message below). The email will be sent by the Behavior Analysis Certification Board to individuals currently credentialed. Only NIOSH researchers will manage the data collection using RedCAP. During the enrollment period, data will be periodically downloaded and backed up on NIOSH servers. All survey data files will be saved and archived in their raw format. Additional data files containing processed, reformatted, or summarize data will be created, edited, or reformatted as necessary to meet the requirements for conducting various statistical analyses. These files will be regularly inspected by the NIOSH researchers for quality (i.e., accuracy, omissions, and errors).

Email message:

"Subject: Seeking Participants for a Survey About Work Injuries

Dear Potential Participant,

I am a researcher at the National Institute for Occupational Safety and Health, and our Behavior Analysis Research Team is conducting research on the work experiences of applied behavior analysis workers. You are receiving this email because you have a BACB credential (RBT, BCaBA, BCBA, or BCBA-D).

You are invited to participate in a short, web-based survey that will collect information on the injuries you might have experienced while working. We are collecting this information so that we can see if applied behavior analysis workers get injured more or less frequently than other types of workers and, in the future, use the data to improve working conditions and reduce injuries.

The survey contains questions about your workplace, the injuries you have sustained in the past 12 months, and any personal protective equipment you use. Your responses to the survey are anonymous. We will not use the survey to identify you. Even though your responses will not identify you, we will treat your data in a secure manner and will not disclose the information unless otherwise compelled by law.

Completing the survey is voluntary and refusing to participate will not involve any penalty. You may skip questions or stop answering questions at any time. You will not receive any compensation for completing the survey. There are no foreseeable risks associated with this survey.

If you agree to participate, please click the following link, or copy and paste the URL into your browser's address bar to go to the survey:

[ survey link]"

### 3. Methods to Maximize Response Rates and Deal with No Response

Acceptable response rates have been achieved with this population in the past using email for survey dissemination. The BACB administered an online survey to BCBA's in February 2016 and obtained a response rate of approximately 36%. There are no reported surveys of RBTs at the current time (the certification was created in 2014). Based on the response rate in the BCBA survey and typical response rates for online surveys, we anticipate a response rate of at least 10-20% of the population or approximately 12,500-25,000 ABA workers.

Several factors may increase the response rate. Occupational injury is a salient topic among ABA workers. The survey has the support of ABA professional organizations. Our strategy to administer the survey directly to all ABA workers, as opposed to receiving it through their work organization, will likely increase the response rate by providing an opportunity to respond discretely without the fear of reprisal or loss of privacy.

We will estimate prevalence with a 95% confidence interval of 0.01 (1%) width or less. With a sample size of 12,500 and assuming  $p=0.5$  as the prevalence of injury provides a 95% confidence interval of 0.491-0.509. A sample size of 25,000 and  $p=0.5$  prevalence provides a confidence interval of 0.494-0.506. A sample of this size would clearly be sufficient for the planned analyses. For example, with a 95% confidence interval, a population size of 125,000, and  $\pm 5\%$  margin of error, the sample size could be as small as 383.

ABA workers who choose not to complete the survey will have an opportunity to provide basic descriptive information in a very brief alternate survey. These data will be aggregated for comparison with responders to assess nonresponse bias.

#### 4. Tests of Procedures or Methods to be Undertaken

Pilot testing was conducted with nine applied behavior analysis workers. This consisted of 45- to 60-min cognitive interviews during which the worker answered read the recruitment materials and instructions and then answered the survey questions via Skype with a member of the research team. The worker explained their thought processes for answering the questions and pointed out any questions they found to be vague or difficult to answer. The survey was revised based on these comments and suggestions from the workers who participated in pilot testing.

#### 5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

Michael Andrew ([mta6@cdc.gov](mailto:mta6@cdc.gov), 304-285-6189) was consulted on statistical aspects of the project design during project development.