

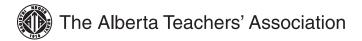
#### COMPARATIVE ANALYSIS OF THE SURVEY DATA

A partnership between the University of Calgary, the Alberta Teachers' Association (ATA) and the Alberta School Employee Benefit Plan (ASEBP)



The Alberta Teachers' Association

www.teachers.ab.ca



© Copyright 2024 ISBN 978-1-990696-04-06 Unauthorized use or duplication without prior approval is strictly prohibited. Alberta Teachers' Association 11010 142 Street NW, Edmonton AB T5N 2R1 Telephone 780-447-9400 or 1-800-232-7208 www.teachers.ab.ca

*Further information about the Association's research is available from Dr Philip McRae at the Alberta Teachers' Association; e-mail research@ata.ab.ca.* 

# Compassion Fatigue, Emotional Labour and Educator Burnout: Research Study

#### COMPARATIVE ANALYSIS OF THE SURVEY DATA

A partnership between the University of Calgary, the Alberta Teachers' Association (ATA) and the Alberta School Employee Benefit Plan (ASEBP)

Initial funding provided by the ATA and ASEBP

Analysis funding provided by the Social Sciences and Humanities Research Council of Canada (SSHRC)

Principal Researcher Research Assistant (Data Analysis) Astrid Kendrick, EdD, University of Calgary Mawuli Tay, PhD Candidate

**Report Date: January 2024** 

# Contents

Research Study Overview	1
About the Current Technical Report	2
Method	3
Data Analysis	3
Results	4
Levels of Compassion Satisfaction and Compassion Fatigue	4
Compassion Satisfaction and Compassion Fatigue Based on Experience	6
Burnout Symptoms by Years of Service	9
Discussion	13
Conclusion	14
References	15

### **Research Study Overview**

In January 2020, three partners concerned with public education in Alberta—the Alberta Teachers' Association (ATA), the University of Calgary's Werklund School of Education and the Alberta School Employee Benefit Plan (ASEBP)—initiated a research study to investigate the relatively understudied experiences of and extent of compassion fatigue, emotional labour and burnout in Alberta's education workers (including teachers, educational assistants, school and district leaders, and support staff).

The study focused on three research questions:

- What is the scope of compassion fatigue and burnout in Alberta's education workers?
- What is the lived experience of Alberta's education workers with compassion fatigue and burnout?
- What can be done to prevent or treat these psychological work hazards in the field of education?

To address these questions, the study developed as three distinct phases over two years.

In phase 1 (ATA 2020), data were collected through an online survey using the Professional Quality of Life Measure, Version 5 (ProQOL 5) (Stamm 2010) and the Maslach and Jackson (1981) burnout inventory. The survey was available to education workers for three weeks in June 2020. Over 2,000 survey responses were collected during this first phase.

Data collected and analyzed during phase 2 (ATA 2021a) consisted of a thematic analysis of qualitative interviews with 53 education workers. The intent of this phase was to understand the lived experience of education workers with regard to compassion fatigue and burnout. The interview data were analyzed using constant comparison thematic analysis (Creswell 2015), with the codes and themes validated through discussion with the advisory council for the study.

The final phase (ATA 2021b; Kendrick 2022) was a second run of the survey developed in phase 1. The survey was available for three weeks in January 2021. In addition to an open online survey, the phase 3 data collection included a random stratified sample of the membership of the ATA. Another 2,000 responses were collected through these two surveys.

The data collected between 2020 and 2021 were analyzed in aggregate, using descriptive statistics. Detailed reports on this study are available on the ATA website (www.teachers.ab.ca/professional-development/education-research/), on the HEARTcare Educators website (www.heartcareeducators .ca) and in Kendrick's (2022) article in the *International Journal of Health, Wellness, and Society*.

### About the Current Technical Report

This technical report provides a comparative analysis of the statistical data gathered during the surveys in June 2020 and January 2021.

The compiled data from these surveys have been cleaned and analyzed further to provide a more nuanced understanding of the scope and nature of compassion fatigue, compassion satisfaction and burnout within groups of education workers.

Because the survey population was uneven, rather than comparing across groups (such as teachers and educational assistants), the analysis focuses on similarities and differences within groups.

*Note*: In this analysis, *administrators* refers to K–12 school district administrators, school administrators, educational assistants and other support staff, which is not the usual definition. The reason for this grouping was that data from the initial and follow-up surveys were largely skewed toward teachers, who constitute the largest group of education workers and, therefore, most of the respondents.

### Method

#### DATA ANALYSIS

For data analysis, both descriptive and inferential statistics were applied to the aggregate data collected between June 2020 and January 2021, using SPSS Statistics 28 software.

A total of 3,611 survey responses were included in the analysis. The descriptive statistics (such as mean, percentages, tables and graphs) were used to describe the general compassion satisfaction and compassion fatigue scores among education workers.

The larger group of education workers was then divided into two groups:

- Teachers, which represented the majority of respondents (N = 3,111)
- Administrators, which included school and district leaders, educational assistants, and support staff (*N* = 500)

The responses to each ProQOL Likert-style question were summed and then categorized into three levels:

- A sum of 22 or less was interpreted as a high level of compassion satisfaction or as a low level of compassion fatigue.
- A sum between 23 and 41 inclusive was interpreted as a moderate level of compassion satisfaction or as compassion stress (secondary traumatic stress), rather than compassion fatigue (secondary traumatic stress disorder) (Figley 2002).
- A sum of 42 or more was interpreted as a low level of compassion satisfaction or as a high level of compassion fatigue.

Inferential statistics—specifically, analysis of variance (ANOVA)—were used to determine how years of service related to teachers' and administrators' compassion satisfaction and compassion fatigue.

Prior to data analysis, erroneous entries and missing values were checked, and data were cleaned. Also, various assumptions underlying ANOVA, as explained by Tabachnick and Fidell (2019), were checked and met. These assumptions included normality, univariate outliers, homogeneity of variance and independence of the data. ANOVA output does not identify which specific differences between pairs of means are significant, so post hoc tests (specifically, Bonferroni) were used to explore differences between multiple groups, using the number of years of service (denoted as 0–5 years, 6–10 years, 11–15 years, 16–20 years and 21+ years). 3

### Results

# LEVELS OF COMPASSION SATISFACTION AND COMPASSION FATIGUE

Figure 1 shows teachers' levels of compassion satisfaction and compassion fatigue, as determined through their responses to the ProQOL survey questions.

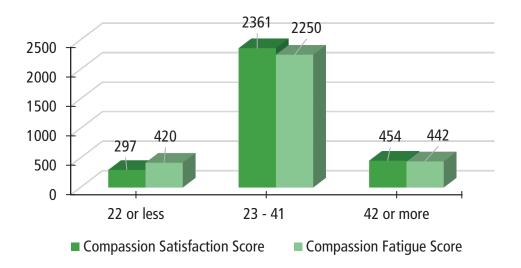


FIGURE 1 . Levels of teachers' compassion satisfaction and compassion fatigue (N = 3,111). Reproduced from Kendrick and Tay (2024, 118). (Note: Although the responses here total 3,112, the total count of teachers used in this analysis is 3,111. This discrepancy arose because one participant did not specify their years of experience. As the analysis was constructed based on this experience data, the count was reduced from 3,112 to 3,111.)

Most of the 3,111 teacher respondents had a calculated compassion satisfaction score of 23–41 (2,361, or 75.9 per cent) and a calculated compassion fatigue score of 23–41 (2,250, or 72.3 per cent).

These results suggest that most teachers experience both moderate compassion satisfaction and moderate compassion fatigue.

As shown in Figure 2, most of the 500 administrator respondents (including educational assistants and support staff) had a compassion satisfaction score of 23–41 (367, or 73.4 per cent) and a compassion fatigue score of 23–41 (325, or 65.0 per cent).

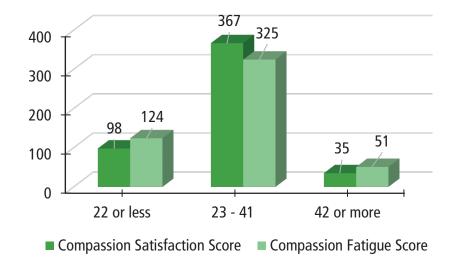


FIGURE 2. Levels of administrators' compassion satisfaction and compassion fatigue (N = 500). Reproduced from Kendrick and Tay (2024, 119). (Note: In this study, administrators refers to school and district administrators, educational assistants, and other support staff.)

These results suggest that most administrators experience both moderate compassion satisfaction and moderate compassion fatigue.

Based on their own scores, the respondents were asked to identify their mental state—compassion fatigue or compassion satisfaction. The results were reported in the phase 1 report (ATA 2020) and the executive summary (ATA 2021b), with 54.3 per cent selecting compassion fatigue and 45.7 per cent selecting compassion satisfaction (ATA 2021b, 16).

#### COMPASSION SATISFACTION AND COMPASSION FATIGUE BASED ON EXPERIENCE

Table 1 presents the descriptive statistics of teachers' and administrators' compassion satisfaction and compassion fatigue based on the number of years they had served in the field of education.

TABLE 1. Teachers' and Administrators' Compassion Satisfaction and Compassion Fatigue Based on Experience

		Те	Teachers ( <i>N</i> = 3,111)			Administrators ( <i>N</i> = 500)			
	Experience (years)	N	Mean	Interpretation	N	Mean	Interpretation		
	0–5	627	32.53	Moderate	99	30.20	Moderate		
Commonsion	6–10	688	33.27	Moderate	71	32.45	Moderate		
Compassion satisfaction	11–15	595	33.54	Moderate	83	30.66	Moderate		
	16–20	513	32.73	Moderate	85	30.74	Moderate		
	21+	688	31.27	Moderate	162	26.96	Moderate		
	Total	3,111	32.64	Moderate	500	29.64	Moderate		
	0-5	627	32.32	Moderate	99	27.31	Moderate		
	6–10	688	32.81	Moderate	71	29.87	Moderate		
Compassion	11–15	595	32.28	Moderate	83	29.93	Moderate		
fatigue	16–20	513	32.05	Moderate	85	30.74	Moderate		
	21+	688	30.82	Moderate	162	28.96	Moderate		
	Total	3,111	32.04	Moderate	500	29.23	Moderate		

*Note*: In this study, *administrators* refers to school and district administrators, educational assistants, and other support staff.

Reproduced from Kendrick and Tay (2024, 119-20).

On average, participants had a calculated score of moderate compassion satisfaction and moderate compassion fatigue. While the respondents fairly evenly represented various levels of experience, a small majority (23.5 per cent) had served 21 or more years in the field of education.

To determine the significance of years of service for respondents' compassion satisfaction and compassion fatigue mean scores, one-way ANOVA analysis between subjects was conducted, as shown in Table 2.

			Sum of squares ( <i>SS</i> )	Degrees of freedom ( <i>df</i> )	Mean square ( <i>MS</i> )	F	Sig
		Between groups	2,066.66	4	516.67	6.87	<.001
	Compassion satisfaction	Within groups	233,701.87	3,106	75.24		
Teachers		Total	235,768.53	3,110		E 42	
reachers		Between groups	1,511.63	4	377.91	5.13	<.001
	Compassion fatigue	Within groups	228,788.77	3,106	73.66		
		Total	230,300.40	3,110			
Administrators	Compassion satisfaction	Between groups	1,948.38	4	487.10	8.11	<.001
		Within groups	29,729.10	495	60.06		
		Total	31,677.48	499			
	Compassion fatigue	Between groups	639.74	4	159.94	2.04	.088
		Within groups	38,795.72	495	78.38		
		Total	39,435.46	499			

# TABLE 2. ANOVA Results on Teachers' and Administrators' Compassion Satisfaction and Compassion Fatigue Based on Experience

*Note:* In this study, *administrators* refers to school and district administrators, educational assistants, and other support staff.

Reproduced from Kendrick and Tay (2024, 120).

The results reveal a statistically significant difference in compassion satisfaction between at least two groups for both teacher and administrator respondents (teachers—F(4, 3, 106) = 6.87, p < .001; administrators—F(4, 495) = 8.11, p < .001).

Post hoc comparisons, using the Bonferroni test, indicated that the mean score for 21 or more years of experience for teacher respondents (M = 31.27) was significantly different than 6–10 years (M = 33.27), 11–15 years (M = 33.54) and 16–20 years (M = 32.73).

For administrator respondents, the Bonferroni test showed that the mean score for 21 or more years of experience (M = 26.96) was significantly different than 0–5 years (M = 30.20), 6–10 years (M = 32.45), 11–15 years (M = 30.66) and 16–20 years (M = 30.74).

However, no significant difference between teachers and administrators with 0–5 years, 6–10 years, 11–15 years and 16–20 years of experience was found in the data.

Taken together, these results suggest that teachers' and administrators' years of service does influence their compassion satisfaction level. Specifically, the more years they spend in education, the less their calculated compassion satisfaction scores.

With respect to compassion fatigue, the results indicate a statistically significant difference in compassion fatigue between at least two groups for teachers F(4, 3, 106) = 5.13, p < .001) but not for administrators F(4, 495) = 2.04, p = .088).

Post hoc comparisons using the Bonferroni test revealed that the mean score for 21 or more years of experience for teachers (M = 30.82) was significantly different than 0–5 years (M = 32.32), 6–10 years (M = 32.81) and 11–15 years (M = 32.28). However, there was no significant difference between 0–5 years, 6–10 years and 11–15 years.

Altogether, these results indicate that teachers' years of service does influence their calculated compassion fatigue level. Particularly, the more years they spend in education, the higher their compassion fatigue scores.

#### BURNOUT SYMPTOMS BY YEARS OF SERVICE

Table 3 presents the prevalence of teachers' burnout symptoms by years of service in the field of education.

		Years of Service					
	0–5	6–10	11–15	16–20	21+	Total*	
Lack of energy	586 (19.2%)	636 (20.8%)	542 (17.8%)	453 (14.8%)	600 (19.7%)	2,817 (92.3%)	
Exhaustion	561 (18.4%)	607 (19.9%)	511 (16.7%)	437 (14.3%)	556 (18.2%)	2,672 (87.5%)	
Concentration problems	465 (15.2%)	498 (16.3%)	405 (13.3%)	347 (11.4%)	419 (13.7%)	2,134 (69.9%)	
Reduced initiative to complete work-related tasks	464 (15.2%)	516 (16.9%)	408 (13.4%)	325 (10.6%)	410 (13.4%)	2,123 (69.6%)	
Sleep disorders	322 (10.6%)	374 (12.3%)	339 (11.1%)	345 (11.3%)	449 (14.7%)	1,829 (59.9%	
Reduced performance of work-related tasks	393 (12.9%)	430 (14.1%)	325 (10.6%)	267 (8.7%)	325 (10.6%)	1,740 (57.0%)	
Reduced imagination or creativity	367 (12.0%)	419 (13.7%)	345 (11.3%)	258 (8.5%)	328 (10.7%)	1,717 (56.3%)	
Memory problems	324 (10.6%)	359 (11.8%)	323 (10.6%)	291 (9.5%)	365 (12.0%)	1,662 (54.5%	
Inability to make decisions	287 (9.4%)	336 (11.0%)	252 (8.3%)	204 (6.7%)	247 (8.1%)	1,326 (43.4%)	
Apathy or lack of emotional commitment to work	171 (5.6%)	203 (6.7%)	170 (5.6%)	130 (4.3%)	153 (5.0%)	827 (27.1%)	
Reduced desire to help colleagues or other staff	146 (4.8%)	187 (6.1%)	171 (5.6%)	100 (3.3%)	137 (4.5%)	741 (24.3%)	
Reduced desire to help students	128 (4.2%)	150 (4.9%)	140 (4.6%)	86 (2.8%)	107 (3.5%)	611 (20.0%)	

#### TABLE 3. Burnout Symptoms Among Teachers (by Years of Service)

\*Due to rounding, percentages may not add up exactly. Note that this specific aspect of the survey involved a multiple-choice question that allowed respondents to choose more than one option. A total of 3,052 responses were received. Consequently, all percentages were calculated based on this total. The breakdown is as follows: 0–5 years (622 responses), 6–10 years (681 responses), 11–15 years (584 responses), 16–20 years (499 responses), and 21 or more years (666 responses).

Adapted from Kendrick and Tay (2024, 121).

Based on these results, it seems that burnout symptoms are a significant issue for teachers across all levels of experience. The following were the most prevalent symptoms reported:

- Lack of energy (92.3 per cent)
- Exhaustion (87.5 per cent)
- Concentration problems (69.9 per cent)
- Reduced initiative to complete work-related tasks (69.6 per cent)
- Sleep disorders (59.9 per cent)
- Reduced performance of work-related tasks (57.0 per cent)

Interestingly, these symptoms were most dominant among teachers with 6–10 years of teaching experience, followed closely by those with 0–5 years of teaching experience. These results suggest that burnout may have a greater impact on work-related tasks for teachers in the beginning and middle of their career.

However, sleep disorders were most prevalent among teachers with 21 or more years of teaching experience.

Table 4 presents the prevalence of administrators' burnout symptoms by years of service in the field of education.

	0–5	6–10	11–15	16–20	21+	Total*
Lack of energy	78 (16.1%)	59 (12.2%)	78 (16.1%)	72 (14.9%)	132 (27.3%)	419 (86.7%)
Exhaustion	75 (15.5%)	56 (11.6%)	67 (13.9%)	73 (15.1%)	121 (25.1%)	392 (81.2%)
Concentration problems	64 (13.3%)	46 (9.5%)	56 (11.6%)	61 (12.6%)	99 (20.5%)	326 (67.5%)
Reduced initiative to complete work-related tasks	56 (11.6%)	43 (8.9%)	46 (9.5%)	54 (11.2%)	86 (17.8%)	285 (59.0%)
Memory problems	47 (9.7%)	36 (7.5%)	47 (9.7%)	46 (9.5%)	83 (17.2%)	259 (53.6%)
Sleep disorders	51 (10.6%)	32 (6.6%)	37 (7.7%)	46 (9.5%)	91 (18.8%)	257 (53.2%)
Reduced performance of work-related tasks	40 (8.3%)	41 (8.5%)	43 (8.9%)	48 (9.9%)	74 (15.3%)	246 (50.9%)
Reduced imagination or creativity	39 (8.1%)	34 (7.0%)	34 (7.0%)	41 (8.5%)	60 (12.4%)	208 (43.1%)
Inability to make decisions	34 (7.0%)	29 (6.0%)	29 (6.0%)	32 (6.6%)	54 (11.2%)	178 (36.9%)
Apathy or lack of emotional commitment to work	15 (3.1%)	23 (4.8%)	19 (3.9%)	19 (3.9%)	29 (6.0%)	105 (21.7%)
Reduced desire to help colleagues or other staff	12 (2.5%)	16 (3.3%)	16 (3.3%)	13 (2.7%)	17 (3.5%)	74 (15.3%)
Reduced desire to help students	6 (1.2%)	11 (2.3%)	7 (1.4%)	8 (1.7%)	12 (2.5%)	44 (9.1%)

TABLE 4. Burnout Symptoms Among Administrators (by Years of Service)

*Note*: In this study, *administrators* refers to school and district administrators, educational assistants, and other support staff.

\*Due to rounding, percentages may not add up exactly. Note that this specific aspect of the survey involved a multiple-choice question that allowed participants to choose more than one option. A total of 483 responses were received. Consequently, all the percentages were calculated based on this total. The breakdown is as follows: 0–5 years (92 responses), 6–10 years (68 responses), 11–15 years (83 responses), 16–20 years (84 responses), and 21 or more years (156 responses).

Adapted from Kendrick and Tay (2024, 122).

The results show that burnout symptoms were prevalent among administrators, regardless of their years of service in the education sector. The following were the most prevalent symptoms reported:

- Lack of energy (86.7 per cent)
- Exhaustion (81.2 per cent)
- Concentration problems (67.5 per cent)
- Reduced initiative to complete work-related tasks (59.0 per cent)
- Memory problems (53.6 per cent)
- Sleep disorders (53.2 per cent)

These symptoms were most prevalent among administrators with 21 or more years of experience. This suggests that long-time administrators are experiencing significant physical and emotional fatigue in their roles.

# Discussion

The results of this comparative analysis are significant for a number of reasons.

First, a common assumption is that early-career education workers are at higher risk of compassion fatigue and burnout than are later-career education workers. Early-career teachers may leave the profession at higher rates (Buchanan et al 2013); however, the risk of compassion fatigue and burnout appears to be consistent across all years of service. Although education workers with 21 or more years of experience have slightly higher rates of both compassion fatigue and compassion satisfaction, compassion stress and compassion fatigue are problematic across the field of education, and workplace solutions are needed.

Thus, further study should include understanding the strategies and workplace conditions that either prevent or exacerbate the compassion fatigue and burnout experienced by later-career education workers. Understanding how those education workers have coped with their psychological distress in order to remain in the field of education can provide the necessary basis for improving school culture and building targeted practices and resources to support workplace well-being.

Second, the comparative analysis based on teachers' years of service shows demonstratively different symptoms of burnout. While early-career teachers are more likely to feel emotional or physical fatigue, later-career teachers reported cognitive issues and decision fatigue as a result of overwork. These differences may be related to other factors, such as the increased caregiving responsibilities of mid- and late-career women (ATA 2022), which needs to be better understood through further study. As with compassion fatigue, understanding how later-career education workers have tempered or managed their burnout symptoms is a necessary part of developing useful interventions for workplace well-being in the field of education.

Finally, this comparative analysis provides a basis for further study of nonteaching professionals and staff in the field of education. As noted, a disproportionate number of teachers responded to the survey. Although some inferences could be drawn from the smaller sample of administrators (which, in this study, includes such diverse roles as educational assistants, school and system leaders, and support staff), a more concerted effort must be made to gather data related to their experiences with compassion fatigue and burnout in their work roles.

The phase 2 interview data suggested that support staff and school leaders have different experiences with regard to building their workplace well-being. Support staff are often ignored or are expected to provide crisis or trauma work outside of their job descriptions. School and system leaders spoke of their specific issues in supporting and managing other adults. The small survey sample supports these two emergent themes from the qualitative data, but a stronger response is needed in order to transfer the findings to make wider conclusions beyond the interviews themselves (Creswell 2015).

# Conclusion

This research study has provided a solid foundation for further study into compassion fatigue, burnout and emotional labour in Alberta's education workers.

Because the risks of compassion fatigue and burnout are consistent across the career of an education worker, workplace well-being must be a collective effort by everyone involved in the field of education.

Building, prioritizing and repairing the occupational well-being of education workers is a longterm and collaborative process that must be supported and resourced by professional associations, faculties of education, other training institutions, benefit providers and ministries of education.

### References

Alberta Teachers' Association (ATA). 2020. Compassion Fatigue, Emotional Labour and Educator Burnout: Research Study; Phase One Report: Academic Literature Review and Survey One Data Analysis. Edmonton, Alta: ATA. Also available at https://legacy.teachers.ab.ca/ SiteCollectionDocuments/ATA/Publications/Research/COOR-101-30%20Compassion%20 Fatigue%20Study.pdf (accessed June 6, 2023).

. 2021b. Compassion Fatigue, Emotional Labour and Educator Burnout: Executive Summary. Edmonton, Alta: ATA. Also available at https://legacy.teachers.ab.ca/SiteCollectionDocuments /ATA/Publications/Research/COOR-101-30-7%20Compassion%20Fatigue-Executive%20 Summary.pdf (accessed June 6, 2023).

. 2022. COVID-19, Caregiving and Careers of Alberta Teachers and School Leaders: A Qualitative Study. Edmonton, Alta: ATA. Also available at https://legacy.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Research/COOR-101-37%20COVID%20 Caregivers%20Careers%20Report%202022%2001.pdf (accessed June 6, 2023).

- Buchanan, J, A Prescott, S Schuck, P Aubusson, P Burke and J Louviere. 2013. "Teacher Retention and Attrition: Views of Early Career Teachers." *Australian Journal of Teacher Education* 38, no 3 (March): 112–29. https://ro.ecu.edu.au/ajte/vol38/iss3/8/ (accessed June 6, 2023).
- Creswell, J. 2015. Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. Loose-leaf version. Upper Saddle River, NJ: Pearson
- Figley, C R, ed. 2002. Treating Compassion Fatigue. New York: Routledge.
- Kendrick, A. 2022. "Compassion Fatigue, Burnout, and the Emotional Labor of Educational Workers." *International Journal of Health, Wellness, and Society* 13, no 1: 31–55. https://doi.org/10.18848/2156-8960/CGP/v13i01/31-55.

- Kendrick, A H, and M K Tay. 2024. "Influence of Number of Years of Service on Educational Workers' Compassion Fatigue and Burnout: A Comparative Analysis." *International Journal of Health*, *Wellness, and Society* 14, no 1: 113–28. https://doi.org/10.18848/2156-8960/CGP/v14i01/113-128.
- Maslach, C, and S E Jackson. 1981. "The Measurement of Experienced Burnout." *Journal of Occupational Behavior* 2, no 2 (April): 99–113. https://doi.org/10.1002/job.4030020205.
- Stamm, B H. 2010. *The Concise ProQOL Manual*. 2nd ed. Pocatello, Idaho: ProQOL.org. Also available at https://proqol.org/proqol-manual (accessed June 6, 2023).

Tabachnick, BG, and LS Fidell. 2019. Using Multivariate Statistics. 7th ed. New York: Pearson.

