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Camille Plantiveau, Katerina Dounavi & Javier Virués-Ortega

ARTICLE

High levels of burnout among early-career board-certified behavior analysts with low collegial support in the work environment

Camille Plantiveau[a], Katerina Dounavi [a] and Javier Virués-Ortega[b]

[a]School of Social Sciences, Education & Social Work, Queen's University Belfast, Northern Ireland; [b]School of Psychology, Auckland University, Auckland, New Zealand

ABSTRACT

Low job satisfaction and burnout are common among those providing behavioral services potentially leading to absenteeism, turnover, low standards of service, and poor health outcomes. The current study explored the occurrence of low job satisfaction and burnout in this population. We disseminated a web-based survey composed of a series of sociodemographic and job-related variables, the Job Satisfaction Survey, and the Maslach Burnout Inventory. A diverse incidental sample of 183 practitioners currently providing behavioral services completed the survey. The results indicated that about two in every three participants were experiencing moderate to high burnout levels and about one in every three were experiencing little to no job satisfaction. A series of logistic regression models showed that social support in the work environment and supervision opportunities for trainees were key predictors of burnout and job satisfaction. We defined a socially supportive work environment as one with (a) several team members, (b) certified professionals, (c) frequent and positive interactions among team members, and (d) frequent and relevant staff training opportunities.

Long-term exposure to work-related stress may lead to poor job satisfaction and burnout. The notions of job satisfaction and burnout rely on poorly defined constructs. For example, an often-cited definition poses that "burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach, Jackson, & Leiter, 1996, p4). A recent review noted the lack of consensual diagnostic criteria for this construct and its almost complete overlap with the depression construct (Bianchi, Schonfeld, & Laurent, 2015). In spite of their inherent imprecision, the psychometric assessment of job satisfaction and burnout can predict important behavioral and health outcomes including absenteeism, turnover, and physical health deterioration in longitudinal studies (e.g., Kim, Ji, & Kao, 2011). In the current analysis, we will use job satisfaction and burnout measures to

characterize a potential public health concern among practitioners delivering applied behavior analysis (ABA) services.

It would be desirable to see experimental analyses of behaviors associated with job satisfaction and burnout in the relevant contexts in the future. Behavioral processes such as noncontingent punishment in the job environment, unavailability of effective escape responses from job-related stress, conditioned emotional responses to the work environment, limited exposure to positive reinforcement outside and inside the workplace, and similar may be playing an important role. Yet, we currently lack the technology to evaluate these processes in ecological settings.

Behavioral indicators and causes

Schaufeli and Enzmann (1998) identified over 130 potential symptoms associated with low job satisfaction and burnout. The core indicator of burnout is exhaustion, which is thought to predate a constellation of other behavioral and emotional concerns.

Burnout is the result of prolonged exposure to job-related stress. Various environmental factors can lead to job-related stress including imbalance between demands and resources and persistent conflict in the work environment (Maslach & Goldberg, 1998). Empirical studies suggest that an employee exposed to high and unrealistic work demands will not immediately succumb to burnout until unachievable demands are present for an extended period of time (Maslach, Schaufeli, & Leiter, 2001).

Conflict within the workplace is also a major form of work-related stress (Maslach & Goldberg, 1998). This includes conflict with clients, coworkers, and supervisors as well as conflict between role demands and personal preferences. Some studies have shown that the emotional and behavioral response to conflict in the workplace can be moderated by the presence of positive interactions. For example, Leiter and Maslach (1988) showed that the effect of negative employee-supervisor interactions could be buffered when supportive co-workers were present. Interaction with clients may also be an additional source of stress. For example, employees who work with clients who engage in aggressive behaviors present a higher rate of burnout (Howard, Rose, & Levenson, 2009; Rose, Mills, Silva, & Thompson, 2013).

Sociodemographic and personal risk factors

Maslach et al. (2001) found that younger employees tend to experience burnout more often than older employees. Individuals who are single or divorced tend to experience low job satisfaction and burnout more often than those who are married. There is evidence to suggest that employees that define their work as their primary source of satisfaction are more likely to become burnout (Schaufeli, 1999). Working longer hours and having limited social support systems may be mediating factors in this context. Studies have also found that individuals with a higher level of education have an increased chance of experiencing burnout. Overall burnout rates do not differ between men and women, although specific behavioral signs may vary across genders (Maslach et al., 2001).

Long-term effects of burnout

Burnout can have harsh consequences at the individual and organizational levels (Hurt, Grist, Malesky, & Mccord, 2013). It often leads to absenteeism, job turnover, and service disruption, which can be detrimental to the client's progress and the overall quality of services. Moreover, absenteeism soon becomes a stress source for the staff that remains on duty leading to more absenteeism and turnover (Kazemi, Shapiro, & Kavner, 2015). On occasions, employees experiencing burnout will continue working, albeit performing poorly, engaging in a spiral leading to long-term stress and lower standards of service (Hughes, 2001).

Burnout among special education professionals and behavioral services providers

In the special education sector, burnout may be caused by a variety of factors including unrealistic expectations and demands (Adera & Bullock, 2010), student challenging behavior (Hastings & Brown, 2002), and lack of administrative support (Skaalvik & Skaalvik, 2007). In an extensive review, Brunsting, Sreckovic, and Lane (2014) showed that younger teachers might be at greater risk of burnout relative to more senior ones.

According to Brunsting et al. (2014), mentorship, staff training, and continued professional development programs have also been identified as protective factors in the special education sector. In the ABA sector, in particular, services are often delivered in the home environment in one-to-one format. First-line workers may not have the opportunity to interact with coworkers or supervisors and are often left alone to cope with challenging behaviors. The lack of support from coworkers and supervisors are potential risk factors leading to low job satisfaction and burnout for those providing behavioral services (Gibson, Grey, & Hastings, 2009; Griffith, Barbakou, & Hastings, 2014). In addition, social support, in the form of both supervision from more experienced staff and the presence of social networks among peers, has consistently shown to be a protective factor against burnout. For example, social support has shown to counterbalance the effects of ineffective supervision and high demands (Gibson et al., 2009; Griffith et al., 2014; Leiter & Maslach, 1988).

In sum, professionals providing behavior analytic services may be at risk of experiencing low job satisfaction and burnout. However, there is a dearth of studies on the degree and contributors to burnout among behavior analysts. The few studies available have been confined to school- and clinic-based programs (Gibson et al., 2009; Griffith et al., 2014; Kelly & Barnes-Holmes, 2013) and programs of "high quality" according to expert judgment (Jennett, Harris, & Mesibov, 2003). Replications with more diverse and ecological samples of professionals are sorely needed for both descriptive and analytical purposes. In addition, the simultaneous evaluation of various predictors at the personal and organizational levels could help to identify prevention strategies. The current study presents the results of a survey presented to certified professionals and trainees with the aim of estimating the prevalence of burnout and the personal and organizational factors that may be associated with its occurrence.

Methods

Participants

We circulated an online survey to relevant professional organizations, lists servers, and social media pages. Specifically, a survey link was circulated through the Facebook pages of ABA España, Centre of Behavior Analysis, and Magiko Sympan (approximate post interaction: 500) and the list-servers of the European Association of Behaviour Analysis and the Queen University Belfast ABA program alumni (approximate pooled subscription: 400). A total of 183 individuals completed the survey. Table 1 presents a summary of sociodemographic and job-related characteristics of participants. Respondents included 167 women (91%) and 16 men (9%). The age distribution of participants was as follows: 100 between the ages of 25 to 34 (56%), 44 participants were 35 to 44 (24%), 20 participants were between 18 and 24 (11%), 14 participants were 44 to 54 (8%), and 5 participants were between 56 and 64 (3%). Most participants were based in North America (58%) and Europe (40%). Master's-level board-certified behavior analysts (BCBA®) totaled 120 (66%), while four participants (2%) had a bachelor's-level certification (BCaBA®). In addition, 25 participants (14%) had a doctoral-level designation (BCBA-D®).

All participants were actively providing services to clients. Participants' caseload varied from one to more than 10 clients (40%). Clients' ages varied from infant (0–3 years; 19%) to adults (30–69 years; 26%). Sixty-two percent of respondents indicated that challenging behavior (self-injury, aggression, and disruptions to the environment) occurred on a daily basis as part of their practice, whereas 28% of them noted challenging behavior as a weekly occurrence (Table 1).

Measures

Demographic characteristics

The survey included 29 questions focusing on participant sociodemographic and job-related information including age, location, level of education, certification status, number of years of ABA-related experience, number of current clients, client age range, severity of client's symptoms, number of colleagues and supervisors, work setting (e.g., home based vs. center based), frequency of staff meetings and training opportunities, among others (Table 1). We evaluated the frequency of supervision sessions over a 6-point scale where one denoted daily supervision sessions and six denoted complete lack of supervision. We evaluated social support at work with an ad hoc 6-item questionnaire composed of the following items: "I get along with coworkers all the time or most of the time," "I attend staff meetings once per month or more," "I attend staff training activities at least once per month," "I am required to undergo staff training activities at the work setting," "I have the facility to participate in paid staff training activities," and "I work with other certified professionals." Items could be answered as either yes or no (scale score range: 0 to 6). The aim of this section was to gain an understanding of each participant's work conditions and identify variables that might relate to levels of job satisfaction and burnout.

Job satisfaction survey (JSS)

The scale is composed of 36 items scored on a 6-point Likert scale (Spector, 1997). Respondents are asked to indicate their level of agreement with a series of statements

Table 1. Sociodemographic and job-related characteristics of participants ($n = 183$).

Characteristic	Categories	n (%)
Gender	Female	167 (91)
	Male	16 (9)
Age	18–24	20 (11)
	25–34	100 (55)
	35–44	44 (24)
	45–54	14 (8)
	55–64	5 (3)
Location	North America	106 (58)
	South America	1 (1)
	Europe	72 (39)
	Africa	2 (1)
	Asia	1 (1)
	Oceania	1 (1)
Education	Below high school	4 (2)
	High school diploma	9 (5)
	Bachelor's degree	48 (26)
	Master's degree	108 (59)
	Doctorate	14 (8)
Employment *	Self-employed	69 (33)
	Employed under contract	120 (66)
Setting *	ABA clinic or center	74 (40)
	School, other	46 (25)
	Center, other	33 (18)
	Home-based	80 (44)
	Other	22 (12)
Experience (years)	<1	11 (6)
	1–2	26 (14)
	3–5	59 (32)
	6–10	43 (24)
	11–15	23 (13)
	> 20	10 (6)
	N/A or unknown	11 (6)
Salary range (€)	< 12,000	16 (9)
	12,000–18,000	15 (8)
	18,000–24,999	24 (13)
	25,000–34,999	35 (19)
	35,000–44,999	20 (11)
	45,000–54,999	14 (8)
	55,000–64,999	13 (7)
	65,000–74,999	16 (9)
	75,000–84,999	10 (5)
	> 85,000	11 (6)
	N/A or unknown	9 (5)
Satisfied with salary	Yes	69 (38)
	No	114 (62)
Certification and supervision		
Certification attained *	RBT®	28 (16)
	BCaBA®	12 (7)
	BCBA®	52 (29)
	BCBA-D®	13 (7)
	Student	85 (41)
Supervision	Works under a BCaBA®	3 (2)
	Works under a BCBA®	120 (66)
	Works under a BCBA-D®	25 (14)
	Does not work under a supervisor	34 (19)
	N/A or unknown	1 (1)
Supervision frequency	Daily	5 (3)
	Weekly	35 (19)
	Bi-weekly	42 (23)
	Once per month	39 (21)
	Once every few months	16 (9)
	Never	43 (23)
	N/A or unknown	3 (2)
Supervision format	Face to face	120 (66)

(*Continued*)

Table 1. (Continued).

Characteristic	Categories	n (%)
	Long distance	30 (16)
	N/A or unknown	33 (18)
Certified professionals in the team	Works alone	39 (21)
	1–3	68 (37)
	4–5	33 (18)
	6–10	10 (5)
	> 10	29 (16)
	N/A or unknown	4 (2)
Work environment		
Gets along with coworkers	Always	57 (31)
	Most of the time	106 (58)
	Sometimes	13 (7)
	Rarely	1 (1)
	Work alone	6 (3)
Staff meetings	Daily	6 (3)
	Weekly	43 (23)
	Bi-weekly	25 (14)
	Once per month	61 (33)
	Once every few months	33 (18)
	Never	15 (8)
Staff training opportunities	Yes	111 (61)
	No	72 (39)
Staff training required	Yes	81 (45)
	No	47 (26)
	N/A or unknown	55 (30)
Paid staff training	Yes	83 (44)
	No	50 (26)
	N/A or unknown	55 (30)
Team building activities	Daily	2 (1)
	Bi-weekly	6 (3)
	Once per month	20 (11)
	Once every few months	69 (38)
	Never	82 (45)
	N/A or unknown	4 (2)
Satisfied with work conditions	Yes	94 (51)
	No	85 (46)
	N/A or unknown	4 (2)
Number of clients	1	4 (2)
	2–5	53 (29)
	5–10	57 (31)
	> 10	69 (38)
Role in client's programing	Supervise	49 (27)
	Implement	51 (28)
	Supervise and implement	79 (43)
	N/A or unknown	4 (2)
Clients age (years) *	0–3	34 (19)
	3–5	67 (37)
	6–12	130 (71)
	13–18	68 (37)
	19–29	32 (17)
	30–69	15 (8)
Client's challenging behavior	Daily	111 (61)
	Weekly	47 (26)
	Bi-weekly	9 (5)
	Once per month	4 (2)
	Once every few months	8 (4)
	Never	1 (1)
	N/A or unknown	3 (2)
Clients ability	Fast learners	3 (2)
	Slow and fast learners	152 (83)
	Slow learners	28 (15)

Characteristics with an asterisk allowed multiple answers. N/A: non-applicable.

focusing on job satisfaction (e.g., "I like my coworkers," "My job is enjoyable," "Many of our rules and procedures make doing a good job difficult," "My supervisor is unfair to me"). We obtained the JSS total score by adding the scores of each question. We reversed the Likert-type scale over which negatively worded questions were scored (i.e., 1 = 6, 2 = 5, 3 = 4, 4 = 3, 5 = 2, and 6 = 1). The minimum and maximum scale scores are 36 and 216 points, respectively. Scores are classified into six ordinal categories: below 36, very unsatisfied; 37 to 72, moderately unsatisfied; 73 and 108, slightly unsatisfied; 109 and 144, slightly satisfied; 145 and 180, moderately satisfied; and 181 to 216, very satisfied.

Maslach burnout inventory (MBI)

The scale is composed of 22 items assessing burnout over three domains: emotional exhaustion, depersonalization, and lack of personal accomplishment (Maslach, & Jackson, 1981). Items are scored over a 6-point Likert scale ranging from never to every day. Respondents are invited to indicate how frequently they feel in a specified manner (e.g., "I feel frustrated by my work," "I feel I look after certain patients/clients impersonally, as if they are objects," "Through my work, I feel that I have a positive influence on people"). Extensive reliability and validity analyses have been published on the MBI (Schaufeli, Leiter, & Maslach, 2008). The scale includes empirically based score ranges. Emotional exhaustion over 30 are consistent with high risk of burnout, scores between 18 and 29 are consistent with moderate risk of burnout, and scores of 17 or lower suggest low risk of burnout. Cut-off score ranges for depersonalization are as follows: scores of 5 or less, low-level burnout; scores between 6 and 11, moderate level; and scores of 12 or higher, high-level of depersonalization. Finally, cut-off levels for lack of accomplishment are 30 or less for high-level burnout, 31 to 39 for moderate-level burnout, and 40 or higher for low-level burnout.

Procedure

Once participants accessed the online survey, they were presented with the consent form. They were asked to give consent before starting the survey. Then they proceeded to the sociodemographic survey, the JSS, and the MBI. They had to answer each question in the specified sequence in order to be able to progress through the various sections of the survey. The complete survey took 15 to 20 min to complete.

Statistical analysis

We computed a series of binary logistic regression models in order to identify independent risk and protective factors of burnout and job satisfaction. Odd ratios (OR) above one suggest risk toward case status, whereas values below one suggest protection against case status. The case status variables were dichotomous (e.g., burnout case vs. non-burnout case). We defined a case of lack of job dissatisfaction by a score in the JSS within 36 and 108 points (Spector, 1997). We defined a case of burnout according to Shanafelt et al. (2015): Emotional Exhaustion above 26; Depersonalization score above 5; and Personal Accomplishment score below 34. We computed independent logistic models for each outcome variable (i.e., JSS score, MBI score). We also computed

separate models for certified professionals (BCBAs®, BCaBAs®), and for students and technicians (RBTs®).

The initial model included the following predictors: Work setting (ABA-oriented vs. non-ABA-oriented), region (Europe, North America), age group (18–24, 25–34, 35–44, 45–54, 55–64 years of age), work status (employed under contract with benefits, self-employed without benefits, both), years of experience, weekly work hours, income, frequency of supervision sessions, supervision format (online, face-to-face), frequency of challenging behavior, work focus (program implementation, program supervision, both), caseload, and social support at work.

We computed a correlation matrix including all prospective predictors and eliminated those resulting in Pearson product-moment correlations coefficients above 0.40. The following predictors were eliminated: region, caseload, and years of experience. Region and client load were highly correlated with income, whereas years of work experience was highly correlated with age. All analyses were conducted with SPSS (v. 22). An alpha value of 0.05 was used throughout.

Results

Descriptive findings

Eighty-eight participants (48%) were reportedly unsatisfied with their current work conditions, whereas 95 (52%) were satisfied. Over half of the participants (62%) reported not being satisfied with their current salary, whereas 69 (38%) reported being satisfied. Regarding supervision, 66% of all participants reported working directly under a BCBA®, though less than half (45%) reported receiving daily, weekly, or bi-weekly supervision from a BCBA®, while one in every five participants reported receiving distance supervision. Almost half of the participants (45%) indicated that their employer required continuous education, with 9% receiving training weekly, 22% monthly, and 45% every few months. About half of the participants (48%) worked in home-based programs, whereas (84%) worked, at least partially, in center- or school-based programs.

Only nine participants (5%) scored within the very satisfied scale score segment of the JSS. One in every five participants ($n = 33$; 18%) scored within the moderately satisfied score range. Score levels increased within the slightly satisfied range totaling 70 participants (38%). Another 60 participants (33%) scored within the slightly unsatisfied segment. Only 11 participants (6%) scored within the moderately unsatisfied range. None of the participants scored within the very unsatisfied range. In sum, these results show that 112 participants (61%) feel very, moderately, or slightly satisfied in their current working environment. The remaining 71 participants (39%) feel slightly or moderately unsatisfied (Figure 1).

According to the cut-off levels recommended by Maslach, Jackson, and Leiter (1996), participants scored high in emotional exhaustion and depersonalization and low in lack of accomplishment: a pattern that is considered compatible with burnout. Specifically, 68 individuals (37%) scored within the low range for emotional exhaustion, 68 (37%) within the moderate range, and 47 (26%) within the high range. In the depersonalization domain, 53 (29%) participants scored within
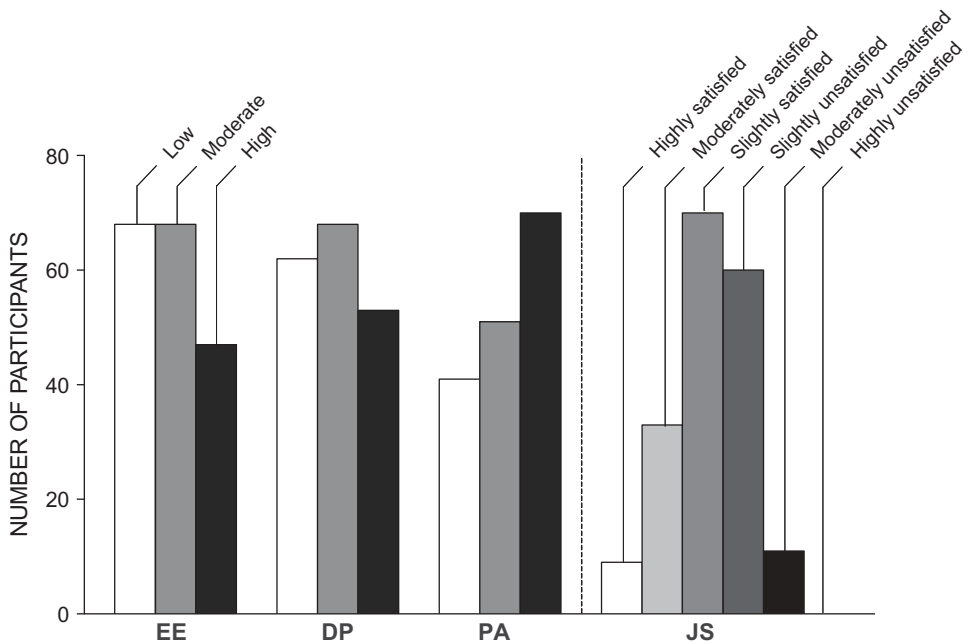
Figure 1. Score distribution in the Maslach burnout inventory domains and the job satisfaction survey (n = 183). DP = Depersonalization; EE = Emotional exhaustion, JS = Job satisfaction; PA = Personal accomplishment.

the high level range, 68 (37%) within the moderate range, and 62 (34%) within the low range. Finally, 91 respondents (50%) scored within the high level for lack of accomplishment, 51 (28%) within the moderate range, and 41 (22%) within the low range (Figure 1).

Logistic regression models

The logistic models (Table 2) indicated that social support at work was the most consistent protective factor against both job dissatisfaction and burnout among certified behavior analysts (job dissatisfaction: OR = 0.49, 95% CI 0.28–0.86, p = 0.013; burnout: OR = 0.65, 95% CI 0.44–0.97, p = 0.035). The effect remained significant for job dissatisfaction cases when all participants, whether certified or not, were included in the analysis (OR = 0.71, 95% CI 0.54–0.94, p = 0.035). In addition, age was found to be a protective factor against burnout among certified behavior analysts (OR = 0.50, 95% CI 0.25–0.98, p = 0.042). Finally, the pattern of predictors shifted considerably when the analyses were replicated for students and behavior technicians. For these, the only significant protective factor against burnout status was level of supervision. Specifically, the results showed that less frequent supervision sessions gradually increased burnout risk (OR = 1.50, 95% CI 1.02–2.19, p = 0.040). All other predictors were not significant.

Table 2. Binary logistic models for certified and uncertified participants ($n = 183$).

	Job Satisfaction Survey (JSS)[a]		Maslach Burnout Inventory (MBI)[b]	
	OR [95% CI]	*p* value	OR [95% CI]	*p* value
BCBA®, BCaBA®				
Age	-	-	0.50 [0.25, 0.98]	0.042
Social support	0.49 [0.28, 0.86]	0.013	0.65 [0.44, 0.97]	0.035
Student, RBT®				
Age	-	-	-	-
Social support	-	-	-	-
Supervision[c]	-	-	1.50 [1.02, 2.19]	0.040
All				
Social support	0.71 [0.54, 0.94]	0.035	-	-

Non-significant predictors omitted. Income, frequency of problem behavior, weekly work hours, and work setting were included in the model.
[a]Individuals with scores in the JSS within the dissatisfaction range were considered cases.
[b]Individuals with scores within the burnout range in any of the three domains of the MBI were considered cases.
[c]Frequency of supervision sessions over a 6-point scale where one denoted daily supervision sessions and six denoted complete lack of supervision.

Discussion

Our findings suggest that about two in every three participants were experiencing moderate to high burnout levels and little to no job satisfaction. These results contrast with previous studies showing low levels of burnout among ABA therapists (e.g., Gibson et al., 2009; Griffith et al., 2014; Jennett et al., 2003). This discrepancy may be due to the varied ABA settings where survey respondents worked. In contrast with previous studies, half of the participants delivered home-based services. Home-based programs typically involve minimal interaction between team members, less frequent supervision than school- and clinic-based programs, and limited environmental control in the event of clients with challenging behaviors. Thus, the level of supervision and social support in the current sample may have been relatively lower than those reported in previous studies.

Our analyses suggest that frequent supervision may be an important prevention strategy among students and front-line workers in home-based programs. In this connection, there is evidence to suggest that supervisors that make use of reinforcement principles and demonstrate empathy have supervisees with lower burnout rates (Gibson et al., 2009). We were not able to establish a protective role for supervision at the BCaBA® and BCBA® levels. Instead, social support in the work setting demonstrated a wider protective role against both lack of job satisfaction and burnout.

The logistic regression models revealed that social support at the workplace might be critical to BCBA® and BCaBA® certificants, students, and front-line workers. Social support influenced job satisfaction and burnout according to a bijective function, that is, when social support was absent, the likelihood of low satisfaction and burnout increased, while when social support was present, the inverse relations were observed. Our data show that a one-unit increment in our ad hoc social support scale increased job satisfaction by 49% and reduced the likelihood of burnout by 65%. It is important to emphasize that we defined socially supportive work environments as those with: (a) several team members, (b) certified professionals, (b) frequent and positive interactions among team members, and (c) frequent and relevant staff training opportunities. Thus,

our findings suggest that building such teams may promote job satisfaction and minimize burnout in this population.

In line with previous research (e.g., Maslach et al., 2001), age was associated with burnout: older professionals were less likely to experience burnout relative to younger practitioners. On average, moving from a given age group to the one immediately following (e.g., from 18 to 24 years of age to 25 to 34 years of age) reduced the probability of burnout by 50%.

Online recruitment is generally associated with relatively low response rates (Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008). We cannot provide an exact estimation of response rate and representativeness. However, a proxy calculation on the basis of both the interaction generated by social media posts and the number of subscribers of targeted list-servers suggests a response rate of 15–20%, which would be slightly superior to the average 10% response rate found in web-based surveys (see a meta-analysis by Manfreda et al., 2008).

The current incidental sample presents some advantages relative to the ones that have been evaluated in the literature. First, the number of respondents is greater by a factor of two to six when compared to the sample sizes attained in previous studies evaluating burnout among ABA workers (Gibson et al.: $n = 81$; Griffith et al.: $n = 45$; Jennett, Harris, & Mesibov: $n = 34$). Second, the current sample is geographically diverse and includes both independent professionals and trainees working in a variety of settings (Table 1). We expect that the representativeness of the incidental sample reported here would be greater than that of previous studies. Finally, the current sample size allowed computing complex logistic models with sufficient power to identify discrete protective factors while incorporating into the model a variety of personal and job-related predictive variables. Also, replicating these models across relevant subgroups and outcome variables (job satisfaction, burnout) helped to establish the generality of the analysis.

In sum, the current study presents a descriptive and analytical evaluation of job satisfaction and burnout among a diverse incidental sample of individuals offering behavior analytic services. Our findings suggest that lack of job satisfaction and risk of burnout are highly prevalent in this population. Adequate support defined by positive interactions within a team of certified professionals and a strong staff training and supervision structure may be key preventive strategies against lack of job satisfaction and burnout for early-career ABA practitioners.

Ethics process

This study has received ethical approval by the Ethics Committee of the School of Education at Queen's University Belfast and has been performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments and Queen's University ethical standards.

Disclosure statement

The authors declare no conflict of interest.

ORCID

Katerina Dounavi   http://orcid.org/0000-0003-1491-9301

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