SURVEYING LEVELS OF STAFF BURNOUT AMONG APPLIED BEHAVIOR ANALYSIS PRACTITIONERS

By

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Abstract

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Applied Behavior Analysis (ABA) practitioners engage in highly demanding work duties from collaborating with schools and families and navigating funding sources to direct work with clients. Therefore, burnout is a prevalent issue in this field. However, it is infrequently studied in the literature in any of its components, including risk factors, overall levels of burnout, or means to mitigate its effects. The aim of the present study was to survey the levels of burnout among ABA practitioners in Northern California and attempt to identify higher levels of weekly engagement in self-care behaviors as one component in lower burnout scores. The present study found that more hours spent per week engaging in self-care activities was indeed associated with lower overall levels of burnout. In addition to self-care, the survey asked questions to discover other possible associations with high burnout scores, including what type of work one primarily engages in within the field. Continued exploration of burnout and its factors is necessary to support ABA practitioners, not only to aid their mental health but also to ensure ABA is providing the highest quality clinicians to the clients and families who rely on them.
Acknowledgements

This project was a necessary pivot due to the pandemic from an original proposal Dr. Walmsley and I had spent about a year working on previously. Despite the disappointment that accompanied this, Dr. Walmsley was quick to provide me with doable alternatives in the uncertainty that took place the last two years. For this and countless other reasons, I want to thank Dr. Walmsley for his unwavering support throughout his graduate program and the year before when I was an undergraduate attempting to write my first research proposal. I look forward to putting in a good word for your program when I am given the opportunity in my future work with prospective students in the community.

I would also like to thank Kim Kowalski for taking time out of her busy schedule to help me when I needed someone new to sit on my committee. I am excited to continue to learn from you as I graduate and step into a new part of my career.

Finally, I want to thank everybody who reads through this project, and the Cal Poly Humboldt Department of Psychology for helping me find my passion within the field.
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Introduction

Burnout among staff working in Applied Behavior Analysis (ABA) is a pervasive issue (Gibson et al., 2009; Hurt et al., 2013; Kelly & Barnes-Holmes, 2012) that is, relative to other constructs in the field of psychology, seldom addressed in the literature. Staff burnout, defined as “a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding” (Schaufeli & Greenglass, 2001, p. 501), can be caused by various environmental factors that staff at ABA agencies frequently encounter. Some of these factors include high emotional demands, inability to maintain psychological distance between one’s job and one’s personal life, and organizational issues within the agency itself (Shankar & Kumar, 2014). As anybody who has worked with individuals with autism spectrum disorder (ASD) or any other Intellectual or Developmental Disability (IDD) may know, the job roles can require a large amount of emotional labor and time.

Many of the studies published in the burnout literature within ABA attempt to identify factors associated with high levels of burnout and staff turnover. Gibson, Grey, and Hastings (2009) distributed a questionnaire to various ABA staff that measured supervisor support as a predictor of burnout. Their results found that high work demands partnered with low supervisor support correlated with low personal accomplishment in the Maslach Burnout Inventory (MBI; Maslach et al., 1986), which is a category occasionally used to measure burnout. Additional factors recognized in the literature as contributing to higher levels of staff burnout are low levels of training satisfaction.
(Bottini, Wiseman, & Gillis, 2020), neuroticism (Hurt et al., 2013), and negative implicit attitudes towards individuals with ASD (Kelly & Barnes-Holmes, 2013).

The Maslach Burnout Inventory is most frequently used in this field of research to measure participants’ levels of burnout. However, the present study will be using the Copenhagen Burnout Inventory (CBI; Kristensen et al., 2005). While the MBI is a commonly used measure, the language in the subscales can potentially evoke negative emotional reactions. For example, in developing the Copenhagen Burnout Inventory Kristensen et al. (2005) conducted a pilot study in which they distributed the MBI and another separate scale and asked participants to make note of questions they found difficult to answer or other comments they wished to make. This pilot study found that almost all negative comments participants made were related to the MBI. Participants had the most problems with the “depersonalization” subscale that asked questions like “I feel I treat some recipients as if they were impersonal objects.” (Maslach et al., 1986). To avoid potentially offending participants, the CBI will be used in the present study.

Although the CBI is newer and less commonly used than the MBI, it employs a more inclusive definition of burnout as the basis for its subscales. The CBI aims to measure personal burnout, work-related burnout, and client-related burnout while the MBI measures depersonalization, emotional exhaustion, and reduced personal accomplishment. Therefore, the CBI’s subscales allow researchers to better understand what specific areas of one’s life burnout may be affecting. Additionally, the CBI can be scored as a single measure of burnout by combining all subscale scores, while the MBI is meant to be three separate scores of the distinct dimensions of burnout (Maslach et al.,
1986). The CBI has been tested and validated, and the original study that published the scale showed it had high face validity, criterion validity, and internal reliability (Kristensen et al., 2005).

While many studies focus on different aspects of one’s personality and/or organizational policies relating to individual agencies, there continues to be a paucity of research in the burnout literature relating to individuals employed within ABA. Specifically, there are few studies addressing how to cope from, recover from, or prevent burnout. The current study will aim to measure levels of staff burnout as well as common strategies used for self-care in ABA workers within the Northern California region. To this author’s knowledge, only one study has been published in the ABA literature that focuses on self-care of practitioners themselves. Fiebig et al. (2020) published a discussion paper on an invitation to engage in self-care as ABA practitioners during the COVID-19 pandemic. The authors provide a few mindfulness and self-compassion techniques BCBA’s and others in the field should practice to prevent burnout and continue providing the best services to their clients. This article appears to be the first of its kind within ABA. The present study therefore hopes to add to self-care literature surrounding practitioners in the field. While the current study is mainly exploratory in nature, it is expected that those who engage in higher levels of self-care will experience lower levels of burnout overall. Further, researchers hypothesize that staff who work primarily directly with clients (e.g., direct implementation of ABA services) will experience higher levels of burnout than those who work primarily indirect hours.
Methods

Participants

The participants for the present study consisted of 54 practitioners over the age of 18 working in ABA within the Northern California area. This area included, but was not limited to, Humboldt, Mendocino, Lake, Del Norte, Placer, and Sacramento counties. The survey was distributed to anybody working in the field either directly or indirectly with clients, thus it was a requirement that the participants deliver ABA services in some capacity (we excluded those solely delivering Supported Living Services). While it was not required, some of the participants held a certification such as a BCBA, BCBA-D, BCaBA, or RBT. It was expected that the majority of participants would be direct staff holding no certification but would at least have a high school diploma, but participants mainly consisted of BCBAs and program supervisors.

Instrumentation

The survey for the present study was delivered on an online platform (Qualtrics) and consisted of three sections to measure burnout levels and self-care strategies among ABA practitioners. The first section asked demographic questions such as (a) participant age, (b) the county they are located in, (c) their job title, (d) their highest level of education, (e) what credential they hold (if applicable), (f) the primary age of clients they serve, (g) how many years they have worked in ABA, (h) how many hours per week are spent directly delivering services to clients, and (i) how many hours per week they spend engaging in indirect client work.
The next section included questions about how many hours per week the participants engage in self-care activities in addition to what general category their preferred self-care strategies fall under (e.g., emotional self-care, practical self-care, physical self-care, mental self-care, social self-care, and spiritual self-care). There was a section included for participants to report any other preferred self-care activity that they feel was not encompassed within the general categories listed.

The final section of the survey was the CBI. The CBI is a 19-item inventory that has three categories to measure burnout: personal burnout (six items; e.g., “How often are you physically exhausted?”), work-related burnout (seven items; e.g., “Is your work emotionally exhausting?”), and client-related burnout (six items; e.g., “Do you feel you give more than you get back when you work with clients?”). Each of the subscales are measured from 1 (never/almost never) to 5 (always or to a very high degree). The CBI is intended to be scored by converting the original range of scores on the Likert scale from 1 to 5 to 0 to 100, with scores of 1 corresponding to scores of 0 and scores of 5 corresponding to scores of 100 (Kristensen et al., 2005). For the purposes of the current study, we kept the original Likert scores of 1 to 5 for each item in the scales as we expected this to produce the same results without requiring data manipulation. Therefore, the CBI had total possible scores of 0 to 95. The original paper developing the CBI did not set criteria for indicating high, moderate, or low levels of burnout, however a more recently published paper (Creedy et al., 2017) used the original scoring of the CBI to set their own criteria. To do so, they decided that low levels of burnout were any score less than 50, moderate scores were between 50 and 74, high levels were between 75-99, and
extreme burnout was a score of 100. Due to overall score ranges being slightly different for the present study (e.g., 0-95 instead of 0-100), we will separate low/moderate/high levels similar to how Creedy et al. (2017) chose to do so. So, our low range will be any score less than 48, moderate will be 48 to 72, and high will be 72 to 95.

**Procedures**

Prior to administering the survey, the researcher obtained approval for the project from the Humboldt State University Institutional Review Board (IRB 21-028). The survey was distributed via an online platform called Qualtrics. Participants were recruited to complete the survey by contacting those who oversee various agencies in Northern California as well as the Redwood Coast Regional Center (RCRC) requesting that they send the survey to other practitioners. We also asked participants who completed the survey to send it to their colleagues working in ABA in Northern California.

**Data Analysis Plan**

A statistical software such as R or Microsoft Excel was used to analyze the results of the current study. Most of the analyses necessary were descriptive statistics, namely mean scores of burnout, age, hours per week engaging in self-care, and hours worked directly and indirectly with clients. In addition, the following correlations were run: burnout scores compared to hours per week engaging in self-care and burnout scores and hours worked directly/indirectly with clients. We also compared burnout scores visually by creating bar graphs separating average scores by job title.
Results

Data from the survey were analyzed using Microsoft Excel. Overall, average burnout score ($M = 50.24$) for practitioners in Northern California (age $M = 36.83$) indicates a moderate level of burnout, as per our previously stated boundaries for the CBI. Additionally, the practitioners surveyed reported on how many hours per week they engaged in self-care ($M = 2.98$) and hours spent per week working both directly ($M = 14.21$) and indirectly ($M = 16.52$) with clients or on client programs in delivery of ABA services. The present study’s main research questions were analyzed using Pearson’s $r$ correlations. Our hypothesis that burnout scores would be negatively correlated with number of hours per week spent engaging in self-care activities was supported ($r = -.34$, $p = .006$), although the correlation was moderate. Further, the present study hypothesized that higher burnout scores would be indicative of more hours per week spent working directly with clients, but this was not supported by the data ($r = .18$, $p = .90$). Additionally, number of indirect hours worked on client programs per week and burnout scores had no association ($r = .03$). Finally, in visually examining average burnout scores of different jobs within ABA (see Figure 1), it appears that there are no major differences in averages between direct staff ($M = 52.11$), associate supervisors ($M = 48.5$), clinical/program supervisors ($M = 47.4$), regional managers ($M = 56.5$), clinical directors ($M = 49.57$), and other ($M = 53.67$).
Figure 1

![Average Burnout Scores by Job Title](image)
Discussion

The primary aim of this study was to survey levels of burnout among ABA practitioners in Northern California and compare these scores to amounts of self-care participants engaged in. Results from the present study confirmed our principal hypothesis that engaging in higher levels of self-care every week may reduce overall levels of burnout. This study also found that, overall, Northern California ABA practitioners are experiencing moderate levels of burnout. Comparatively, the original study that published and validated the CBI (Kristensen et al., 2005) found that in their survey of individuals in the human service field, the mean scores of burnout for their participants fell well into the low levels. Similarly, Milfont et al. (2009) surveyed teachers using this inventory and their mean scores were also in the low range of 0 to 50. The differences between the present study’s mean levels of burnout and these other two studies could be due to the smaller sample size of participants, as it is possible the only practitioners who responded to the present study’s survey were experiencing higher levels of burnout. It could also be the due to the targeted audience of the present study (i.e., ABA practitioners in Northern California) versus more general populations surveyed in Kristensen et al. (2005) and Milfont et al. (2009). ABA staff might experience higher levels of burnout than other human service or teaching fields, but more research on this topic would be necessary to warrant this conclusion. A final possibility for the higher mean burnout scores could be due to the present study being conducted during the COVID-19 pandemic. With service delivery changing to telehealth in many
cases and various reasons for cancellations and general stress from working during a
global pandemic, there could be overall higher levels of burnout.

These results offer some direction in an area that is under researched in the field
of ABA that agencies and practitioners should be encouraging their staff to make time to
take part in self-care activities more often. Relatedly, Bethay et al. (2012) conducted a
preliminary study that examined the efficacy of Acceptance and Commitment Therapy
(ACT) combined with ABA techniques to reduce levels of burnout and stress among staff
who work with individuals with Intellectual Disability (ID). They found that the staff
who consistently engaged in ACT practices outside of training sessions had reduced
levels of stress and burnout during the post-test. This study was not specific to ABA staff,
but it provides some support that staff in similar fields who engage in self-care strategies
(e.g., mindfulness) experience lower stress and burnout.

While there was one study published among ABA literature recently that
promotes practitioners’ engagement in self-care (Fiebig et al., 2020) amidst the COVID-
19 pandemic, burnout has been a prevalent issue in the field long before this (Gibson et
al., 2009; Hurt et al., 2013; Kelly & Barnes-Holmes, 2012). Due to the high stress nature
of the jobs ABA practitioners work, there can be many factors associated with higher
levels of burnout. While self-care may not be able to address all these factors, the initial
results from this study indicate that, at least for these participants, engagement in self-
care is negatively correlated with burnout scores.

The present study also collected data on number of hours worked directly (e.g.,
direct implementation of ABA services) and indirectly with clients (e.g., goal writing,
graphing data, and research). It was hypothesized that higher burnout scores would be associated with more hours worked directly per week with clients, but this was not supported by the data. Further, there was no association between burnout scores and number of hours worked indirectly in ABA services. These results imply that it isn’t the exact nature of the work that might be contributing to the burnout among practitioners, but instead there are other outside factors. Fortunately, most of the studies conducted within the small body of burnout research aim to identify factors related to high burnout, which have been found to be low levels of training satisfaction (Bottini, Wiseman, & Gillis, 2020), neuroticism (Hurt et al., 2013), negative implicit attitudes towards individuals with ASD (Kelly & Barnes-Holmes, 2013), and low levels of supervision support partnered with high work demands (Maslach et al., 1986). While the present study was not able to add to the area of research that identifies specific factors of ABA work that contributes to burnout, there is a continued need for research in this area so the field can provide BCBA’s with proactive strategies to mitigate the issue.

Limitations

One of the major limitations of the present study was the small geographical area in which the research was conducted. The primary investigator resides in the area where most of the participants responded, which is a small, rural town far north in California. This county has a high number of children with two or more Adverse Childhood Experiences (ACEs; Let’s Get Healthy California, 2022), and this could lend itself to the possibility of higher burnout scores among the practitioners who live here and work with these children. Another identified limitation was the number of participants who
completed the survey (n = 54). With the limited area and responses, the generalizability of these results may not be strong. However, this is not to say that burnout is not a pervasive issue in ABA as other research supports the notion that it is prevalent (Maslach et al., 1986; Kristensen et al., 2005; Gibson et al., 2009; Hurt et al., 2013; Kelly & Barnes-Holmes, 2012). So, the specific results from the present study may only apply to rural Northern California ABA practitioners.

Another limitation identified in the present study was the lack of diverse responding regarding the job titles of the practitioners. We would have run an ANOVA of average burnout scores by job title if we had more responses from regional managers (N = 3) and clinical directors (N = 6), but results would not have been as accurate due to the significantly higher numbers of responses from other positions in the field. It was decided that the visual analysis of these average burnout scores would suffice for the information we had.
Conclusions and Recommendations

Future research should examine the burnout scores and self-care levels of practitioners in different states at a much larger scale to get a stronger idea of the relationship between self-care behaviors and burnout. Additionally, future research should continue to investigate possible factors associated with higher burnout scores and the specific factors among ABA work that may contribute to burnout. From this research, the field could potentially find more evidence-based approaches, such as ACT which promotes mindfulness practices, to support practitioners in their training and after when they are engaging with clients in the field.

While this study consisted of preliminary research in a small area of Northern California, its results provide some evidence that engaging in weekly self-care is negatively correlated with burnout scores on the CBI. These results should be used as some justification to study these constructs even further to attempt initial steps in supporting ABA practitioners so they themselves may continue to provide quality support to the individuals they serve.
References


Appendices

Appendix A: Survey from Qualtrics

Demographic Questions
1. How old are you?
2. What county are you located in?
3. What is your job title (you may pick more than one)?
   a. Direct staff
   b. Clinical Supervisor
   c. Associate Supervisor
   d. Regional Manager
   e. Clinical Director
   f. Other (please include your title below)
4. What is your highest level of education?
   a. PhD, PsyD, Master’s degree, Bachelor’s degree, high school diploma
5. What credential do you hold (if applicable)?
   a. BCBA/BABA-D
   b. BCaBA
   c. RBT
   d. SLP
6. What is the primary age of clients you work with (you may select more than one)?
   a. Early intervention (0-3 years old)
   b. Young children (4-11 years old)
   c. Adolescents (12-17 years old)
   d. Young adults (18-25 years old)
   e. Adults (26+ years old)
7. How many years have you working in the field of ABA?
8. About how many hours per week do you work directly with clients?
9. About how many hours per week do you do indirect work for clients?

Self-Care Strategies
1. What self-care strategies do you typically engage in? (you may choose however many apply)
   a. Emotional self-care (including seeing a therapist, journaling, creating art, playing music, etc.)
   b. Practical self-care (including creating a budget, taking professional development classes, organizing, cleaning, etc.)
   c. Physical self-care (including taking a walk, exercising, ensuring enough sleep, staying hydrated, etc.)
   d. Mental self-care (including reading, doing puzzles, going to a museum, etc.)
   e. Social self-care (including being around friends, loved ones, etc.)
f. Spiritual self-care (including meditation, yoga, going to church, etc.)
g. I do not engage in any of these self-care activities.

2. About how many hours per week do you typically engage in these self-care activities?
   a. 0-1 hour
   b. 1-3 hours
   c. 3-5 hours
   d. 5+ hours

3. Are there any other self-care strategies you engage in that do not fall into any of the categories above? If so, please list them.

**Personal Burnout**
The following questions will ask about the degree of physical and psychological fatigue and exhaustion you may experience.

<table>
<thead>
<tr>
<th></th>
<th>Never/almost never</th>
<th>Seldom or to a low degree</th>
<th>Sometimes or somewhat</th>
<th>Often or to a high degree</th>
<th>Always or to a very high degree</th>
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<tr>
<td>How often do you feel tired?</td>
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<td>How often are you physically exhausted?</td>
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<td>How often are you emotionally exhausted?</td>
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<td>How often do you think “I can’t take it anymore”?</td>
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<td>How often do you feel worn out?</td>
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<td>How often do you feel weak and susceptible to illness?</td>
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**Work-Related Burnout**
The following questions will ask you about how physically or psychologically tired or exhausted you may be in relation to your work.

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<tr>
<th></th>
<th>Never/ almost never</th>
<th>Seldom or to a low degree</th>
<th>Sometimes or somewhat</th>
<th>Often or to a high degree</th>
<th>Always or to a very high degree</th>
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<tr>
<td>Do you feel worn out at the end of the working day?</td>
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<td>Are you exhausted in the morning at the thought of another day at work?</td>
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<td>Do you feel that every working hour is tiring for you?</td>
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<td>Do you have enough energy for family and friends during leisure time?</td>
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<td>Is your work emotionally exhausting?</td>
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<td>Does your work frustrate you?</td>
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<td>Do you feel burnt out because of your work?</td>
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**indicated reverse score

**Client-Related Burnout**
The following questions will ask you about the degree of exhaustion, mentally or physically, you may experience in relation to your work with clients.

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<th>Question</th>
<th>Never/almost never</th>
<th>Seldom or to a low degree</th>
<th>Sometimes or somewhat</th>
<th>Often or to a high degree</th>
<th>Always or to a very high degree</th>
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<tr>
<td>Do you find it hard to work with clients?</td>
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<tr>
<td>Does it drain your energy to work with clients?</td>
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<td>Do you find it frustrating to work with clients?</td>
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<td>Do you feel that you give more than you get back when you work with clients?</td>
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<td>Are you tired of working with clients?</td>
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<td>Do you sometimes wonder how long you will be able to continue to work with clients?</td>
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Appendix B: Tables and figures

![Average Burnout Scores by Job Title](image)