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# Ethics, Burnout, and Reported Life and Job Attitudes Among Board-Certified Behavior Analysts

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Like other professionals working with vulnerable populations, engagement in ethical practice is important for board-certified behavior analysts (BCBAs). This exploratory research examines the relationships among reported supervisory pressure to act unethically, burnout, and life and job attitudes among BCBAs working in schools and other settings. To do so, BCBAs ($N$ = 106) completed a web-based survey with questions about supervisory pressure to act unethically and their responses to the pressure. Participants also completed measures of burnout, life satisfaction, job satisfaction, and intention to turnover. Of participants, 71 (77%) reported that they had experienced supervisory pressure to act unethically, most commonly in the form of a supervisor asking them not to recommend services because of associated costs. Participants reported using a variety of strategies to manage pressure to act unethically, including educating supervisors about behavior analysts' ethical and legal responsibilities. BCBAs reported relatively low levels of burnout as well as positive job and life attitudes compared with other professionals. However, BCBAs who reported higher levels of burnout also reported more negative life and job attitudes. There were no significant differences in reported burnout, life satisfaction, job satisfaction, or intention to turnover among BCBAs working primarily in different settings. Implications for practice, which include seeking professional development in ethical conduct and engaging in individual and organizational strategies to mitigate consequences associated with burnout, are discussed.

*Keywords:* ethics, burnout, reported job attitudes, reported life attitudes, schools

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## Job Attitudes, Burnout, and Ethics Among Board-Certified Behavior Analysts

Ethical practice is important for board-certified behavior analysts (BCBAs) for myriad reasons, not the least of which is that BCBAs often work with vulnerable populations (Bailey & Burch, 2011; Rosenberg & Schwartz, 2019). Demonstrations of the importance of ethical practice include graduate training requirements in ethics, proficiency in ethics on the certification examination, and, upon certification, continuing education in ethics as mandated by the Behavior Analysis Certification Board (BACB; Brodhead & Higbee, 2012). Given this backdrop, careful study of ethical behavior is warranted. Indeed, a growing body of research has examined ethical behavior across a number areas including supervisory practices (e.g., Sellers et al., 2016), working with students with autism spectrum disorder (ASD; Schreck & Mazur, 2008; Schreck & Miller, 2010; Schreck et al., 2016), and telehealth service delivery (Pollard et al., 2017). Although there has been considerable examination of ethics and engagement in ethical behavior, there has been less examination of pressure to engage in unethical behavior and its correlates. This topic forms the basis of the current exploratory research.

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All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

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Boccio et al. (2016) found that supervisory pressure to act unethically was related to higher levels of burnout, lower job satisfaction, and intention to turnover from one's job and career among school psychologists. Nearly a third of their participants reported that they had experienced some form of supervisory pressure to act unethically. The most common form of pressure was to avoid recommending services for students because of the cost to the school district. Other common forms of pressure experienced by participants included using inadequate materials for intervention and assessment and making placement decisions that considered least restrictive. Forms of pressure that implied threats to these individuals' jobs were experienced by 6% of participants. These findings have potentially important implications for professionals in other fields, such as BCBAs, who may also experience pressure to act unethically and negative correlates such as burnout.

Burnout leads to decreases in personal resources (e.g., effort) brought about by prolonged and continuous exposure to stress, and, its original conceptualization, it has three distinct components (Maslach & Jackson, 1986). The first component of burnout is emotional exhaustion (EE), which is the depletion of emotional resources due to job demands and may include increased levels of fatigue and reports of feeling overwhelmed. The second component of burnout is depersonalization (DP), which is reporting hardened attitudes toward those with whom one works that may include making cynical statements about clients and coworkers. Finally, burnout includes a reduced sense of personal accomplishment (PA), which is results in individuals reporting lower levels of job performance. High levels of EE and DP along with low levels of PA are indicative of burnout. Common antecedents for EE and DP are high and unmanageable job demands and conflict whereas lack of resources to complete one's work is a common antecedent for PA (Maslach et al., 2016). Researchers have questioned the accuracy of the tripartite conceptualization of burnout arguing, among other things, that EE and DP are the core dimensions of burnout and that PA represents a distinct entity (Demerouti et al., 2001; Halbesleben, & Demerouti, 2005).

Studying burnout is important because it affects personal, professional, and organizational functioning (Alarcon, 2011; Brunsting et al., 2014; Maslach, 2017; Maslach et al., 2016; Rupert et al., 2015; Schaufeli et al., 2009). Burnout is related to reports of fear reactions (i.e., anxiety), engaging in unhealthy coping behavior (e.g., substance use), and impairments in relationships with friends and family (Maslach et al., 2016). Burnout is also related to reports of reductions in reported life satisfaction, quality of life, and lowered physical and mental health among psychotherapists (Rupert et al., 2015) and negative physical and mental health outcomes among special education teachers (Brunsting et al., 2014).

With regard to professional functioning, a meta-analysis conducted by Alarcon (2011) indicated that the components of burnout have moderately strong to strong relationships with reported job attitudes. Job attitudes are important as they are predictive of a number of productive (e.g., job performance) and counterproductive workplace behaviors (e.g., turnover; Judge et al., 2017). Alarcon's results indicated that high levels of EE and DP, which are the core components of burnout, were strongly related to low levels of job satisfaction and organizational commitment. All components of burnout had moderately strongly relations to intention to turnover. Research has indicated that individuals who report high levels of burnout may perform their jobs more poorly (Maslach, 2017).

Burnout also results in costs to organizations and to organizations' consumers (Maslach, 2017; Rupert et al., 2015; Schaufeli et al., 2009). Schaufeli et al. (2009) posited that burnout is the depletion of work engagement (i.e., excitement and energy about work) which is important for optimal organizational functioning. Burnout may affect an organization's consumers, particularly when those consumers have special needs. In a review of the literature examining burnout among special education teachers, Brunsting et al. (2014) found that students of teachers who reported higher levels of burnout met fewer goals in their individualized education programs.

The purpose of this exploratory research was to examine the relations among reported pressure to act unethically, burnout, and life and job attitudes among BCBAs working in schools and other settings. Studying these relations is important for a number of reasons, one of which is personnel shortages (BACB, 2018). The demand for behavior analytic services increased by 800% and BCBA and Board Certified Behavior Analyst-Doctoral Level (BCBA-D) are the most likely provider of such services (BACB, 2018). Individuals who experience burnout may be more likely to indicate that they intend to turnover from a job and profession (Maslach, 2017). Reported turnover intention is the

best predictor of turnover (Judge et al., 2017). For behavior analysis, the intent to turnover might exacerbate already documented personnel shortages (BACB, 2018). The impact of personnel shortages may spread beyond organizational functioning and affect consumer services. Consider young children with ASD or other disabilities for whom the effectiveness of early intensive behavioral interventions is well-established (Griffith et al., 2014). Lack of qualified personnel to deliver those services may have negative lifelong effects for children and their families unable to obtain these services (Kazemi et al., 2015).

Although there is relatively little research exploring burnout among BCBAs and others who practice behavior analysis, the body of research that does exist dates back a number of years. Jennett et al. (2003) and Gibson et al. (2009) found that participants who endorsed a specific teaching philosophy, such as applied behavior analysis (ABA), reported lower levels of burnout as compared with participants who did not endorse a specific teaching philosophy. Other research examined the relationship of personality, reported attitudes, and demographic characteristics to burnout among individuals practicing behavior analysis (Hurt et al., 2013; Kelly & Barnes-Holmes, 2013; Langeliers, 2014; Plantiveau et al., 2018). Here, variables such as neuroticism, extraversion, attitudes toward students with ASD, and coping styles were related to different components of burnout (Hurt et al., 2013; Kelly & Barnes-Holmes, 2013). Other research indicated that among those practicing behavior analysis, older and more experienced participants reported lower levels of burnout as compared with their younger and less experienced counterparts (Langeliers, 2014; Plantiveau et al., 2018).

Another vein of research examined the relationship of aspects of the workplace and burnout (Gibson et al., 2009; Jennett et al., 2003; Langeliers, 2014; Plantiveau et al., 2018). Research indicated that participants who practice behavior analysis reported lower levels of burnout as compared with individuals in other health and human service occupations (Gibson et al., 2009; Jennett et al., 2003). Frequent supervision has been demonstrated to be related to lower levels of burnout among those practicing behavior analysis (Gibson et al., 2009; Langeliers, 2014; Plantiveau et al., 2018). Higher levels of social support were a significant predictor of lower overall burnout among participants practicing behavior analysis (Plantiveau et al., 2018).

One variable and its relation to burnout that has yet to be explored among BCBAs working is supervisory pressure to act unethically. For individuals who experience such pressure, burnout may occur because of a misalignment of behaviors mandated by the BACB Professional and Ethics Compliance Code and behaviors expected of employees. For example, for BCBAs practicing in schools, those environments typically do not have guidelines regarding supervision for BCBAs; however, the BACB ethics code includes supervision guidelines (Bailey, 2018). Similarly, the BACB ethics code specifies that BCBAs only operate within their boundaries of competence. However, in schools, BCBAs may be assigned cases that fall outside of those boundaries (Bailey, 2018). Yet another way that these individuals may experience pressure to act unethically is when the BACB ethics code is not aligned with school board policies or state and federal regulations regarding general and special education (Bailey, 2018).

This exploratory research attempted to answer a number of questions. First, what, if any, types of supervisory pressure to act unethically do BCBAs experience, and is primary work setting (i.e., school v. other settings) related to supervisory pressure to act unethically? Second, what, if any, types of actions do BCBAs take to manage supervisory pressure to act unethically? Third, what is BCBAs' reported levels of burnout, life satisfaction, and job attitudes (i.e., job satisfaction, intention to turnover, attitudes toward supervisors) and is primary work setting related to reported levels of these variables? Finally, what is the relationship between supervisory pressure to act unethically and BCBAs' reported levels of burnout, life satisfaction, and job attitudes (i.e., job satisfaction, intention to turnover, attitudes toward one's supervisor)?

## Method

### Participants

Ninety-seven BCBAs and nine BCBA-D practicing behavior analysis in a variety of settings participated in this study. Table 1 gives information about participant demographic and work characteristics. Most participants were women ($n$ = 92), White ($n$ = 105), and had obtained a master's degree as their highest degree ($n$ = 89). Many participants ($n$ = 63) reported that their primary place of employment was a public school district. Many

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**Table 1**
*Participants' Demographic and Job-Related Characteristics*

| Characteristic | *n* | % |
|---|---|---|
| Gender | | |
| Female | 92 | 87 |
| Male | 13 | 12 |
| Other | 1 | <1 |
| Race/ethnicity | | |
| White | 92 | 87 |
| Black | 4 | 4 |
| Latinx | 3 | 3 |
| Asian/Pacific Islander | 4 | 4 |
| Native American | 1 | <1 |
| Other | 2 | <1 |
| Education | | |
| MA/MS-Applied Behavior Analysis (ABA) | 22 | 21 |
| MA/MS-Education | 44 | 42 |
| MA/MS-Psychology | 12 | 11 |
| MA-Other | 11 | 10 |
| PhD/PsyD-ABA | 1 | 1 |
| PhD/PsyD-Other | 14 | 13 |
| Behavior Analysis Certification Board-Certification Certification | | |
| Board Certified Behavior Analyst | 97 | 92 |
| Board Certified Behavior Analyst-Doctoral Level | 9 | 8 |
| Employer | | |
| Public school | 51 | 48 |
| Private school | 11 | 10 |
| Consulting agency | 12 | 11 |
| Self-employed | 15 | 14 |
| Other | 17 | 16 |
| Primary work setting | | |
| Public school | 63 | 59 |
| Private school | 13 | 12 |
| Home | 17 | 16 |
| Clinic | 6 | 6 |
| Other | 7 | 7 |
| Additional work settings | | |
| Public school | 33 | 31 |
| Private school | 13 | 12 |
| Home | 36 | 34 |
| Clinic | 11 | 10 |
| Other | 12 | 11 |
| Not applicable | 34 | 32 |
| Consumer's age | | |
| 0 to <3 years | 8 | 8 |
| 3 to 5 years | 54 | 51 |
| 6 to 13 years | 90 | 85 |
| 14 to 21 years | 67 | 63 |
| >21 years | 19 | 18 |
| Consumer's diagnosis | | |
| Autism Spectrum Disorder (ASD) | 103 | 97 |
| Emotional disorder | 64 | 60 |
| Developmental disorder (not ASD) | 65 | 61 |
| Behavioral disorder | 62 | 59 |
| Mental health disorder | 49 | 46 |
| Other | 18 | 17 |

*Note.* $N = 106$. ASD = autism spectrum disorder.

reported that their primary work setting in which they provide behavior analytic services is public ($n = 63$) or private ($n = 13$) schools. Nearly all participants ($n = 103$) provided behavior analytic services to consumers with an ASD. Many ($n = 90$) provided behavior analytic services to consumers between the ages of 6 and 13 years.

Participant age ranged from 25 to 69 years ($M = 41.58$, $SD = 9.93$). On average, participants had been board certified behavior analysts for 6.31 years. Participants indicated that they had been working in the field of ABA for 2 to 32 years. On average, participants worked in the field of ABA for 13.89 years ($SD = 8.19$). Participants indicated that they had been working in their current position for less than 1 year to 30 years with an average of 5.78 years ($SD = 6.10$). Participants resided in 30 of the 50 states in the United States. The four most common states in which participants resided were California ($n = 14$), Pennsylvania ($n = 13$), New Jersey ($n = 11$), and Massachusetts ($n = 10$).

## Measures

The survey included some measures similar to those developed and used by Boccio et al. (2016). Where necessary, questions on these measures (i.e., ethics measures) were altered slightly to refer to behavior analytic practice. Other measures assessed burnout as well as reported job and life attitudes. Finally, participants responded to a demographic measure.

### *Ethics Measures*

The first similar measure was nine items asking participants whether they had experienced different types of supervisory pressure from supervisors to act unethically. Here, participants responded either yes or no. A sample question asked if participants experienced pressure from supervisors to make decisions or take actions that they believed did not comply with federal or state law. The next similar measure was 12 items asking participants to respond to a series of questions that asked about methods they used to cope with supervisory pressure to act unethically. Participants made ratings of their supervisors. A sample item asks participants to rate the extent to which their supervisor is cooperative. Ratings were made on Likert-type scales ranging from 1 (*strongly disagree*) to 6 (*strongly agree*).

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### *Burnout Measure*

Participants responded to the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2001; Demerouti et al., 2010). The OLBI is the most widely used, cost-free measure of burnout (Sinval et al., 2019). It has been demonstrated to be an acceptable psychometric alternative to the Maslach Burnout Inventory, the most widely used measure of burnout that is available for purchase (Halbesleben, & Demerouti, 2005; Sinval et al., 2019). The OLBI has 16 items. It gives scores for total burnout, exhaustion, and disengagement. Disengagement is similar to depersonalization in Maslach et al.'s original conceptualization of burnout. A sample item asks participants to rate the extent of their agreement with the statement, "There are days when I feel tired before I arrive at work." Ratings are made on Likert-type scales ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). Scores on total burnout can range from 16 to 64, with higher scores indicating higher levels of total burnout. Scores on both exhaustion and disengagement can each range from 8 to 32 with higher scores indicating higher levels of exhaustion and disengagement, respectively. Coefficient alpha for total burnout was .88, for exhaustion, it was .76, and for disengagement, it was .85.

### *Life Satisfaction Measure*

Participants responded to the Satisfaction With Life Scale (SWLS; Diener et al., 1985). The *SWLS* is the oldest and most frequently used measure of life satisfaction (Diener et al., 2013). It has strong psychometric properties (Diener et al., 2013). The SWLS is a five-item measure of life satisfaction. A sample item asks participants to rate the extent of their agreement with the statement that in most ways my life is close to ideal. Ratings are made on Likert-type scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Scores can range from 5 to 35. Diener (2016) reported that scores between 25 and 35 indicate that individuals are very satisfied with their lives. Scores between 20 and 24 are average. Scores below 24 are indicative of varying levels of dissatisfaction. Coefficient alpha for the SWLS for this research was .89.

### *Job Satisfaction Measure*

Participants responded to the Job in General (JIG; Ironson et al., 1989). The JIG has been used extensively in industrial and research settings (Gillespie et al., 2016). The JIG asks participants to rate whether 18 different adjectives (e.g., *worthwhile*, *rotten*) are descriptive of their job. Participants can respond *yes*, *no*, or *not sure* for each of the 18 items. Scores can range from 0 to 54 with higher scores indicating higher levels of job satisfaction. Developers of the JIG do not give cutoff scores that are indicative of different levels of job satisfaction. However, they do provide normative data for the JIG; these were most recently updated in 2016 (Gillespie et al., 2016). Coefficient alpha for the JIG for this research was .89.

### *Intention to Turnover Measure*

Participants responded to a scale measuring intention to turnover (Kelloway et al., 1999). This measure is used primarily in research settings. Normative data for this measure are not available. The scale is comprised of four items, and a sample item asks participants to rate the extent of their agreement with the statement that I am planning to look for a new job. Ratings are made on Likert-type scales ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores can range from 4 to 20 with higher scores indicating higher levels of intention to turnover. Coefficient alpha for this scale was .96.

### *Demographic Measure*

Participants responded to demographic questions. Questions asked about their personal characteristics (e.g., age), characteristics of consumers with whom they work (e.g., grade level), and characteristics of their employment settings (e.g., where they provide behavior analytic services).

## Procedure

Institutional research review board approval was gained prior to data collection. Participants were recruited through the BACB listserv. Participants were those who indicated in the BACB registry that their primary or secondary area of employment was education or special education. Participants were e-mailed a brief description of the study along with a link to the study survey that was administered through the Qualtrics platform (Qualtrics, 2020). Also included in the description was information about informed consent. Prior to completing the survey, participants read that information which included a statement indicating that by proceeding to the survey, they were giving their informed consent.

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## Results

### Research Question 1

Research Question 1 asked what, if any, types of supervisory pressure to act unethically do BCBAs experience and is primary work setting (i.e., school vs. other settings) related to supervisory pressure to act unethically? Examination of reported frequencies were used to address what, if any, types of supervisory pressure to act unethically do BCBAs experience. A chi-square test of independence was used to address if primary work setting (i.e., school vs. other settings) related to supervisory pressure to act unethically.

Results indicated that, of participants who responded to this question, 71 (77%) reported that they had experienced supervisory pressure to act unethically. Among all participants, 59 (46%) reported experiencing two or more types of pressure. Table 2 lists the types of supervisory pressure to act unethically and the number and percentage of participants who reported that they experienced the type of supervisory pressure. The most often reported type of pressure experienced was to not recommend services because of their cost to the school district (42% of participants). Other common forms of pressure experienced were to perform job duties outside of the scope of one's professional competence, remove a student from school without due process, not adhere to placement recommendations for the least restrictive environment, and make decisions that were unethical. The most infrequently reported type of pressure was to make unlawful decisions or to take unlawful actions (10% of participants).

A chi-square test of independence was conducted to determine whether primary work setting (i.e., school vs. other settings) was related to reporting that one experienced supervisory pressure to act unethically. The result of this analysis was not significant, $\chi^2(1) = .536, p = .464$.

### Research Question 2

Research Question 2 asked what, if any, types of actions do BCBAs take to manage supervisory pressure to act unethically? Examination of reported frequencies were used to address this research question.

Table 3 lists the types of actions that participants took to manage supervisory pressure to act unethically and the number and percentage of participants who reported that they took the action. The percent of participants who reported that they took different types of actions ranged from 52% to 5%. More than half of participants (52%) reported that they attempted to educate their supervisors about their own ethical and legal responsibilities. Forty percent of participants reported that they spoke with

**Table 2**
*Types of Supervisory Pressure to Act Unethically*

| Type of pressure | *n* | % |
|---|---|---|
| I have experienced pressure from administrators to avoid recommending certain support services due to costs to the district. | 42 | 42 |
| I have experienced pressure from administrators to perform job duties that are outside the scope of my training and expertise. | 38 | 38 |
| I have experienced pressure from administrators to make decisions or take actions that I believed were unethical. | 36 | 36 |
| I have experienced pressure from administrators to agree with a special education placement that was not the least restrictive appropriate environment for the student. | 35 | 35 |
| I have experienced pressure from administrators to remove a student from school or encourage parents to keep the student home without due process due to behavioral and/or safety concerns. | 23 | 23 |
| I have experienced pressure from administrators to make decisions or take actions that I believed were not in compliance with federal or state law. | 23 | 23 |
| I have experienced pressure from administrators to make decisions or take actions that I believed were unethical, with an implied threat to my job standing (e.g., negative evaluation, move to less desirable assignment, loss of job) if I did not comply. | 12 | 12 |
| I have experienced pressure from administrators to disclose information about a client that I considered confidential. | 11 | 11 |
| I have experienced pressure from administrators to make decisions or take actions that I believed were not in compliance with federal or state law, with an implied threat to my job standing (e.g., negative evaluation, move to less desirable assignment, loss of job) if I did not comply. | 10 | 10 |

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**Table 3**
*Types of Action Taken to Deal With Supervisory Pressure to Act Unethically*

| Type of action | *n* | % |
|---|---|---|
| Tried to educate my supervisor about my ethical/legal responsibilities | 55 | 52 |
| Spoke with colleagues to obtain advice and emotional support | 42 | 40 |
| Informed my supervisor about the potential consequences of not behaving ethically/legally (e.g., parents file due process complaint) | 35 | 33 |
| Educated parents/consumers about their rights | 32 | 30 |
| Negotiated a compromise that was consistent with my ethical/legal responsibilities and acceptable to my supervisor | 30 | 28 |
| Brought my concerns to another supervisor in a higher position | 22 | 21 |
| Directed parents/consumers to an advocacy organization | 17 | 16 |
| Complied with supervisory demands | 11 | 10 |
| Contacted BACB or my state ABA association for advice from their ethics committee | 13 | 12 |
| Spoke to my union representative | 9 | 9 |
| Contacted my state department of education or other governmental agency | 5 | 5 |

colleagues to obtain support as a type of action to manage supervisory pressure. Participants also reported that they took other educative actions such as informing supervisors about the consequences of unethical behavior (33% of participants).

## Research Question 3

Research Question 3 asked about BCBAs' reported levels of burnout, life satisfaction, and job attitudes (i.e., burnout, job satisfaction, intention to turnover, and attitudes toward supervisors). Examination of reported means relative to scale normative data, if available, was used to address this part of the research question. This research question also asked if primary work setting was related to reported levels of these variables. Independent samples *t* tests were used to address this part of the research question.

Reported total burnout scores ranged from 19 to 59 with a mean of 34.59 (*SD* = 6.93). Scores for reported exhaustion ranged from 8 to 29 with a mean of 18.83 (*SD* = 4.08). Scores for disengagement ranged from 8 to 30 with a mean of 15.76 (*SD* = 3.52). Norms for establishing cutoffs for burnout are not available for the OLBI (Halbesleben, & Demerouti, 2005); however, for total burnout, exhaustion, and disengagement, participants' reported mean scores are well below the maximum scale values.

Participants' mean score on the SWLS was 26.53 (*SD* = 5.18). Their scores ranged from 12 to 35. Based on national and international samples, Pavot and Diener (1993) stated that mean scores on the SWLS between 25 and 30 indicate that one is satisfied with his or her life.

Participants' mean score on the JIG was 47.08 (*SD* = 9.51). Their scores ranged from 6 to 54. Comparative national norms for workers across all industries for the JIG indicate that scores of 46 have a percentile rank of 60 (Gillespie et al., 2016). Comparative national norms for workers in educational services for the JIG indicate that scores of 46 have a percentile rank of 57 (Gillespie et al., 2016). In both cases, BCBAs reported higher than average levels of job satisfaction.

Participants' mean score on the measure of intention to turnover was 8.01 (*SD* = 4.40). Their scores ranged from 4 to 20. Kelloway et al. (1999) reported a mean of 10.05 among their participants. Normative data are not available for this scale.

A series of independent samples *t* tests was conducted to explore whether primary work setting was related to reported levels of burnout, life satisfaction, job satisfaction, and intention to turnover. The results of these analyses appear in Table 4. None of these analyses yielded results that were statistically significant.

Similar to Boccio et al. (2016), participants also respond to a series of single-item questions asking about their level of satisfaction with their supervisor. These responses appear in Table 5. Participants' reported satisfaction levels with their supervisors were positive. Participants reported scores above the scale midpoint for all positively phrased questions about their supervisors and below the midpoint for all negatively phrased questions.

## Research Question 4

Research Question 4 asked about the relations between supervisory pressure to act unethically and

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**Table 4**
*Results of Tests of Relationships Between Primary Work Setting to Study Variables*

| Study variable | Primary school | | Primary nonschool | | | | |
|---|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | *t*(89) | *p* | Cohen's *d* |
| Total burnout | 34.12 | 6.90 | 35.77 | 7.01 | 1.024 | .309 | .238 |
| Exhaustion | 18.72 | 3.99 | 19.11 | 4.36 | 0.412 | .681 | .096 |
| Disengagement | 15.40 | 3.60 | 16.65 | 3.19 | 1.549 | .125 | .359 |
| Life satisfaction | 26.94 | 4.96 | 25.39 | 5.72 | −1.234 | .220 | −.299 |
| Job satisfaction | 47.31 | 8.94 | 46.44 | 11.11 | −0.378 | .706 | −.091 |
| Intention to turnover | 7.86 | 4.35 | 8.44 | 4.61 | 0.534 | .595 | .129 |

BCBAs reported levels of burnout, life satisfaction, and job attitudes (i.e., job satisfaction, intention to turnover, attitudes toward one's supervisor). A series of correlational analyses was conducted to address this research question.

The results of these correlational analyses appear in Table 6. With a Bonferroni correction applied and an alpha of .01 necessary for statistical significance, there were no significant relationships between whether one experienced supervisory pressure to act unethically and reported burnout, life satisfaction, job satisfaction, or intention to turnover.

There were significant relations between reported total burnout and both reported life and job satisfaction. Higher levels of reported total burnout were significantly related to lower levels of reported life and job satisfaction. The same pattern of correlations was found between reported disengagement and reported life and job satisfaction as well as between reported exhaustion and reported life and job satisfaction.

There were also significant relations between reported total burnout and intention to turnover. Here, higher levels of reported total burnout were significantly related to higher levels of reported intention to turnover. The same pattern of correlations was found between reported disengagement and reported intention to turnover as well as between reported exhaustion and intention to turnover.

## Discussion

In this initial exploration of the relation of supervisory pressure to act unethically and burnout and reported job and life attitudes, results indicated that 77% of participants reported that they had experienced supervisory pressure to act unethically. This rate is higher than that reported in Boccio et al. (2016) where 32% of participants experienced supervisory pressure to act unethically. The pressure experienced was of a number of types, but most

**Table 5**
*Reported Attitudes About Supervisors*

| Attitude | *M* | *SD* |
|---|---|---|
| I think highly of the supervisors I work with. | 4.90 | 1.13 |
| The supervisors I work with are cooperative. | 4.99 | 1.02 |
| The supervisors I work with are incompetent and/or inflexible. | 2.28 | 1.27 |
| I have a good relationship with the supervisors I work with. | 5.27 | 0.72 |
| The supervisors I work with understand the ethical responsibilities of those providing behavioral services. | 4.07 | 1.57 |
| The supervisors I work with are knowledgeable about state and federal laws that pertain to special education. | 4.78 | 1.29 |
| I often feel caught between meeting students/consumers' needs and complying with supervisors' demands. | 2.51 | 1.39 |
| I feel burned out because of having to work with uncooperative/inflexible supervisors. | 2.30 | 1.36 |
| I feel burned out because of having to deal with pressure from supervisors to behave in ways that I feel are unethical. | 1.89 | 1.03 |
| The actions of supervisors make it hard to keep my workplace legal (i.e., in compliance with federal, state, and local regulations). | 1.78 | 1.00 |

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**Table 6**
*Intercorrelations for Experiencing Administrative Pressure to Act Unethically, Reported Burnout, Reported Life Attitudes, and Reported Job Attitudes*

| Study variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Total burnout | — | | | | | | |
| 2. Exhaustion | .93** | — | | | | | |
| 3. Disengagement | .90** | .66** | — | | | | |
| 4. Life satisfaction | −.51** | −.41** | −.54** | — | | | |
| 5. Job satisfaction | −.71** | −.62** | −.68** | .39** | — | | |
| 6. Intention to turnover | .53** | .43** | .55** | −.25* | −.51** | — | |
| 7. Administrative pressure | −.04 | −.05 | −.01 | .10 | .11 | .17 | — |

*Note.* $N = 106$. Administrative pressure (to act unethically) coded as 0 for not experienced, coded as 1 for experienced.
* $p < .05$. ** $p < .001$.

commonly occurred when participants were pressured not to recommend services because of their cost. Boccio et al. (2016) also found that this was the most common type of pressure that their participants experienced. The types of actions that participants took to manage supervisory pressure to act unethically varied, but in many cases, participants took some sort of educative action (e.g., tell administrators about their own ethical and legal responsibilities) or relied on the support of colleagues. Boccio et al. (2016) also had similar findings with regard to types of actions taken to manage supervisory pressure.

Unlike Boccio et al. (2016), there were not significant relations between supervisory pressure to act unethically and reported burnout and job and life attitudes. However, participants in this exploratory research, regardless of many reporting that they had experienced supervisory pressure to act unethically, reported experiencing high levels of job satisfaction, life satisfaction, and low intention to turnover. In addition, participants reporting lower levels of burnout reported experiencing high levels of job satisfaction, life satisfaction, and low intention to turnover. These findings may be important for the field of ABA with regard to attracting and retaining skilled personnel ultimately resulting in the provision of high-quality services to consumers.

This study did have a number of limitations, most of which are related to its methodology. First, the sample was relatively small and, as a result, there was not adequate statistical power for the inferential statistical tests. Another concern related to the sample is that the response rate is unknown. While common in web-based survey research, it is important to recognize. Participants were not asked about the proportion of work they did in different settings other than whether it was their primary work setting. In addition, responding may be subject to bias with potential participants who experienced supervisory pressure to act unethically more motivated to complete the study than those who did not experience such pressure. This may explain the disparity between differences in supervisory pressure reported by participants here and in Boccio et al. (2016).

Additional research is necessary. Perhaps most importantly, researchers should attempt to replicate the study findings of high rates of supervisory pressure to act unethically among those delivering behavior analytic services. If this finding is not replicated, it may be that the current findings are an artifact. However, if the finding is replicated, the implications raise questions about supervisors in schools and other settings where BCBAs practice and their lack of knowledge of ethical behavior analytic practice or their apparent willingness to ask BCBAs to violate their ethics code. Any attempt to replicate these findings using a similar methodology should ensure that the sample size is large enough to have adequate statistical power. Those same attempts might consider the use of stratified random sampling to ensure that the sample is representative of BCBAs with respect to the settings in which they practice and other related variables.

## Implications for Training and Practice

BCBAs are required to complete four continuing education credits in ethics as part of their 2-year recertification cycle (BACB, 2017). The type of ethics training BCBAs receive can vary and the BACB makes a number of recommendations regarding acceptable topics for ethics training. BCBAs may want to be selective about the type of

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continuing education in ethics that they pursue. As an example of this, consider BCBAs who work in schools. These individuals may want to pursue ethics training on providing behavior analytic services in school settings (Brodhead et al., 2018). Other BCBAs who might work in clinics or deliver telehealth behavior analytic services might consider other types of ethics training.

In addition to seeking specific types of continuing education, BCBAs should engage in individual strategies that will help them mitigate the negative consequences associated with burnout (Maslach, 2017). These might include self-management strategies that focus on the development of more effective coping skills. Changes in work patterns (i.e., working less, redesigning one's job) may also be effective. Might also benefit from training on how to manage supervisory pressure to violate their ethics code. This might be best done using behavior skills training.

While individual level strategies may be effective in ameliorating some of the effects of burnout, strategies that are more useful may be at the systems-level targeting the entire organization (Maslach, 2017). Data from this study indicated that professionals working in schools and other settings are, at times, asked to violate their ethical code. Supervisors may need training on the ethical responsibilities of BCBAs. Other system-wide preventative measures may include advocating for appropriate reductions in workload and ongoing training for BCBAs and other employees who are their consumers. These efforts should be made in a partnership with national, state, and local organizations that advocate for BCBAs and their consumers.

In conclusion, results from this study indicate that most participants reported that they had experienced supervisory pressure to act unethically and that they used a variety of strategies to manage the pressure. Regardless, they reported experiencing low levels of burnout and relatively positive life and job attitudes. There were significant relations between burnout and job attitudes, all in the expected direction. Future research should attempt to replicate these findings.

## References


Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, *79*(2), 549–562. https://doi.org/10.1016/j.jvb.2011.03.007

Bailey, J. (2018, February 28). Ethics in schools: Review of ethics landscape with Dr. Jon Bailey, BCBA-D [Webinar]. In *Ethics in School Training bundle*. https://www.special-learning.com/

Bailey, J., & Burch, M. (2011). *Ethics for behavior analysts* (2nd ed.). Routledge/Taylor & Francis.

Behavior Analysis Certification Board. (2017). *Continuing education*. https://www.bacb.com/maintain/continuing-education/

Behavior Analysis Certification Board. (2018). *U.S. behavior analyst workforce: Understanding the demand*. https://www.bacb.com/wp-content/uploads/Burning_Glass_20180614.pdf

Boccio, D. E., Weisz, G., & Lefkowitz, R. (2016). Administrative pressure to practice unethically and burnout within the profession of school psychology. *Psychology in the Schools*, *53*(6), 659–672. https://doi.org/10.1002/pits.21931

Brodhead, M. T., & Higbee, T. S. (2012). Teaching and maintaining ethical behavior in a professional organization. *Behavior Analysis in Practice*, *5*(2), 82–88. https://doi.org/10.1007/BF03391827

Brodhead, M. T., Quigley, S. P., & Cox, D. J. (2018). How to identify ethical practices in organizations prior to employment. *Behavior Analysis in Practice*, *11*(2), 165–173. https://doi.org/10.1007/s40617-018-0235-y

Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education & Treatment of Children*, *37*(4), 681–712. https://doi.org/10.1353/etc.2014.0032

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Demerouti, E., Mostert, K., & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology*, *15*(3), 209–222. https://doi.org/10.1037/a0019408

Diener, E. (2016). *Understanding the Satisfaction With Life Scale*. http://labs.psychology.illinois.edu/~ediener/Documents/UnderstandingSWLSScores.pdf

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, *49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Inglehart, R., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social*


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*Indicators Research*, *112*(3), 497–527. https://doi.org/10.1007/s11205-012-0076-y

Gibson, J. A., Grey, I. M., & Hastings, R. P. (2009). Supervisor support as a predictor of burnout and therapeutic self-efficacy in therapists working in ABA schools. *Journal of Autism and Developmental Disorders*, *39*(7), 1024–1030. https://doi.org/10.1007/s10803-009-0709-4

Gillespie, M. A., Balzer, W. K., Brodke, M. H., Garza, M., Gerbec, E. N., Gillespie, J. Z., . . . Yugo, J. E. (2016). Normative measurement of job satisfaction in the U.S. *Journal of Managerial Psychology*, *31*(2), 516–536. https://doi.org/10.1108/JMP-07-2014-0223

Griffith, G. M., Barbakou, A., & Hastings, R. P. (2014). Coping as a predictor of burnout and general health in therapists working in ABA schools. *European Journal of Special Needs Education*, *29*(4), 548–558. https://doi.org/10.1080/08856257.2014.952915

Halbesleben, J. R. B., & Demerouti, E. (2005). The construct validity of an alternative measure of burnout: Investigating the English translation of the Oldenburg burnout inventory. *Work & Stress*, *19*(3), 208–220. https://doi.org/10.1080/02678370500340728

Hurt, A. A., Grist, C. L., Malesky, L. A., Jr., & McCord, D. M. (2013). Personality traits associated with occupational 'burnout' in ABA therapists. *Journal of Applied Research in Intellectual Disabilities*, *26*(4), 299–308. https://doi.org/10.1111/jar.12043

Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Construction of a job in general scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, *74*(2), 193–200. https://doi.org/10.1037/0021-9010.74.2.193

Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Developmental Disorders*, *33*(6), 583–593. https://doi.org/10.1023/B:JADD.0000005996.19417.57

Judge, T. A., Weiss, H. M., Kammeyer-Mueller, J., & Hulin, C. L. (2017). Job attitudes, job satisfaction, and job affect: A century of continuity and of change. *Journal of Applied Psychology*, *102*(3), 356–374. https://doi.org/10.1037/apl0000181

Kazemi, E., Shapiro, M., & Kavner, A. (2015). Predictors of intention to turnover in behavior technicians working with individuals with autism spectrum disorder. *Research in Autism Spectrum Disorders*, *17*, 106–115. https://doi.org/10.1016/j.rasd.2015.06.012

Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, *4*(4), 337–346. https://doi.org/10.1037/1076-8998.4.4.337

Kelly, A., & Barnes-Holmes, D. (2013). Implicit attitudes towards children with autism versus normally developing children as predictors of professional burnout and psychopathology. *Research in Developmental Disabilities*, *34*(1), 17–28. https://doi.org/10.1016/j.ridd.2012.07.018

Langeliers, A. L. (2014). *Perceived supervisor support, job satisfaction, and burnout among ABA therapists for children with autism* (Publication No. 3593586) [Doctoral dissertation California School of Professional Psychology, Alliant International University]. ProQuest Dissertations and Theses International.

Maslach, C. (2017). Finding solutions to the problem of burnout. *Consulting Psychology Journal*, *69*(2), 143–152. https://doi.org/10.1037/cpb0000090

Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory Manual* (2rd ed.). CPP, Inc.

Maslach, C., Jackson, S. E., & Leiter, M. P. (2016). *Maslach Burnout Inventory manual* (4th ed.). Mind Garden.

Pavot, W., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, *5*(2), 164–172. https://doi.org/10.1037/1040-3590.5.2.164

Plantiveau, C., Dounavi, K., & Virues-Ortega, J. (2018). High levels of burnout among early-career board-certified behavior analysts with low collegial support in the work environment. *European Journal of Behavior Analysis*, *19*(2), 195–207. https://doi.org/10.1080/15021149.2018.1438339

Pollard, J. S., Karimi, K. A., & Ficcaglia, M. B. (2017). Ethical considerations in the design and implementation of a telehealth service delivery model. *Behavior Analysis: Research and Practice*, *17*(4), 298–311. https://doi.org/10.1037/bar0000053

Qualtrics, C. (2020). Qualtrics Software. Provo, Utah, United States. https://www.qualtrics.com

Rosenberg, N. E., & Schwartz, I. S. (2019). Guidance or compliance: What makes an ethical behavior analyst? *Behavior Analysis in Practice*, *12*(2), 473–482. https://doi.org/10.1007/s40617-018-00287-5

Rupert, P. A., Miller, A. O., & Dorociak, K. E. (2015). Preventing burnout: What does the research tell us? *Professional Psychology: Research and Practice*, *46*(3), 168–174. https://doi.org/10.1037/a0039297

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement and sickness absenteeism. *Journal of Organizational Behavior*, *30*(7), 893–917. https://doi.org/10.1002/job.595

Schreck, K. A., & Mazur, A. (2008). Behavior analyst use of and beliefs in treatments for people with autism. *Behavioral Interventions*, *23*(3), 201–212. https://doi.org/10.1002/bin.264

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Schreck, K. A., & Miller, V. A. (2010). How to behave ethically in a world of fads. *Behavioral Interventions*, *25*(4), 307–324. https://doi.org/10.1002/bin.305

Schreck, K. A., Karunaratne, Y., Zane, T., & Wilford, H. (2016). Behavior analysts' use of and beliefs in treatments for people with autism: A 5-year follow-up. *Behavioral Interventions*, *31*(4), 355–376. https://doi.org/10.1002/bin.1461

Sellers, T. P., Alai-Rosales, S., & MacDonald, R. P. F. (2016). Taking full responsibility: The ethics of supervision in behavior analytic practice. *Behavior Analysis in Practice*, *9*(4), 299–308. https://doi.org/10.1007/s40617-016-0144-x

Sinval, J., Pasian, S., Queirós, C., & Marôco, J. (2019). Brazil-Portugal transcultural adaptation of the UWES-9: Internal consistency, dimensionality, and measurement invariance. *Frontiers in Psychology*, *9*, 353. https://doi.org/10.3389/fpsyg.2018.00353

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