Job Control and Its Impacts on Burnout in Academic Instruction Librarians

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Abstract

Librarians have been grappling with the issue of burnout for decades, at least. This study uses the Copenhagen Burnout Inventory (CBI) and Job Control Inventory to show how job control impacts burnout. Using the CBI, academic instruction librarians, on average, have high work-related burnout and even higher personal burnout compared to other jobs. However, librarians have low client-related burnout, similar to other "caring" or "helping" professions. The findings point to key factors that impact job control and burnout to help consider ways of mitigating burnout and increasing job control.

Keywords: academic libraries, academic librarians, library instruction, job control, burnout, burnout prevention

Introduction

Librarians have been grappling with the issue of burnout for decades, at least, with many acknowledging its prevalence in the profession. In recent years, additional empirical evidence, both quantitative and qualitative, has been published. Two specific instances have applied quantitative inventories to measure burnout among academic librarians. Applying the Areas of Worklife Survey and Maslach Burnout Inventory, Nardine (2019) found "that lack of personal agency is the primary contributor to a sense of burnout" (p. 508). Additionally, employing the Copenhagen Burnout Inventory, Wood et al. (2020) found that librarian perceptions of burnout are quite high in comparison to other occupations, including nurses, hospital doctors, and social workers. Burnout is clearly a central concern for the profession that has received considerable attention in scholarship and other discussions, and agency or job control may be a large contributor.

Burnout has been identified as a predictor of various negative consequences for employee health and wellbeing and for organizational success. These include physical consequences (cardiovascular diseases, pain, and impaired immune function), psychological consequences (depression and insomnia), and occupational consequences (absenteeism, poor performance, and job dissatisfaction). Given the negative impacts of burnout on employees and organizations, managers and administrators should consider preventative measures to mitigate burnout. Job control may be one area worth focusing mitigation measures.

Librarians may lack job control generally and when providing library instruction specifically. There is no current data about job control among librarians, though job control does appear to be tied to burnout. However, little scholarly research considers librarian agency or begins to understand the factors that contribute to agency or feelings of agency for librarians at work. In order to improve job control and mitigate burnout in the

workplace, we first need to understand how job control is experienced and what factors impact that experience.

Given the relationship between job control and burnout and the negative impacts of burnout, it stands to reason that managers and administrators should work with employees to increase their job control as a means of mitigating burnout (Salvagioni et al., 2017). However, further research on job control and burnout among librarians is needed.

This study seeks to address this research problem and fill the gap identified in the literature around librarian perceptions of job control generally and regarding instruction specifically. The study considers the following research questions:

- For academic instruction librarians, how does job control impact burnout?
- What factors contribute to job control and burnout for academic instruction librarians? To what extent do these factors contribute to job control?

This study uses the Copenhagen Burnout Inventory (CBI) and Job Control Inventory to show how job control impacts burnout. Using the CBI, academic instruction librarians, on average, have drastically high work-related burnout and even higher personal burnout compared to other jobs. However, librarians have drastically low client-related burnout, similar to other "caring" or "helping" professions. I argue that this difference is related to vocational awe and that person-centered management is necessary to approach employees holistically to mitigate personal and work-related burnout, which are statistically correlated. Additionally, the findings point to key factors that impact job control and burnout to help consider ways of mitigating burnout and increasing job control.

Literature Review

This study attempts to understand and quantify the relationship between burnout and job control among academic librarians who provide instruction. These concepts have been studied together in other fields, but job control is understudied in library literature. While librarians are likely familiar with burnout, as it has occupied considerable space in the literature, librarians and library leaders may be less aware of the concept of job control. Both concepts are defined and discussed below. For a more complete picture of the history of burnout research in library scholarship, Wood et al. (2020) provide a comprehensive discussion in their literature review.

Burnout

The World Health Organization (WHO) in their International Classification of Diseases, 11th Edition (ICD-11) describe burnout as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterised by three dimensions: 1) feelings of energy depletion or exhaustion; 2) increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and 3) a sense of ineffectiveness and lack of accomplishment" (World Health Organization, 2020). For several decades, burnout has been a preoccupation of librarians, the profession, and our professional literature. In fact, as Wood et al. (2020) demonstrate a scholarly literature

search for burnout AND librar*, scholarly literature on burnout in librarians has had a steady upward trend for the past 4 decades. This has included considerable anecdotal evidence. In fact, over 30 years ago, Fisher (1990) called for further empirical evidence on burnout in librarians to answer her titular question "are librarians burning out?" While the extent of the anecdotal evidence should give us cause to believe librarians and a librarian's belief that they are burnt out seems just as important as an empirical decision or diagnosis that they are, anecdotal approaches may leave us lacking as we attempt to understand the systemic and structural causes of burnout in libraries and mitigate these effects. That is to say, it seems undeniable that burnout is an issue among academic librarians. Burnout research in libraries and among librarians needs to go beyond proving the existence and prevalence of burnout; we need to begin identifying the relevant factors impacting burnout and testing the countless solutions that have been presented for reducing and preventing burnout among academic librarians. Further quantitative and qualitative study of burnout among librarians will allow us to pinpoint solutions for library administration to make organizational and structural changes for the benefit of library workers.

Wood et al. (2020) and Nardine (2019) represent recent work to provide further quantitative analysis of burnout. Employing the Copenhagen Burnout Inventory, Wood et al. (2020) found that librarian perceptions of burnout are quite high in comparison to other occupations, including nurses, hospital doctors, and social workers. This points to a significant issue that needs to be addressed. Considering job control as a component of agency may be one way to measure a specific aspect of burnout and mitigate feelings of workplace burnout. Applying the Maslach Burnout Inventory, Nardine (2019) found "higher levels of Personal Accomplishment and lower levels of Emotional Exhaustion and Depersonalization […] than anticipated" (p. 522). However, Wood et al. (2020) found higher scores for total-work related burnout among academic librarians in their study than any other profession evaluated by Kristensen et al. (2005). It's possible that the MBI is underrepresenting librarian burnout or inadequately designed to assess burnout amoung librarians. Applying the Areas of Worklife Survey (AWS) and Maslach Burnout Inventory (MBI), Nardine (2019) found "that lack of personal agency is the primary contributor to a sense of burnout (p. 508). However, the AWS doesn't measure agency directly, but rather what Leiter & Maslach (2003) refer to as Control, which "includes employee's perceived capacity to influence decisions that affect their work, to exercise professional autonomy, and to gain access to resources necessary to do an effective job" (p. 96). This work and Nardine's (2019) observation made me curious about the capacity that academic librarians have to exercise their own agency or control at work. How do we understand job control? What factors might contribute to control for librarians and does this have the potential to reduce or prevent burnout?

Job Control

Job control is under-studied in library literature, especially in relation to burnout. Nardine (2019) appears to be the first study that specifically comments on job control through discussion of agency. Ganster (1989) defines control "as the ability to exert some influence over one's environment so that the environment becomes more rewarding or less threatening." Job control may have the following domains or dimensions hypothesized as

"areas from which stress at work may arise": work tasks, work pacing, work scheduling, physical environment, decision making, interaction, and mobility. He also points to a tradition of "employee participation in decision making" as an aspect of job control, which previous literature on burnout has pointed to as a solution [Sheesley (2001); Christian (2015); Maslach (2017); (Corrado, 2022)]. Maslach & Leiter (2016), identify job control, in relation to burnout and stress, as "the perceived capacity to influence decisions that affect their work, to exercise professional autonomy, and to gain access to the resources necessary to do an effective job." Existing research supports the connection between low job control and increased burnout (Park et al., 2014; Portoghese et al., 2014; Taris et al., 2005). This study seeks to determine if this relationship between job control and burnout holds true among academic instruction librarians. This research presents further reasons for reconsidering employee-manager relationships and watching closely to prevent micro-managing that may decrease job control. Increasing decision latitude by allowing librarians to make choices about their own work in ways that are operationally feasible for the workplace may benefit the library and the librarian. Furthermore, when working with librarians to reduce their workload as a means of mitigating or preventing burnout, allowing the librarian to lead in making these choices about their workload

Vocational Awe

Fobazi Ettarh (2018) describes vocational awe as "the set of ideas, values, and assumptions librarians have about themselves and the profession that result in beliefs that libraries as institutions are inherently good and sacred, and therefore beyond critique." She argues that this positioning of the library as inherently good and thus of the workers in the library as the doers of that good work creates a situation in which any failure of the library is a failure of the individual "to live up to the ideals of the profession."

Ettarh argues, in particular, that burnout is one of several negative impacts caused by vocational awe. This sacredness of libraries becomes a way for institutions to deflect criticism and avoid caring for workers, pushing instead of individualized solutions to burnout that bely structural and systemic issues in library organizations and libraries broadly: "institutional response to burnout is the output of more 'love and passion,' through the vocational impulses noted earlier and a championing of techniques like mindfulness and 'whole-person' librarianship." Martyrdom and self-sacrifice become features of the profession; these are necessary features to operate libraries that are understaffed and under-resourced—doing more with less: "Awe is easily weaponized against the worker, allowing anyone to deploy a vocational purity test in which the worker can be accuse of not being devout or passionate enough to serve without complaint."

Workers may even weaponize awe against themselves as a form of self-regulation to meet the unrealistic ideals of the profession. While we have no psychometric measure of vocational awe, it may be a buffering mechanism for librarians, especially when considering patron-related aspects of burnout. Especially for academic librarians who provide instruction, much of our work may be directly with patrons or users. Because of vocational awe, this type of patron-focused work may buffer for burnout or librarians may self-regulate when discussing this work in qualitative or quantitative studies, reducing our

ability to identify burnout for librarians performing patron-focused duties. And, librarians may be unwilling to give up this work.

Materials and Methods

A web survey was administered to measure job control and burnout among academic librarians with instruction responsibilities. To measure job control, the survey used the job control measure designed by Ganster (1989), which includes 22 questions. To measure burnout, the survey used the Copenhagen Burnout inventory described by Kristensen, et al. (2005), which includes 19 questions.

Sample and Recruitment

The target population for the study was academic librarians with some instruction responsibilities. The survey was distributed using professional distribution lists provided by the ALA Connect platform that operates as a forum and email distribution system. The recruitment email was sent three times (29 August 2022, 13 September 2022, and 28 September 2022) with concurrent messages via the social media platform Twitter. To participate, individuals needed to be currently employed in an academic library and have at least some teaching responsibilities. Calculating the reach of these methods and who within that reach meets the participation requirement is difficult; however, the ALA Connect distribution was sent to three lists: ACRL Members, which includes approximately 7,200 members; ACRL Instruction Section, which includes 4,800 members; and Information Literacy Instruction in Academic Libraries, which includes 292 members. Given the size of the field and the connections between these groups, there is certainly overlap among the population across these three lists. In the end, 307 survey responses were collected, of which, 245 included complete results, which were used for data analysis. Demographic characteristics of the sample are included in Table 1. Participants could select more than one response for sexuality and race and ethnicity.

Table 1. Demographic characteristics of the sample.

Measures

The web survey (developed using LibWizard) included demographic questions, questions about the characteristics of the participant's job/employment, and two psychometric scales related to work.

The first of these psychometric scales was on job control, which was developed by Ganster (1989) and (Dwyer & Ganster, 1991). The inventory includes 22 questions to measure job control across various dimensions. In Ganster (1989), the first 21 questions are used to measure job control, and question 22 is used as a control; however, in (Dwyer & Ganster, 1991), the authors use all 22 questions to calculate the job control score. Ganster's (1989) measure, Karasek's (1985) measure, and Jackson et al.'s (1993) measure of job control are the primary psychometric scales used to measure the concept of job control. Karasek's (1985) measure of job control has been criticized for its poor operationalization of the

studied concepts, and both Karasek (1985) and Jackson et al. (1993) were designed as tests of the job-demands control (JDC) model, which was not the focus of this study (Mansell & Bough, 2005). Additionally, Ganster's (1989) scale was intended to be more generic and applicable across settings while being multifaceted. For this study, I used Ganster's (1989) scale over either of the other two options; however, at least Karasek's (1985) and Ganster's (1989) scales are likely measuring similar constructs (Smith et al., 1997).

Participants were asked all 22 questions; however, in this study, the first 21 questions are used to calculate the job control score. Participants were asked to complete this job control inventory as it applies to their job generally, and then asked again to complete the same job control inventory but thinking specifically about their instruction responsibilities or the instructional aspects of their roles. However, the questions were exactly the same both times. Despite the note about this in the survey, this may have resulted in fewer complete responses. Scoring for the job control inventory uses a Likert scale with values 1 through five attributed (Very little = 1; Little = 2; A moderate amount = 3; Much = 4; and Very much =5). The job control score is the average of these for the participant across the 21 items in the inventory.

The Chronbach's alpha for the 21 item job control scale was 0.89 (n=245) when used for job control in general and 0.894 (n=245) when used for job control specifically related to instruction. Adding the twenty-second item increases the Chronbach's alphas to 0.899 and 0.902 respectively; however, the internal consistency is still good with the 21-item scale, and the twenty-second item was meant as an overall control for perception. This is also similar to Ganster's original 1989 report on the scale, which had an alpha of 0.87 (n = 191), and Dywer & Ganster (1991), which also had an alpha of 0.87 (n = 90).

The second of these psychometric scales was on burnout, using the Copenhagen Burnout Inventory (CBI), which includes three subscales: personal burnout (6 items), work-related burnout (7 items), and client-related burnout (6 items). The CBI has construct validity established using factor analysis across professions (Walters, Brown & Jones, 2020; Creedy et al., 2017; Milfont et al., 2008). Construct validity is important because it ensures that the CBI is reasonably measuring burnout. While the Maslach Burnout Inventory (MBI) is widely used to measure burnout, it's a costly tool, it has already been used extensively, and it may under-report for burnout among academic librarians. The CBI is a newer measure, but it has been used extensively in other fields and diversifying our measure of burnout may yield new results and be valuable as a new way of measuring and considering burnout (Walters, Brown & Jones, 2020). Wood et al. (2020) also noted that "the CBI has become the measure of choice for healthcare and the helping professions" and that the CBI provides a unidimensional score that is simpler, easier to understand, and easier to communicate (p. 516). In addition to being a no-cost tool, these aspects of simplicity and the applicability for the population make the CBI ideal for expanding burnout research in library literature. Wood et al. (2020) used the CBI but only used the work-related burnout scale. This study expands on that work by using all three scales of the CBI. For the purposes of this study, the word client in the client-related burnout subscale was changed to "patrons," as it was believed that this terminology was better aligned with how librarians consider users. This

is aligned with general usage of the CBI: "'Clients' is a broad concept covering terms such as patients, inmates, children, students, residents, etc. When the CBI is used in practice, the term appropriate for the specific group of respondents is used" (Kristensen et al., 2005).

Kristensen et al. (2005) define these three dimensions measured by the subscales as follows:

- **Personal burnout:** "the degree of physical and psychological fatigue and exhaustion experienced by the person"
- **Work-related burnout:** "the degree of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work"
- **Client-related burnout:** "the degree of physical and psychological fatigue and exhaustion that is perceived by the person as related to his/her work with clients"

Thus, personal burnout is not necessarily related to an individual's personal life but rather to a more general or generic assessment of burnout.

The CBI uses two different Likert scales that are given values ranging from 0 to 100, and one question in the work-related burnout inventory is inversely scored. The total work-related burnout score (TWRBS), total personal burnout score (TPBS), and total client-related burnout score (TCRBS) are the average within the given subscale for the participant.

The Chronbach's alpha for the personal burnout subscale, work-related burnout subscale, and client-related burnout subscale from the Copenhagen Burnout Inventory were 0.875, 0.889, and 0.887 respectively, which is similar to Kristensen et al. (2005), which reported a range from 0.85 to 0.87 (n = 1,910), and Wood et al. (2020) with a Chronbach's alpha of 0.798 (n = 1,808) for the work-related burnout subscale. The results demonstrate that these subscales have a good measure of reliability as well.

Finally, the survey included questions about demographics and questions about the characteristics of the participants' employment. These were used to determine if any of these factors contribute to or are correlated with differences in job control and/or burnout. Individuals who are marginalized or minoritized in academic libraries may experience greater burnout or reduced decision latitude due to oppressive, dismissive, or negligent workplaces, colleagues, or leaders. The following demographic questions were included:

1. What is your gender?
2. What is your gender modality? "Gender modality refers to how a person's gender identity stands in relation to their gender assigned at birth" (Ashley, 2022)
3. What is your sexuality? Select all that apply.
4. Are you disabled?
5. Which of the identities described above have you disclosed at work or would you consider to be "out" at work? Select all that apply.
6. Please describe your race/ethnicity. Select all that apply.

A summary of this demographic information within the sample is available in Table 1 above.

The following questions about the characteristics of the participants employment were included because it was hypothesized that they would have an effect on job control or burnout:

1. How long (in years) have you worked at your current institution?
2. How long (in years) have you been in a librarian position after receiving your degree (in library science or equivalent)?
3. How long (in years) have you worked in libraries in any capacity?
4. Which of the following best describes the institution where you work?
5. Which of the following best describes your current position?
6. What is your annual salary or income (before taxes, etc.) in US Dollars?
7. Which of the following best describes your employment status at your current institution?
8. Are librarians at your institution eligible for tenure or an equivalent status?
9. Have you obtained tenure or its equivalent at your institution? (This was only revealed if the participant answered yes to the previous question.)
10. Are you represented by a union?
11. Have you received formal training in library school or on the job specifically intended to prepare you to teach?
12. Do you believe this training adequately prepared you for teaching? (This was only revealed if the participant answered yes to the previous question.)
13. Which of the following best describes your teaching workload?

A summary of these characteristics within the sample is included in Table 2 below.

Table 2. Summary of job characteristics for participants in the sample.

It is unclear why only one participant identified their position as tenure faculty, but 86 participants said they had tenure. The wording of the questions was likely confusing.

Statistical Analyses

Analyses were conducted using the R Statistical language [version 4.2.1; R Core Team (2022)] on macOS Monterey 12.5.1, using the packages easystats [version 0.5.2; Lüdecke et al. (2022)], ltm [version 1.2.0; Rizopoulos (2007)], MASS [version 7.3.58.1; Venables & Ripley (2002)], plyr [version 1.8.8; Wickham (2011)], ggplot2 [version 3.4.0; Wickham (2022b)], stringr [version 1.4.1; Wickham (2022a)], dplyr [version 1.0.10; Wickham et al. (2022)], and tidyr [version 1.2.1; Wickham & Girlich (2022)].

Ethical Considerations

Human research ethics approval was obtained from the Institutional Review Board at the University of California, Los Angeles (IRB#22-001337), which certified the study as exempt. Consent was implied by participants clicking a button labelled “I agree to participate” at the start of the survey after reading an information sheet concerning the

study. No survey responses were required, so participants could simply skip any question; however, many questions also gave an option for "prefer not to disclose" as well.

Results

Within the sample, the mean Total Work-Related Burnout Score (TWRBS) was 49.9, the mean Total Personal Burnout Score (TPBS) was 57, and the mean Total Client-Related Burnout Score (TCRBS) was 28.7. The distributions of these data are included in Figure 1 and Table 3 below.

Figure 1. Box plots showing the distribution of data for TWRBS, TPBS, and TCRBS

Table 3. Statistics related to the distribution of data for TWRBS, TPBS, and TCRBS.

Using the CBI, a score of 50 or greater but less than 75 can be categorized as moderate burnout, a score of 75 or greater but less than 100 can be categorized as high burnout, and a score of 100 can be categorized as severe burnout. As demonstrated in Table 4 and Figure 2, among academic instruction librarians studied, 53.47% are experiencing moderate to severe work-related burnout, 69.39% are experiencing moderate to severe personal burnout, and 14.69% are experiencing client-related burnout.

Table 4. Counts of participants experiencing moderate, high, and severe burnout across TWRBS, TPBS, and TCRBS.

Figure 2. A stacked column chart showing the counts of moderate, high, and severe burnout by the three subscales, TPBS, TWRBS, and TCRBS

Within the sample, the mean job control score was 3.33 (see Table 5), which is higher (meaning more job control), than means found in (Dwyer & Ganster, 1991), which was 3.30 among manufacturing plant workers, and (Fox et al., 1993), which was 2.87 among nurses.

Table 5. Statistics related to the distribution of data for job control.

Correlation of Job Control with TWRBS, TPBS, and TCRBS

The correlations of job control, TWRBS, TPBS, and TCRBS are summarized in a correlation matrix in Figure 3. The correlations were calculated in order to statistically represent the relationship between all of the studied concepts. Correlations between all four areas are statistically significant. The greatest r value was between work-related burnout score and personal burnout score suggesting a strong linear relationship which explains a statistically significant and substantial portion of variance ($R2 = 0.67$) for TPBS predicting TWRBS or TWRBS predicting TPBS. This suggests that increased burnout in one domain may predict increased burnout in other domains.

Figure 3. A correlation matrix showing correlations between job control score, personal burnout score, work-related burnout score, and client-related burnout score

I fitted three linear models (estimated using OLS) to predict TWRBS, TPBS, and TCRBS with job control. Standardized parameters were obtained by fitting the models on a standardized version of the dataset. 95% Confidence Intervals (CIs) and p-values were computed using a Wald t-distribution approximation. I used linear models because they can loosely predict the effect of job control on each of the burnout domains and provide a useful visual representation of the data and the relationship between the independent variable and dependent variables. Because the study attempts to predict human behavior, the r-squared quantifying the proportion of variance represented by the models is expected to be low; however, it can also help decision-makers understand the proportion of employees in their workplace who might be impacted by organizational changes impacting job control,

Table 6. Summary of linear models to predict TWRB, TPBS, and TCRBS with job control

As illustrated in Figure 4, the model to predict TWRBS with job control explains a statistically significant and moderate proportion of variance ($R^2 = 0.20$, $F(1, 243) = 59.53$, $p < .001$, adj. $R^2 = 0.19$). The model's intercept, corresponding to Job Control Score = 0, is at 105.47 (95% CI [91.11, 119.83], $t(243) = 14.46$, $p < .001$). Within this model the effect of job control is statistically significant and negative (beta = -16.67, 95% CI [-20.93, -12.42], $t(243) = -7.72$, $p < .001$; Std. beta = -0.44, 95% CI [-0.56, -0.33]).

Figure 4. Linear Regression of Total Work-related Burnout Score Predicted by Job Control Score

As illustrated in Figure 5, he model to predict TPBS with job control explains a statistically significant and weak proportion of variance ($R^2 = 0.11$, $F(1, 243) = 28.53$, $p < .001$, adj. $R^2 = 0.10$). The model's intercept, corresponding to Job Control Score = 0, is at 95.54 (95% CI [81.14, 109.93], $t(243) = 13.08$, $p < .001$). Within this model the effect of job control is statistically significant and negative (beta = -11.56, 95% CI [-15.83, -7.30], $t(243) = -5.34$, $p < .001$; Std. beta = -0.32, 95% CI [-0.44, -0.20]).

Figure 5. Linear Regression of Total Personal Burnout Score Predicted by Job Control Score

As illustrated in Figure 6, The model to predict TCRBS with job control explains a statistically significant and weak proportion of variance ($R^2 = 0.11$, $F(1, 243) = 29.63$, $p < .001$, adj. $R^2 = 0.11$). The model's intercept, corresponding to Job Control Score = 0, is at 71.72 (95% CI [55.95, 87.49], $t(243) = 8.96$, $p < .001$). Within this model the effect of job control is statistically significant and negative (beta = -12.92, 95% CI [-17.59, -8.24], $t(243) = -5.44$, $p < .001$; Std. beta = -0.33, 95% CI [-0.45, -0.21]).

Figure 6. Linear Regression of Total Client-related Burnout predicted by Job Control Score

Additionally, the Welch Two Sample t-test testing the difference between average job control among those with moderate work-related burnout and those with high work-related burnout (mean for moderate = 3.23, mean for high = 2.96) suggests that the effect is positive, statistically significant, and small (difference = 0.27, 95% CI [0.04, 0.50], t(49.67) = 2.32, p = 0.025; Cohen's d = 0.48, 95% CI [0.06, 0.90]). Similar t-tests for TPBS (p=0.107) and TCRBS (p=0.1325) were not statistically significant; however, job control is still higher for those with moderate burnout than those with high burnout across all three dimensions. These data are demonstrated in Figure 7. I used t-tests in order to compare the means between these groups and determine if the difference in means is statistically significant. In this case, the t-tests tested the hypothesis that job control would be lower for participants at higher levels of burnout. These further test the correlation between these constructs and demonstrate the differences in job control at different levels of burnout.

Figure 7. A column chart showing average job control score by dimension and severity of burnout.

Analysis of Demographics and Job Characteristics

To analyze the demographics and job characteristics collected in the survey, I used ANOVA tests to compare the variance of the means across the different groups in each category (i.e., to compare the means across different genders) and determine if the differences were statistically significant. If the differences were statistically significant according to the ANOVA test, I used the Tukey HSD as a post-hoc test to determine where the differences occurred between groups (i.e., to compare the means between two different genders and determine if the differences are statistically significant). Where differences were statistically significant, the data are discussed below and bar charts are provided to demonstrate the difference between means in each group of a demographic or job characteristic. While the differences in means may be graphically apparent on the bar charts, the tests determine where there are statistically significant differences in means.

Between 0 and 3 observations were ignored for each of the ANOVA tests in Table 7 below because of missing data. For Training Preparation, the question was only presented to participants who noted that they received training. For Tenure (individual) or similar status, the question was only presented to participants who noted that their institution had tenure or a similar status for librarians.

Table 7. p-values for ANOVA tests comparing job control, TWRBS, TPBS, and TCRBS with variables assessed in the survey.

Effect sizes included in the analyses below are identified based on Field's (2013) recommendations.

Gender

The main effect of Gender on TWRBS is statistically significant and medium (F(6, 238) = 2.92, p = 0.009; Eta2 = 0.07, 95% CI [9.94e-03, 1.00]). Post-hoc analysis using Tukey's HSD

test revealed significant differences between men and genderqueer or gender fluid people ($p < 0.05$) and a nearly significant difference between prefer not to say and genderqueer or gender fluid people ($p = 0.0502$)

The main effect of Gender on TPBS is statistically significant and medium ($F(6, 238) = 3.66$, $p = 0.002$; Eta2 = 0.08, 95% CI [0.02, 1.00]). Post-hoc analysis using Tukey's HSD test revealed significant differences between men and genderqueer or gender fluid people ($p < 0.05$) and unsure and men ($p < 0.05$).

As demonstrated in Table 8 and Figure 8, genderqueer or gender fluid, nonbinary, agender, and unsure individuals on average had higher TWRBS than the sample mean, and gender queer or gender fluid, unsure, nonbinary, and agender individuals on average had higher TPBS than the sample mean. The average TWRBS and TPBS for women is also slightly higher than the sample mean based on the sample that is 84.08% women.

Table 8. TWRBS and TPBS by Gender

Figure 8. A column chart showing Average TPBS and TWRBS by Gender

Time at Institution

The main effect of Time at Institution on TPBS is statistically significant and small ($F(4, 240) = 2.59$, $p = 0.037$; Eta2 = 0.04, 95% CI [1.29e-03, 1.00]). Post-hoc analysis using Tukey's HSD test was not significant. As demonstrated in Table 9 and Figure 9, individuals who have only been at their institutions for 1 to 5 years have the highest average TPBS, which is also higher than the sample mean TPBS of 57.

Table 9. TPBS by time at institution

Figure 9. A column chart showing average TPBS by time at institution

Status

The main effect of Status (staff, faculty, or academic staff) on Job Control (General) is statistically significant and small ($F(2, 242) = 5.83$, $p = 0.003$; Eta2 = 0.05, 95% CI [9.50e-03, 1.00]). Post-hoc analysis using Tukey's HSD test revealed significant differences between staff and academic staff ($p < 0.01$) and faculty and staff ($p < 0.05$). As demonstrated in Table 10 and Figure 10, academic staff and faculty both have higher average job control scores than staff.

Table 10. Job control by status

Figure 10. A column chart showing average job control score by status

The main effect of Status (staff, faculty, or academic staff) on TWRBS is statistically significant and small ($F(2, 242) = 3.16$, $p = 0.044$; Eta2 = 0.03, 95% CI [3.50e-04, 1.00]).

Post-hoc analysis using Tukey's HSD test revealed a significant difference between staff and academic staff ($p < 0.05$).

The main effect of Status (staff, faculty, or academic staff) on TPBS is statistically significant and small ($F(2, 242) = 3.44$, $p = 0.034$; Eta2 = 0.03, 95% CI [1.16e-03, 1.00]). Post-hoc analysis using Tukey's HSD test revealed a significant difference between staff and faculty ($p < 0.05$).

As demonstrated in Table 11 and Figure 11, individuals classified as staff experience higher average work-related burnout and personal burnout than those classified as academic staff or faculty.

Table 11. TPBS and TWRB by status

Figure 11. A column chart showing average TWRBS and TPBS by status

Tenure

The main effect of Tenure (Institution) on TCRBS is statistically significant and small ($F(3, 241) = 3.29$, $p = 0.021$; Eta2 = 0.04, 95% CI [3.25e-03, 1.00]). Post-hoc analysis using Tukey's HSD test revealed a significant difference between those with tenure and those with a similar status ($p < 0.05$), and a nearly significant difference between those with a similar status to tenure and those without ($p = 0.052$). As demonstrated in Table 12 and Figure 12, Individuals at institution that either didn't have tenure or a similar status or had had tenure for librarians experienced higher TCRBS on average than those at institutions that had a similar status to tenure.

Table 12. TCRBS by tenure (institution)

Figure 12. A column chart of average TCRBS by whether or not the institution a participant works at has tenure or a similar status or not

The main effect of Tenure or Similar Status (Individual) on TPBS is statistically significant and medium ($F(2, 117) = 3.90$, $p = 0.023$; Eta2 = 0.06, 95% CI [4.91e-03, 1.00]). Post-hoc analysis using Tukey's HSD test revealed a significant difference between those with tenure or a similar status and those without ($p < 0.05$). As demonstrated in Table 13 and Figure 13, average TPBS is higher for those without tenure or a similar status than those with tenure or a similar status at institutions where tenure or a similar status are available.

Table 13. TPBS by tenure or similar status (individual)

Figure 13. A column chart showing average TPBS based on whether or not the participant has attained tenure or a similar status

Teacher Training

The main effect of Teacher Training Received (yes or no) on TCRBS is statistically significant and small ($F(2, 242) = 4.13$, $p = 0.017$; Eta2 = 0.03, 95% CI [3.30e-03, 1.00]). I flattened the data here to simply compare wether or not participants had received training, though the original response options split yes into whether they received training in library

school, on the job, or both. Post-hoc analysis using Tukey's HSD test revealed a significant difference between participants who received training and those who didn't ($p < 0.05$) and those who received training and other ($p < 0.05$). As demonstrated in Table 14 and Figure 14, average TCRBS is higher for those who haven't received any teacher training than those who did or who responded other. For the other responses, the majority of these still referenced some sort of teacher training that just wasn't specific to libraries.

Table 14. TCRBS by Teacher Training Received

Figure 14. A column chart showing average TCRBS based on whether or not a participant received training to do library instruction

Teaching Workload

The main effect of Teaching Workload on Job Control (General) is statistically significant and small ($F(4, 240) = 2.66$, $p = 0.034$; Eta2 = 0.04, 95% CI [1.77e-03, 1.00]). Post-hoc analysis using Tukey's HSD test was not significant. The difference between those with slightly light and those with slightly excessive workloads was nearly significant ($p = 0.056$). As shown in Table 15 and Figure 15, participants with slightly excessive workloads experienced less job control than all other participants.

Table 15. Job control by teaching workload

Figure 15. A column chart showing average job control score based on teaching workload

The main effect of Teaching Workload on TWRBS is statistically significant and small ($F(4, 240) = 3.44$, $p = 0.009$; Eta2 = 0.05, 95% CI [7.90e-03, 1.00]). Post-hoc analysis using Tukey's HSD test revealed a significant difference between those with workloads that are just right and those that are far too excessive ($p < 0.05$).

The main effect of Teaching Workload on TCRBS is statistically significant and small ($F(4, 240) = 3.77$, $p = 0.005$; Eta2 = 0.06, 95% CI [0.01, 1.00]). Post-hoc analysis using Tukey's HSD test revealed a significant difference between those with workloads that are just right and those that are far too excessive ($p < 0.05$).

As demonstrated in Table 16 and Figure 16, average TWRBS and TCRBS are highest for individuals with teaching workloads that are far too excessive. Additionally, average TWRBS and TCRBS are greater than the sample mean for individuals with workloads that are far too light or slightly excessive. For individuals with slightly light workloads, average TCRBS is slightly greater than the sample mean.

Table 16. TWRBS and TCRBS by teaching workload

Figure 16. A column chart showing average TWRBS and TCRBS by perceived teaching workload)

Race and Ethnicity

Because race and ethnicity allowed participants to select all applicable identities, ANOVA tests were conducted for each identity individually, comparing people identifying with that identity to all other identity groups. Middle Eastern or North African participants experienced statistically significantly higher rates of TWRBS ($p = 0.0316$) and TPBS ($p = 0.0367$). Table 17 shows average TWRBS by race and ethnicity, and Table 18 shows average TPBS by race and ethnicity.

Table 17. TWRBS by race and ethnicity

Table 18. TPBS by race and ethnicity

Sexuality

Because sexuality allowed participants to select all applicable identities, ANOVA tests were conducted for each identity individually, comparing people identifying with that identity to all other identity groups. Asexual ($p=0.303$) participants experienced greater TPBS than others, and gay ($p=0.0288$) participants and those who preferred not to disclose their sexuality ($p=0.0154$) experienced lower TPBS than other participants. Asexual participants experienced the greatest TPBS on average, and gay participants experienced the lowest TPBS on average; however, counts for some sexualities are low.

Table 19. TPBS by sexuality

Discussion

Building on the work of Wood et al. (2020), which studied work-related burnout using the CBI among academic librarians, this study analyzed burnout across work-related, client-related, and personal CBI scores among academic instruction librarians. In this regard, the study presents a more holistic view of burnout though the results are more specific in their focus on academic instruction librarians.

This study corroborates previous findings suggesting that academic librarians—more specifically academic instruction librarians—are experiencing burnout. Academic instruction librarians in this study had an average TWRBS of 49.9 out of 100. This result is similar to the findings of Wood et al. (2020), which reported a TWRBS of 49.6 with a larger sample of 1,628 academic librarians. In comparison to the 15 main jobs in Kristensen et al. (2005), this score is considerably higher than the highest score of 43.5 for midwives. Similarly, academic instruction librarians in this study had an average TPBS of 57, which is considerably higher than the highest score among those 15 jobs of 41.2 for prison wards. However, academic instruction librarians in this study had a TCRBS of 28.7, which is slightly lower than the lowest score among those 15 jobs of 29.5 for head nurses. According to Kristensen et al. (2005), “as a general rule of thumb, differences of 5 points or more are

significant for the individuals in question," which suggests that the differences between librarians and other professions are significant.

However, it's interesting that academic instruction librarians score higher for TWRBS and TPBS in comparison to these other jobs but lower for TCRBS. One explanation for this could be related to vocational awe, where vocational awe works as almost a protecting factor for TCRBS. It's also possible that academic instruction librarians choose this specific work because they are energized by working with our users, so they experience less burnout in. the client-related dimension. Or, users are not as much of a stressor for academic instruction librarians as the literature suggestions. And still, this might be the result of social-desirability response bias because participants feel compelled to answer questions about users favorably, which may also be an enactment of vocational awe as participants self-regulate their responses.

Kristensen et al. (2005) found similar findings among hospital workers where they had higher scores for work-related burnout and lower scores for client-related burnout. While they attribute this difference to "the conditions of the job," vocational awe may be one aspect of those conditions.

Job control among academic instruction librarians was higher than in previous studies cited, which makes sense given the context of the work in comparison to nurses and manufacturing plant workers who were previously studied. There is still a statistically significant and negative correlation between job control and TWRBS, TPBS, and TCRBS (i.e., increasing job control may decrease burnout across all three areas). In particular, job control predicts TWRBS for a moderate proportion of variance ($R2 = 0.20$) and TPBS and TCRBS for a weak proportion of variance. Given that these studies involve humans and human behavior can be difficult to predict and highly variable, job control is still worth further study and consideration as a means of reducing burnout.

Areas for Future Research

The results of the study revealed a negative correlation between job control and all three dimensions of burnout. Further research should be conducted specifically on job control among librarians. While this study suggests that job control is tied to status as faculty, staff, or academic staff and teaching workload, there are likely underlying factors, especially related to status, that contribute to feelings of control at work. Additional quantitative research could compare other factors with job control to identify which factors have significant effects on job control, and additional qualitative research could identify what those other possible factors might be where library workers experience issues with job control.

Additionally, further research should be conducted on TCRBS among librarians and other feminized professions, possibly with an emphasis on vocational awe.

Implications for Library Administrators and Managers

While job control is high for librarians as compared to nurses and manufacturing plant workers, improving job control for academic instruction librarians may still improve

burnout for librarians across all three dimensions with the greatest focus on work-related burnout. Library administrators and managers should consider discussing job control with library workers and consider changes that may improve their perception of control. For academic instruction librarians, this may involve reconsidering our approach to one-shots, which may be a site where job control is considerable lacking. More broadly, management styles, such as micromanaging, that involve excessive supervision and control of employees' work, time, decision latitude, processes, and tasks may be contributing to lack of job control and thus possible greater burnout. However, workers are also capable of identifying issues of control in their own specific work context, and managers should take the time to listen and make adjustments.

Additional Impacts on Job Control, TWRBS, TPBS, and TCRBS

In addition to these findings, the following attributes were found to have significant impacts on the phenomena studied: - extent of job control is tied to status (faculty, academic staff, or staff) and teaching workload,
- severity of TWRBS is tied to gender, status (faculty, academic staff, or staff), and teaching workload,
- severity of TPBS is tied to gender, time at institution, status (faculty, academic staff, or staff), and whether or not an individual has tenure or a similar status, and - severity of TCRBS is tied to whether or not an institution has tenure, whether or not training for library instruction was received, and teaching workload.

Gender

Differences in TWRBS and TPBS were statistically significant when comparing across genders. Agender, genderqueer or gender fluid, and nonbinary people had higher scores for TWRS and TPBS than men or women. However, women still had higher scores of TWRBS and TPBS than men. Using the rule of thumb that differences of 5 or more are significant to the individual, women are still experiencing significantly greater burnout than men. Unfortunately, the majority of the sample was women (n=206), and responses from other gender categories were quite low from 22 for men to 2 for agender individuals.

Areas for Future Research

Since the majority of the sample was made up of women, future studies should consider more effective means to recruit agender, genderqueer or gender fluid, and nonbinary individuals in order to better understand burnout across gender. (Wood et al., 2020) identified similar concerns about work-related burnout among women and third-gender/nonbinary individuals and also lamented the lack of data from third-gender/nonbinary individuals. Qualitative studies may be more adept at uncovering the burnout issues faced by gender minority individuals.

Implications for Library Administrators and Managers

Library administrators and managers should continue to be aware of the gender inequality in their workplaces and on the teams they manage. Specifically, managers should consider the costs of emotional and invisible labor for individuals from gender minorities. It's

important to consider who is shouldering this work, though there may also be other work with gendered differences, of which managers should be cognizant. Additionally, library leaders should look for ways to better recognize and reward gendered labor, especially emotional and invisible labor.

Race and Ethnicity

Differences in TWRBS and TPBS were statistically significant when comparing by race and ethnicity. The number of participants of color is very low; however, employing the rule of thumb that differences of five points for TWRBS, TPBS, and TCRBS are significant, African America or Black, Indigenous, and Middle Eastern or North African participants are experiencing greater TWRBS than their peers, and Middle Eastern or North African and Indigenous participants are experiencing greater TPBS than their peers.

Areas for Future Research

Since the majority of the sample was made up of white people, future studies should consider more effective means to recruit librarians of color.

Implications for Library Administrators and Managers

Library administrators and managers should continue to be aware of the racial inequality in their workplaces and on the teams they manage. Specifically, managers should consider the costs of invisible labor as well as the impacts of racial microaggressions on burnout. Existing qualitative studies, such as Kendrick & Damasco (2019), also provide factors to consider related to low morale for librarians of minoritized races and ethnicities.

Sexuality

Differences in TPBS were statistically significant when comparing across sexualities. Interestingly, gay participants experienced the lowest TPBS on average. However, the majority of participants in the study identified as straight, and gay participants made up the smallest percentage of participants. Asexual participants (n=15) experienced the greatest TPBS. Additionally, pansexual (n=7) and queer (n=18) individuals experienced greater TPBS than their straight counterparts, following the 5-point rule of thumb.

Areas for Future Research

Additional research should consider what factors result in greater burnout for librarians based on sexuality. TPBS for gay participants was also interestingly low; future research may consider both why this might be low or attempt to recruit additional participants of minoritized sexualities.

Implications for Library Administrators and Managers

Library administrators and managers should discuss factors impacting burnout with their pansexual, queer, and asexual employees in particular, paying close attention to factors

they might identify that are specifically related to marginalized sexualities. Managers should be cognizant of discrimination, both overt and covert, based on sexuality, such as queerphobia.

Time at Institution

Differences in TPBS were statistically significant when comparing how long participants had been working for their current institutions with participants who had been working at their current institutions for 1 to 5 years having the highest average score for TPBS (60.9). Again, looking at differences of 5 or more, the difference between 1 to 5 years and less than 1, 6 to 10 years, and 11 to 15 years are all significant for the individual. This suggests that after a year of settling into a role, new colleagues are experiencing greater fatigue and exhaustion. Interestingly, this starts to decrease at levels of 5 or more from the 1 to 5 year category to the 6 to 10 year category to the 11 to 15 year category but picks back up in the 16 or more years category. It's possible that personal burnout may lessen with time at an institution; however, changing jobs frequently may be resulting in substantially more personal burnout.

Areas for Future Research

Further research should be conducting on burnout among people who change jobs frequently or to conduct more comparison between the first year of employment and the early years after that first year. Additional qualitative research may uncover the differences in practices and how burnout increases after an initial period of settling into a job. Such research would also have considerable implications for onboarding and continued support of employees after the initial onboarding.

Implications for Library Administrators and Managers

Given that individuals within their first 1 to 5 years had the highest average TPBS, which was a significant increase from TPBS at less than 1 year, managers should consider the long tail of onboarding and ensure that they're continuing to provide support to new employees after the first year of employment. It's possible that managers consider an employee settled after the first year and pull back some of the support needed by new employees to mitigate burnout. Managers should be more cognizant of employees in the 1 to 5 year timeframe and ensure that they continue to receive the support they need.

Status (Faculty, Academic Staff, or Staff)

Differences in job control, TWRBS, and TPBS were statistically significant when comparing individuals whose positions were faculty, academic staff, or staff. Academic staff and faculty had higher job control scores on average than staff. There are likely other underlying factors related to having faculty or academic staff status that contribute to higher job control. That is to say, I wouldn't expect that simply telling someone they now have faculty status would result in increased perception of job control but rather that there are benefits of faculty status that contribute to greater job control. Similarly, TWRBS and TPBS scores

for academic staff and faculty were similar, but both were considerably lower than staff, suggesting that academic instruction librarians in staff roles are experiencing burnout at a greater rate.

Areas for Future Research

It's possible that the status itself provides some form of protecting factor for how burnout and job control are perceived because of an individual's own perception of themselves and their understanding of how they are perceived by others, especially others on campus. However, it seems more likely that there are other perks and protections provided via academic staff or faculty status that result in greater job control and reduced burnout. Additional research should consider this question of status to disentangle the myriad perks and protections and hone in on the aspects of status that contribute to burnout and job control whether that is prestige, flexibility, perception from colleagues, funding, work from home opportunities, or other supports.

Implications for Library Administrators and Managers

In the short term, managers of librarians in staff roles (and possibly of library workers in staff roles) should consider the affordances allowed to academic staff and faculty and consider ways to extend these affordances to staff where possible or advocate to library and campus leadership for such affordances. In the long term, library leadership on campuses and the profession should consider the way librarians are perceived in higher education institutions and look for opportunities to extend the benefits provided to faculty to librarians as well or to argue for faculty status. Additionally, librarians' unions may consider bargaining for faculty status or for other protections and benefits provided to faculty on their campuses.

Tenure

The status of tenure for librarians at the participants' place of work was statistically significant for TCRBS. Interestingly, average TCRBS was similar for those at institutions that don't have tenure and those at institutions that do have tenure, but participants at institutions that had a similar status to tenure had an average TCRBS 10 points lower than those at institutions without tenure and even more than that compared to those at institutions with tenure. It's possible that institutions that have benefits and protections for librarians similar to tenure helps to mitigate TCRBS by having less aggressive requirements for achieving the similar status than there are for tenure. However, there could also be other components of these types of institutions that are affecting TCRBS in particular, such as the ratio of librarians to students.

At institutions where librarians could obtain tenure or a similar status, whether or not participants had obtained that status had a statistically significant effect on TPBS. Participants who had not yet obtained tenure or the similar status available at their institution had a higher average TPBS by 9.7 points. It makes sense that either the process or the lack of security for people without this status would result in greater general fatigue and exhaustion. However, it's important to recall that participants who had been at their current institutions for 1 to 5 years also had the highest average TPBS, and it's likely that

the people who don't have tenure or a similar status yet are also the people who have been working there for less time. And similarly to the differences with faculty status, it's likely that there are underlying factors related to having tenure that help mitigate personal burnout, such as focusing more on work-life balance after possibly working extra hours while on the tenure clock.

Areas for Future Research

Further research should be conducted on the impact of tenure. With the current data, it's difficult to draw conclusions about the impact of tenure at a given institution. However, in conjunction with information about the impact of status, tenure seems to merit further consideration, especially if people are considering pushing for faculty status and need to decide whether to push for tenure as well. The impact of the tenure process should be further studied, perhaps with pre- and post-tenure individuals for further comparison. Relatedly, it does appear pre-tenure academic instruction librarians have higher personal burnout, so further research could examine the factors leading to this and possibilities for mitigating tenure-related burnout.

Implications for Library Administrators and Managers

Managers and library leaders at institutions that don't have tenure should consider possibilities for providing employment security or other similar protections to tenure where possible. Managers at institutions that do have tenure should be sure to offer opportunities for support to employees who haven't yet received tenure to be aware of the impacts of the tenure process on workers. While tenure might help mitigate burnout once achieved, it's important to consider the toll that the process takes. Additionally, job-seeking librarians may consider both the status of librarians on campus and the possibility of tenure when applying for jobs and weigh these options in terms of how they might affect job control and burnout.

Teacher Training

Average TCRBS is higher those participants who did not receive some kind of teacher training, including in library school, on the job, or both. It's likely that providing training prepares librarians for working with users and helps mitigate the effects of client-related burnout by providing them with skills for teaching. This suggests that further training for librarians doing instruction would help reduce TCRBS. It is interesting though that the majority of participants did receive some form of training. Only 23.67% of respondents hadn't received training, and 52.24% receiving some kind of training for library instruction while in library school. This might suggest that library schools are increasing their offerings for classes related to library instruction or that librarians interested in doing instruction seek out these opportunities in particular; however, the question referred to formal training ("Have you received formal training in library school or on the job specifically intended to prepare you to teach?"), which could be interpreted differently by different participants. While I would expect formal training in library school to be coursework, that wasn't explicit in the question, and participants may receive formal

training through an internship, field work, or sponsored workshops and other programming.

Areas for Future Research

This study focused specifically on instruction training for academic instruction librarians; however, future research might consider other types of training or even the general onboarding process for librarians to consider how training in other areas impacts burnout. For example, does receiving reference training also result in a lower average TCRBS?

Implications for Library Administrators and Managers

Managers should consider the training that librarians have previously received in library school or previous roles and identify opportunities for continued training, specifically for teaching & learning, which was studied here. This research suggests that there's no statistically significant difference between receiving training in library school, on the job, or both, so providing this training at any point should still be beneficial for academic instruction librarians. LIS Programs should continue to develop their offerings related to teaching & learning, but academic libraries should also consider how they ensure that librarians get the training and support they need to do library instruction.

Teaching Workload

The effect of teaching workload on job control, TWRBS, and TCRBS was statistically significant. Participants with far too light (3.49) and far too excessive (3.47) teaching workloads experienced the greatest job control. It's interesting that job control was highest on both extreme ends of the Likert scale; however, it's also important to note that there were far fewer participants identifying with these workload measures (n=17 for far too light and n= 10 for far too excessive). The low number of responses here may impact the data. However, participants with slightly excessive workloads (3.18) had the least job control. Ignoring the responses for far too excessive workloads, there is a trend of increasing job control from slightly excessive to far too light teaching workloads. This suggests that, except in the case of the extreme far too excessive workload, academic instruction librarians perceive greater job control when their teaching workload is lighter. Though this study didn't gather data on the types of instruction participants were doing, this does generally corroborate existing literature on one-shots that suggest reduced control for academic instruction librarians.

Additionally, though individuals with far too excessive workloads had higher job control, they also experienced the greatest work-related and client-related burnout among participants. This finding isn't aligned with the linear regression models for job control and TWRBS and TCRBS, which predict that higher job control results in decreased burnout; however, the models predict a moderate to weak proportion of the variance, so it's possible for situations like this to occur, and this may again be due to the small number of participants with far too excessive teaching workloads (n=10). Individuals whose teaching workloads were just right had the lowest TWRBS and TCRBS with scores increasing slightly on either end.

For TWRBS, there is an increase greater than 5 points on the scale from just right to far too light and from just right to slightly excessive. It makes sense that TWRBS would be increased when doing more teaching than is a good fit for your workload because you may be strained. However, it's interesting that TWRBS is also increased for individuals with far too light teaching workloads. Again, the number of participants in this category (n=17) is low, but it's also possible that lower teaching workload results in more work in other areas that's resulting in greater work-related burnout. Or, for academic librarians who do instruction, having a teaching workload that's far too light might be unfulfilling.

For TCRBS, there is an increase greater than 5 on the scale from just right to slightly light and from just right to slightly excessive. This suggests again that maintaining a teaching workload that is just right is important for managing burnout. It's interesting that reducing teaching workload too severely still has negative effects for burnout though. However, given that the survey participants were specifically academic librarians with teaching responsibilities, it makes sense that morale may decrease when they're teaching less or teaching may be an enjoyable part of their work that helps to mitigate burnout.

Areas for Future Research

This research looked specifically at the impact of teaching workload; however, it's unclear if workload generally also has the same impact on job control, TWRBS, and TCRBS. Additionally, it's worth further studying librarians who are at the extremes of far too excessive and far too light workload to understand specifically how this is impacting burnout and job control. While it seems intuitive that an excessive workload increases burnout, it's interesting that a too light workload does as well. Future research may consider workload more holistically as well as considering workload across other areas in addition to teaching. It's also worth considering the impact of work that is rewarding on burnout. For example, are academic instruction librarians with far too light workloads feeling burnout because they aren't getting to do as much of a part of their job that they find rewarding?

Implications for Library Administrators and Managers

Managers should be aware of and communicating about workload with library workers. In particular, managers should consider ways to share teaching workload equitably across a department or the library in order to help maintain a Goldilocks workload for all academic instruction librarians. Since too much and too little teaching workload may lead to burnout, it's important to maintain a balance, which likely requires frequent check ins about teaching workload and working to distribute the work evenly. Managers may also consider the ways that their organizational structures or work models, such as subject liaison or librarian approaches, result in teaching workload issues or create difficulties with flexibly managing workloads and distributing work.

Limitations

The present study has several limitations. First, the study focused specifically on academic instruction librarians, meaning that the results are not generalizable to the larger populations of academic librarians or librarians across types of libraries. Second, the study

was unable to recruit significant numbers of participants from minoritized and oppressed populations, which may be underrepresented in the profession. For example, few individuals from gender and sexual minorities and few people of color were recruited. This further reduces the generalizability of the findings to the entire population. Even for some of the job characteristics, further recruitment or a larger population would yield more generalizable results.

Conclusion

The findings of this study demonstrate that academic instruction librarians, like academic librarians more broadly, are burning out. While previous studies have demonstrated the work-related burnout, this study corroborates that finding while also demonstrating even higher levels of personal burnout among academic instruction librarians. Though client-related burnout is low, this should be further studied, since it seems common across caring professions to have high work-related and personal burnout but lower client-related burnout. Furthermore, this study suggests a relationship between job control and all three areas of burnout with job control predicting the greatest proportion of variance (among the three burnout subscales) in work-related burnout. This suggests that more research should be conducted on job control in particular to determine what aspects of a job improve job control. Finally, this study suggests that gender, time at an institution, status (faculty, academic staff, or staff), teacher training, and teaching workload may contribute to burnout and/or job control. These findings reveal several considerations for academic library administrators to consider as they think about how to manage burnout and support their employees holistically.

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The author reports there are no competing interests to declare.

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Tables

Table 1. Demographic characteristics of the sample.

Characteristic	No.	Percentage
Gender		
Agender	2	0.82
Genderqueer or gender fluid	3	1.22
Man	22	8.98
Nonbinary	3	1.22
Prefer not to say	5	2.04
Unsure	4	1.63
Woman	206	84.08
Gender Modality		
Cisgender	228	93.06
Prefer not to disclose	12	4.90
Transgender	3	1.22
Unsure	1	0.41
Missing	1	0.41
Sexuality		
Asexual	15	6.12
Bisexual	39	15.92
Gay	5	2.04
Lesbian	7	2.86
Pansexual	7	2.86
Queer	18	7.35
Straight	158	64.49
Prefer not to disclose	15	6.12
Disability		
Abled	188	76.73
Disabled	44	17.96
Prefer not to disclose	12	4.90
missing	1	0.41

Characteristic	No.	Percentage
Race & Ethnicity		
African	1	0.41
African American/Black	6	2.45
East Asian	1	0.41
Hispanic or Latinx/Latine	12	4.90
Indigenous American, Native American, First Nations, or Alaska Native	2	0.82
Middle Eastern or North African	4	1.63
Southeast Asian	1	0.41
White	222	90.61
Prefer not to disclose	10	4.08

Table 2. Summary of job characteristics for participants in the sample.

Characteristic	No.	Percentage
Length of time at current institution (in years)		
Less than 1	31	12.65
1 to 5	100	40.82
6 to 10	55	22.45
11 to 15	23	9.39
16 or more	36	14.69
Length of time since obtaining their degree (in years)		
Less than 1	6	2.45
1 to 5	62	25.31
6 to 10	63	25.71
11 to 15	45	18.37
16 or more	67	27.35
missing	2	0.82
Length of time working in libraries (in years)		
1 to 5	31	12.65
6 to 10	61	24.90
11 to 15	57	23.27
16 or more	93	37.96
missing	3	1.22
Type of institution		
Associate's college	28	11.43
Baccalaureate college	30	12.24
Doctoral university	130	53.06
Law school	3	1.22
Master's college or university	54	22.04
Public or private		
Private	91	37.14
Public	154	62.86
For-profit or non-profit		

Characteristic	No.	Percentage
For-profit	1	0.41
Non-profit	244	99.59
Permanent or temporary position		
Permanent	240	97.96
Probationary	1	0.41
Temporary	4	1.63
Full-time or part-time		
Full-time	242	98.78
Part-time	3	1.22
Income		
$20,000 to $34,999	1	0.41
$35,000 to $49,999	16	6.53
$50,000 to $74,999	129	52.65
$75,000 to $99,999	77	31.43
$100,000 or greater	16	6.53
Prefer not to disclose	6	2.45
Faculty status		
Academic staff	58	23.67
Faculty	153	62.45
Staff	34	13.88
For faculty, tenure status (n=153)		
Non-tenure-track	60	39.22
Tenure-track	92	60.13
Tenured	1	0.65
Tenure for librarians at institution		
No	120	48.98
Yes, similar status	34	13.88
Yes, tenure	86	35.1
Other	5	2.04

Characteristic	No.	Percentage
Tenure status for individual participant (n=120)		
No	63	52.5
Yes, I am tenured	36	30
Yes, I have attained an equivalent status	19	15.83
Other	2	1.67
Union status		
In the process of unionizing	3	1.22
No	169	68.98
Unsure	5	2.04
Yes	67	27.35
Other	1	0.41
Training for library instruction		
No	58	23.67
Yes, in library school and on the job	88	35.92
Yes, only in library school	40	16.33
Yes, only on the job	45	18.37
Other	14	5.71
Perception of effectiveness of training preparation (n=172)		
Highly	41	23.84
Not at all	20	11.63
Somewhat	111	64.53
Perception of teaching workload		
Far too excessive	10	4.08
Slightly excessive	68	27.76
Just right	90	36.73
Slightly light	60	24.49
Far too light	17	6.94

Table 3. Statistics related to the distribution of data for TWRBS, TPBS, and TCRBS.

Scale	Mean	Standard Deviation	Median	Min	Max	Skewness
TWRBS	49.87	19.42	50	3.57	100	0.10
TPBS	56.97	18.43	58.33	0	100	-0.16
TCRBS	28.66	20.24	25	0	100	0.77

Table 4. Counts of participants experiencing moderate, high, and severe burnout across TWRBS, TPBS, and TCRBS.

Burnout Level	TWRBS	TPBS	TCRBS
Moderate Burnout (50 >= x > 75)	95 (38.78%)	122 (49.80%)	26 (10.61%)
High Burnout (75 >= x > 100)	35 (14.29%)	46 (18.78%)	9 (3.67%)
Severe Burnout (x = 100)	1 (0.41%)	2 (0.82%)	1 (0.41%)
Total	**131 (53.47%)**	**170 (69.39%)**	**36 (14.69%)**

Table 5. Statistics related to the distribution of data for job control.

Mean	Std. Dev.	Median	Min	Max	Skewness
3.33	0.52	3.33	1.86	5.00	-0.09

Table 6. Summary of linear models to predict TWRB, TPBS, and TCRBS with job control

Formula	R2	F	p	beta
TWRBS ~ Job Control	0.2	59.53	<.001	-16.67
TPBS ~ Job Control	0.11	28.53	<.001	-11.56
TCRBS ~ Job Control	0.11	29.63	<.001	-12.92

Table 7. p-values for ANOVA tests comparing job control, TWRBS, TPBS, and TCRBS with variables assessed in the survey.

	Job Control (General)	TWRBS	TPBS	TCRBS
Gender	0.371	0.00921 **	0.00171 **	0.708
Gender Modality	0.606	0.147	0.222	0.692
Disability	0.754	0.132	0.128	0.356
Income	0.0594	0.325	0.174	0.962
Time at Institution	0.29	0.0969	0.0373 *	0.565
Time Since Degree	0.172	0.514	0.228	0.465
Time in Libraries	0.319	0.621	0.29	0.226
Type of Institution	0.553	0.891	0.288	0.375
Public or Private	0.787	0.583	0.577	0.981
For-profit or Non-profit	0.925	0.466	0.406	0.292
Permanent or Temporary	0.873	0.54	0.825	0.475
Full-time or Part-time	0.334	0.586	0.692	0.139
Status (staff, faculty, academic staff)	0.00338 **	0.0442 *	0.0335 *	0.245
Tenure (institution)	0.499	0.228	0.243	0.0214 *
Tenure or Similar Status	0.505	0.352	0.307	0.534
Tenure (individual, n=120)	0.339	0.317	0.0571	0.606
Tenure or Similar Status (individual, n=120)	0.265	0.176	0.0229 *	0.655
Union	0.983	0.713	0.624	0.828
Teacher Training Received by Type	0.301	0.132	0.13	0.0828
Teacher Training Received (yes or no)	0.0893	0.109	0.158	0.0172 *
Training Preparation (n=172)	0.926	0.154	0.369	0.233
Teaching Workload	0.0335 *	0.00937 **	0.0589	0.00537 **

Table 8. TWRBS and TPBS by Gender

Gender	N	Mean TWRBS	Median TWRBS	Std. Dev. TWRBS	Min. TWRBS	Max. TWRBS	Mean TPBS	Median TPBS	Std. Dev. TPBS	Min. TPBS	Max. TPBS
Agender	2	64.3	64.3	20.2	50	78.6	64.6	64.6	8.84	58.3	70.8
Genderqueer or gender fluid	3	79.8	78.6	5.46	75	85.7	84.7	79.2	13.4	75	100
Man	22	42.7	46.4	23.4	3.57	82.1	47.9	54.2	24.5	0	87.5
Nonbinary	3	69.0	67.9	16.1	53.6	85.7	72.2	70.8	6.36	66.7	79.2
Prefer not to say	5	38.6	28.6	20.7	21.4	71.4	47.5	37.5	17.3	33.3	75
Unsure	3	58.9	58.9	27.7	25	92.9	77.1	77.1	12.0	62.5	91.7
Woman	206	49.9	50	18.4	3.57	100	57.1	54.2	17.3	4.17	100

Table 9. TPBS by time at institution

Time at Institution	N	Mean	Median	Std. Dev.	Min.	Max.
Less than 1	31	52.6	50	19.7	4.17	100
1 to 5 years	100	60.9	60.4	17.5	20.8	100
6 to 10 years	55	55.9	54.2	15.5	16.7	87.5
11 to 15 years	23	49.8	50	22.1	4.17	91.7
16 or more years	36	56.0	58.3	19.6	0	91.7

Table 10. Job control by status

Status	N	Mean	Median	Std. Dev.	Min.	Max.
Academic staff	58	3.46	3.40	0.466	2.67	5
Faculty	153	3.34	3.33	0.500	1.95	4.48
Staff	34	3.09	3.17	0.598	1.86	4.05

Table 11. TPBS and TWRB by status

Status	N	TWRBS Mean	TWRBS Median	TWRBS Std. Dev.	TWRBS Min.	TWRBS Max.	TPBS Mean	TPBS Median	TPBS Std. Dev.	TPBS Min.	TPBS Max.
Academic staff	58	46.7	50	17.0	3.57	89.3	56.0	54.2	16.3	25	100
Faculty	153	49.5	50	19.4	3.57	92.9	55.6	54.2	19.3	0	100
Staff	34	57.0	55.4	22.2	21.4	100	64.6	68.8	16.2	29.2	95.8

Table 12. TCRBS by tenure (institution)

Tenure (Institution)	N	Mean	Median	Std. Dev.	Min.	Max.
No	120	29.6	25	22.1	0	100
Yes, similar status	34	19.6	16.7	15.0	0	58.3
Yes, tenure	86	31.4	29.2	18.6	0	79.2
Other	5	20.0	25	15.1	4.17	37.5

Table 13. TPBS by tenure or similar status (individual)

Tenure or Similar Status (Individual)	N	Mean	Median	Std. Dev.	Min.	Max.
No	63	61.2	62.5	18.5	20.8	100
Yes	55	51.5	50	19.3	0	95.8
Other	2	54.2	54.2	23.6	37.5	70.8

Table 14. TCRBS by Teacher Training Received

Teacher Training Received	N	Mean	Median	Std. Dev.	Min.	Max.
No	58	34.6	29.2	23.8	0	87.5
Yes	173	27.4	25	18.6	0	100
Other	14	20.2	14.6	19.5	0	58.3

Table 15. Job control by teaching workload

Teaching Workload	N	Mean	Median	Std. Dev.	Min.	Max.
Far too light	17	3.49	3.52	0.738	1.86	5
Slightly light	60	3.42	3.43	0.489	2.19	4.48
Just right	90	3.35	3.33	0.491	2.29	4.48
Slightly excessive	68	3.18	3.19	0.481	1.95	4.38
Far too excessive	10	3.47	3.69	0.529	2.62	4.05

Table 16. TWRBS and TCRBS by teaching workload

Teaching Workload	N	TWRBS Mean	TWRBS Median	TWRBS Std. Dev.	TWRBS Min.	TWRBS Max.	TCRBS Mean	TCRBS Median	TCRBS Std. Dev.	TCRBS Min.	TCRBS Max.
Far too light	17	51.7	53.6	26.3	3.57	100	33.3	25	29.4	0	100
Slightly light	60	47.9	50	20.4	3.57	96.4	28.7	27.1	20.2	0	87.5
Just right	90	46.1	46.4	18.6	7.14	89.3	23.7	25	17.8	0	75
Slightly excessive	68	53.9	51.8	17.0	17.9	85.7	31.7	29.2	18.0	0	83.3
Far too excessive	10	65.0	64.3	13.0	39.3	82.1	45.0	50	26.8	0	87.5

Table 17. TWRBS by race and ethnicity

Race	N	Mean	Median	Std. Dev.	Min.	Max.
African American or Black	6	54.8	53.6	18.4	32.1	78.6
East Asian	1	50	50	NA	50	50
Hispanic or Latinx	12	45.5	46.4	23.1	17.9	96.4
Indigenous	2	57.1	57.1	10.1	50	64.3
Middle Eastern or North African	4	70.5	69.6	17.8	53.6	89.3
Southeast Asian	1	46.4	46.4	NA	46.4	46.4
White	222	49.9	50	19.3	3.57	96.4
Prefer not to disclose	10	53.6	51.8	24.8	21.4	100

Table 18. TPBS by race and ethnicity

Race	N	Mean	Median	Std. Dev.	Min.	Max.
African American or Black	6	59.7	60.4	15.7	33.3	79.2
East Asian	1	50	50	NA	50	50
Hispanic or Latinx	12	58.3	54.2	24.6	20.8	95.8
Indigenous	2	64.6	64.6	8.84	58.3	70.8
Middle Eastern or North African	4	76.0	77.1	25.5	50	100
Southeast Asian	1	50	50	NA	50	50
White	222	57.1	58.3	18.2	0	100
Prefer not to disclose	10	55.0	56.2	20.4	33.3	95.8

Table 19. TPBS by sexuality

Sexuality	N	Mean	Median	Std. Dev.	Min.	Max.
Asexual	15	66.9	70.8	17.0	29.2	87.5
Bisexual	39	60.4	58.3	16.7	29.2	100
Gay	5	39.2	33.3	23.3	20.8	79.2
Lesbian	7	60.7	62.5	8.95	50	75
Pansexual	7	63.1	75	21.0	25	83.3
Queer	18	63.0	64.6	16.8	29.2	91.7
Straight	158	57.0	58.3	18.4	0	100
Prefer not to disclose	15	45.8	41.7	18.8	4.17	75

Figure Captions

Figure 1. Box plots showing the distribution of data for TWRBS, TPBS, and TCRBS

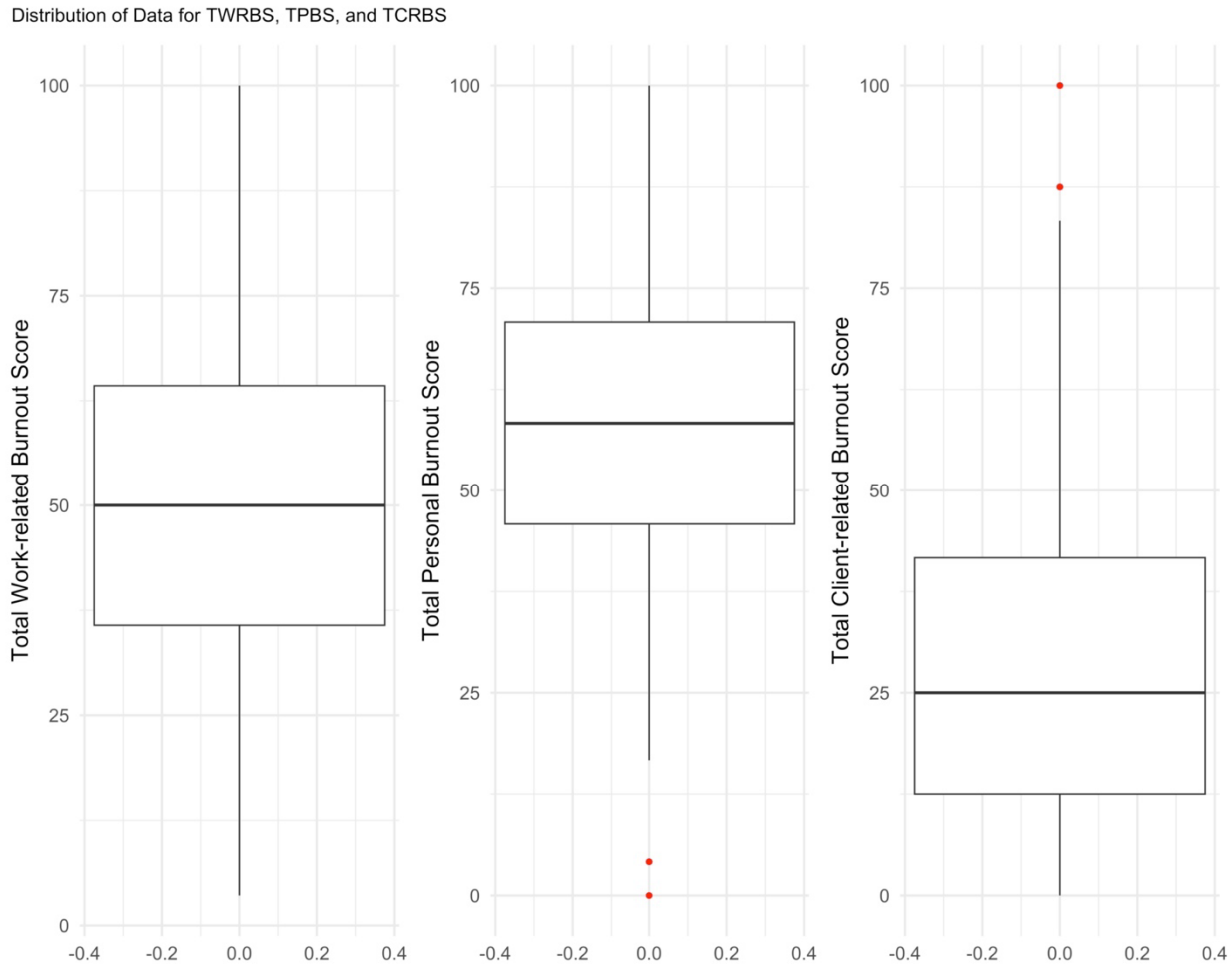


Figure 2. A stacked column chart showing the counts of moderate, high, and severe burnout by the three subscales, TPBS, TWRBS, and TCRBS

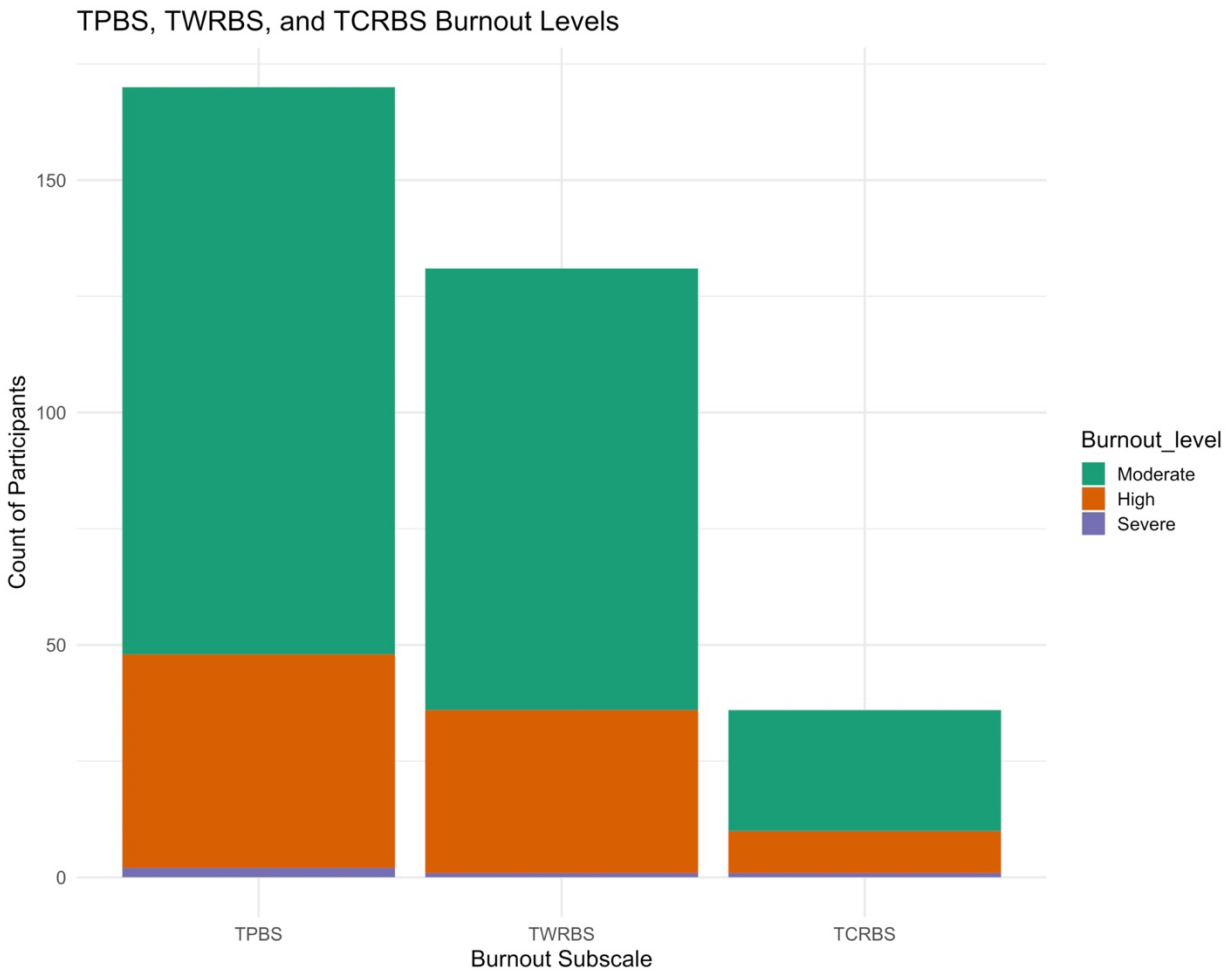


Figure 3. A correlation matrix showing correlations between job control score, personal burnout score, work-related burnout score, and client-related burnout score

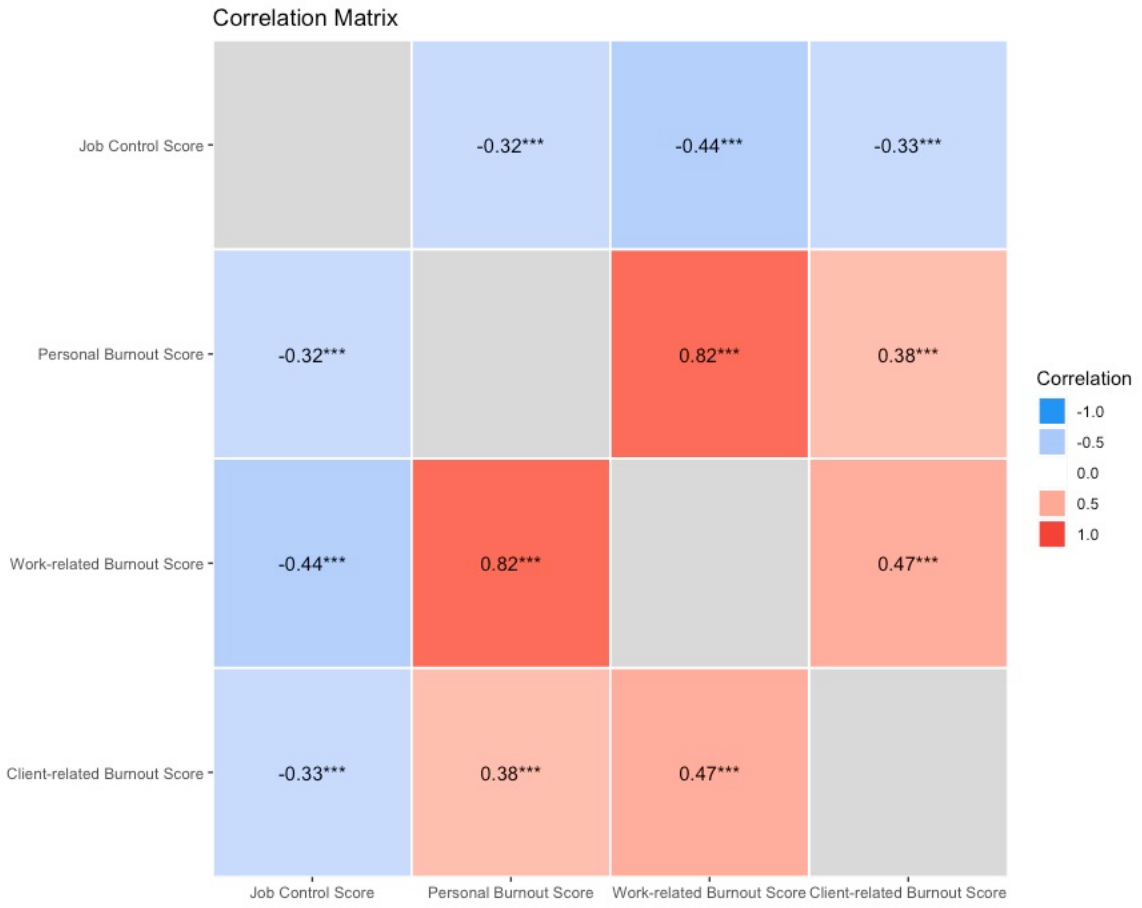


Figure 4. Linear Regression of Total Work-related Burnout Score Predicted by Job Control Score

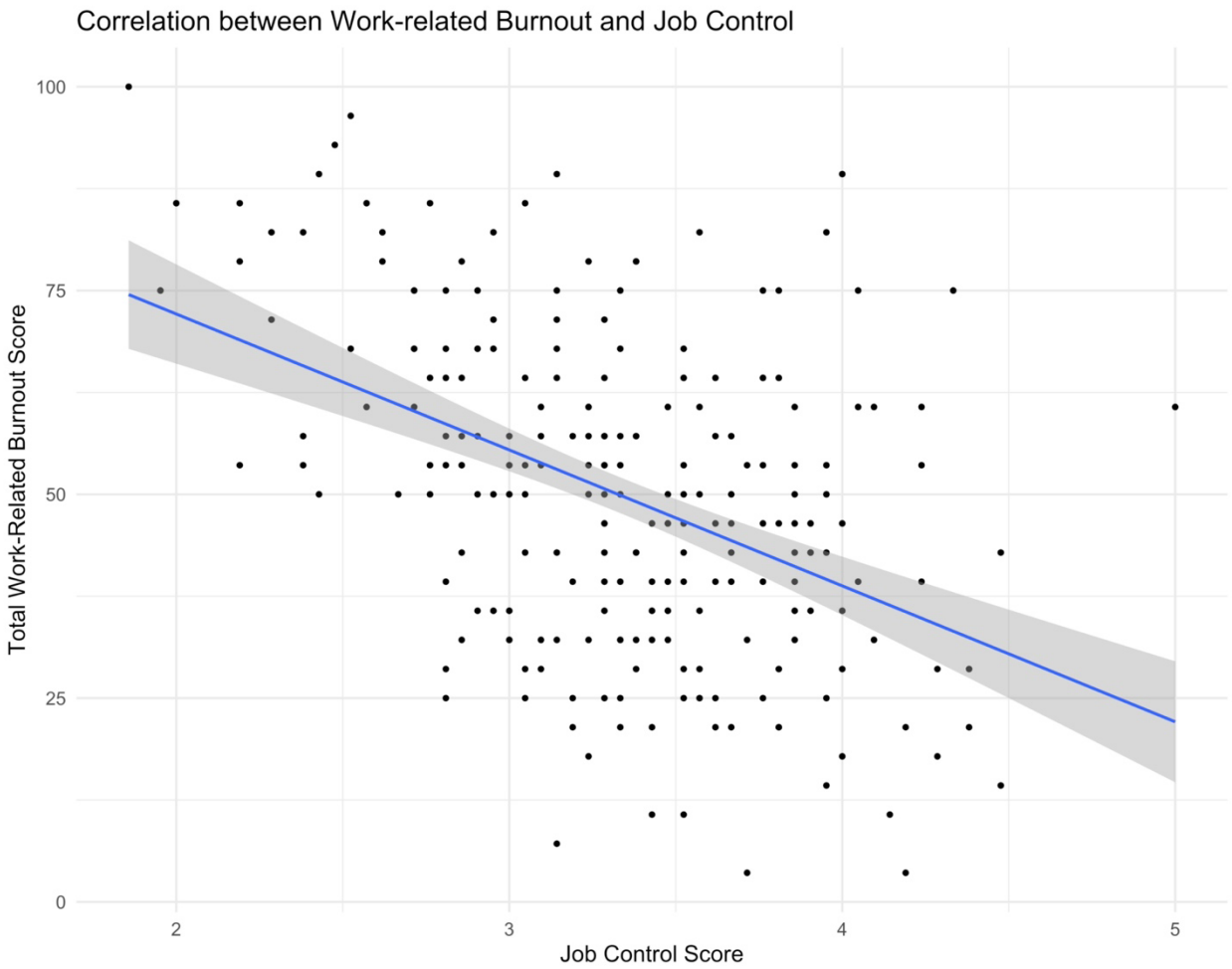


Figure 5. Linear Regression of Total Personal Burnout Score Predicted by Job Control Score

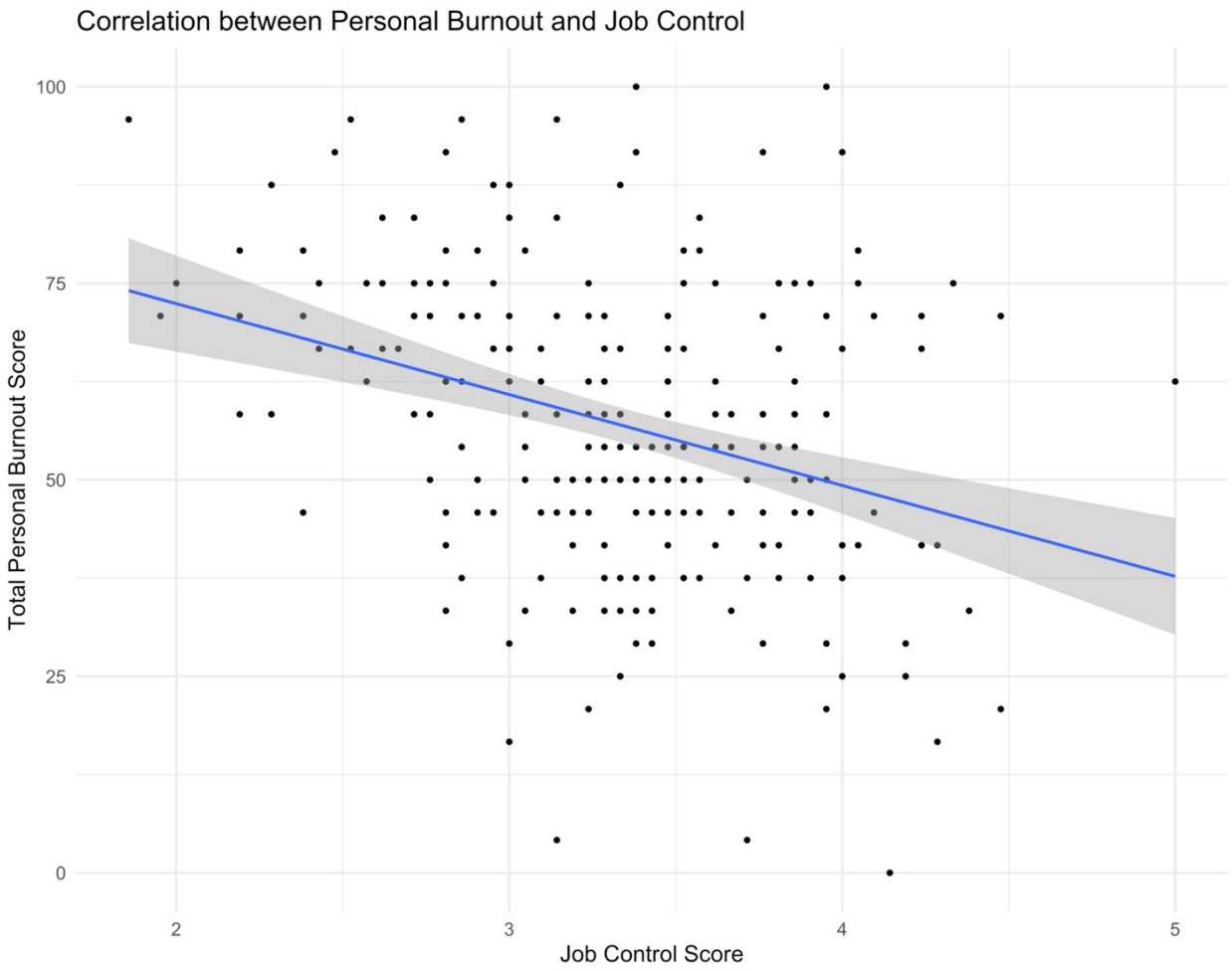


Figure 6. Linear Regression of Total Client-related Burnout predicted by Job Control Score

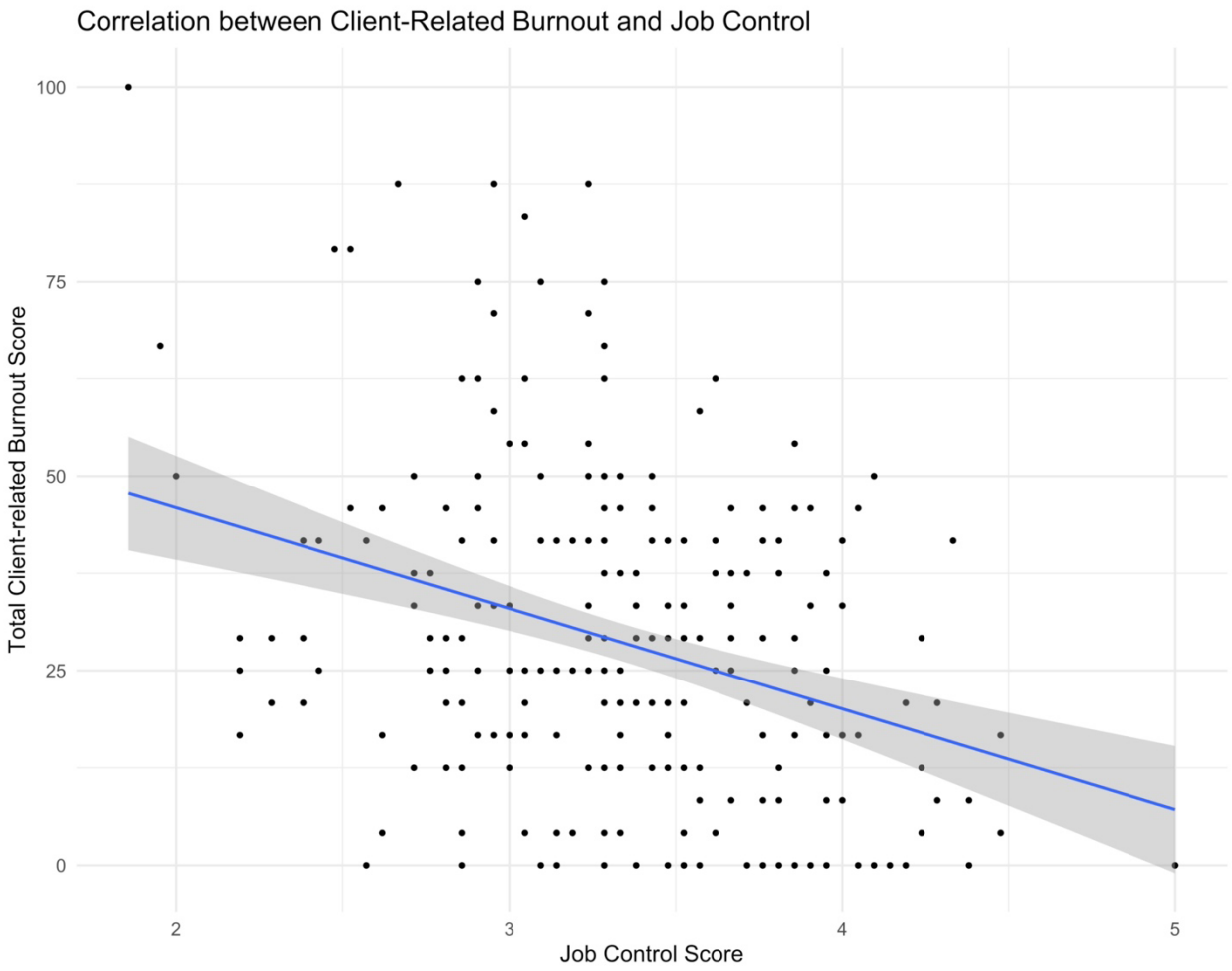


Figure 7. A column chart showing average job control score by dimension and severity of burnout.

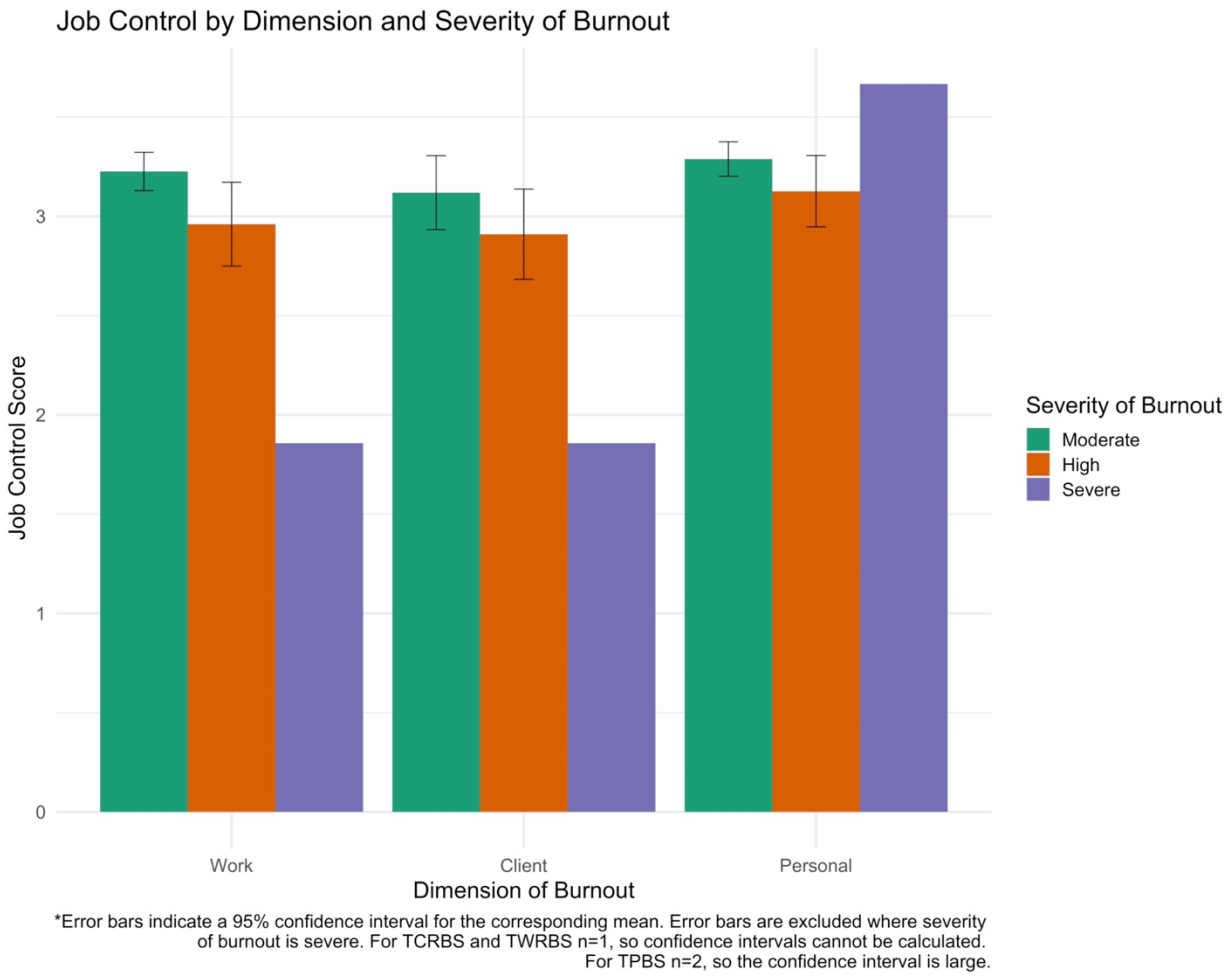


Figure 8. A column chart showing Average TPBS and TWRBS by Gender

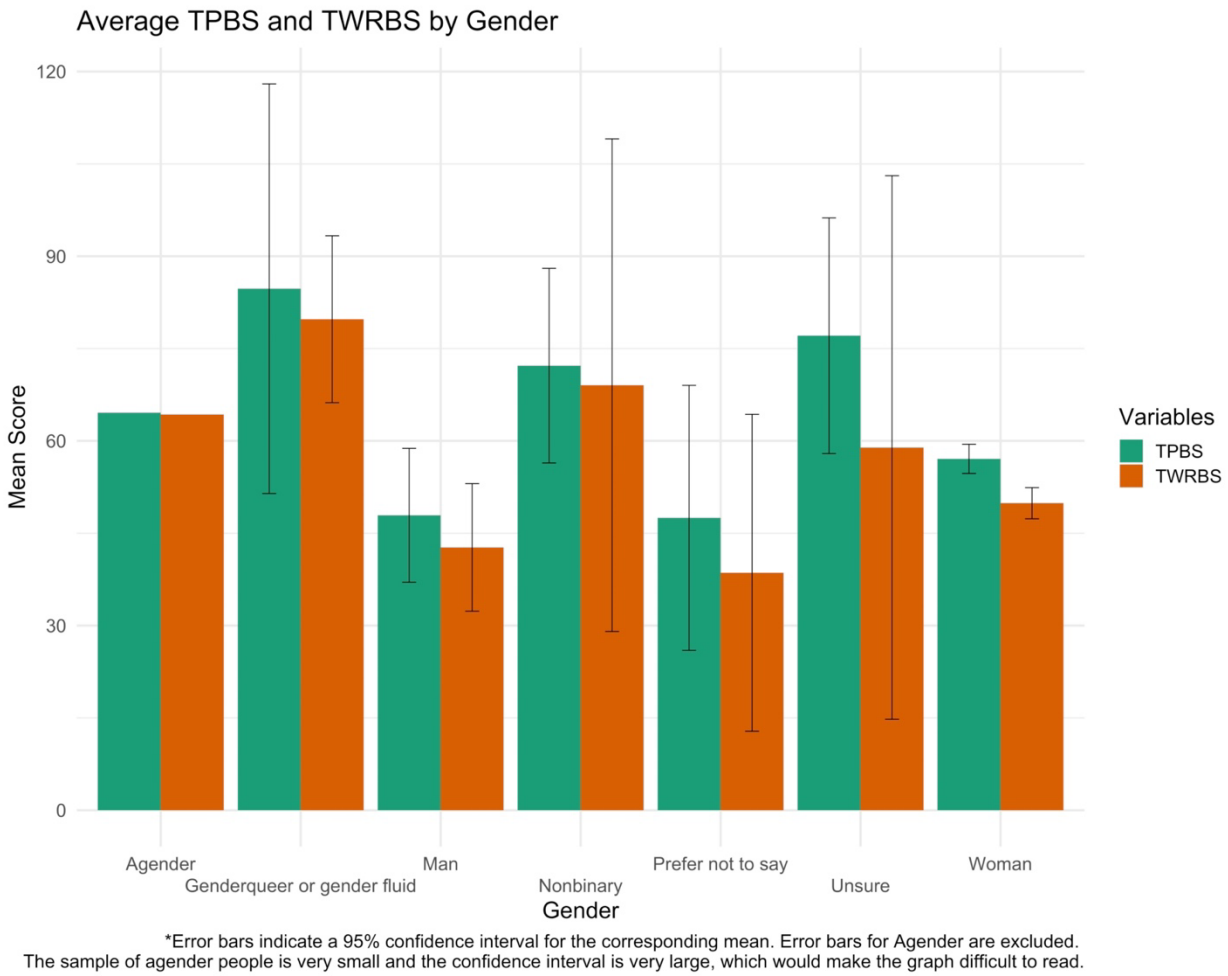


Figure 9. A column chart showing average TPBS by time at institution

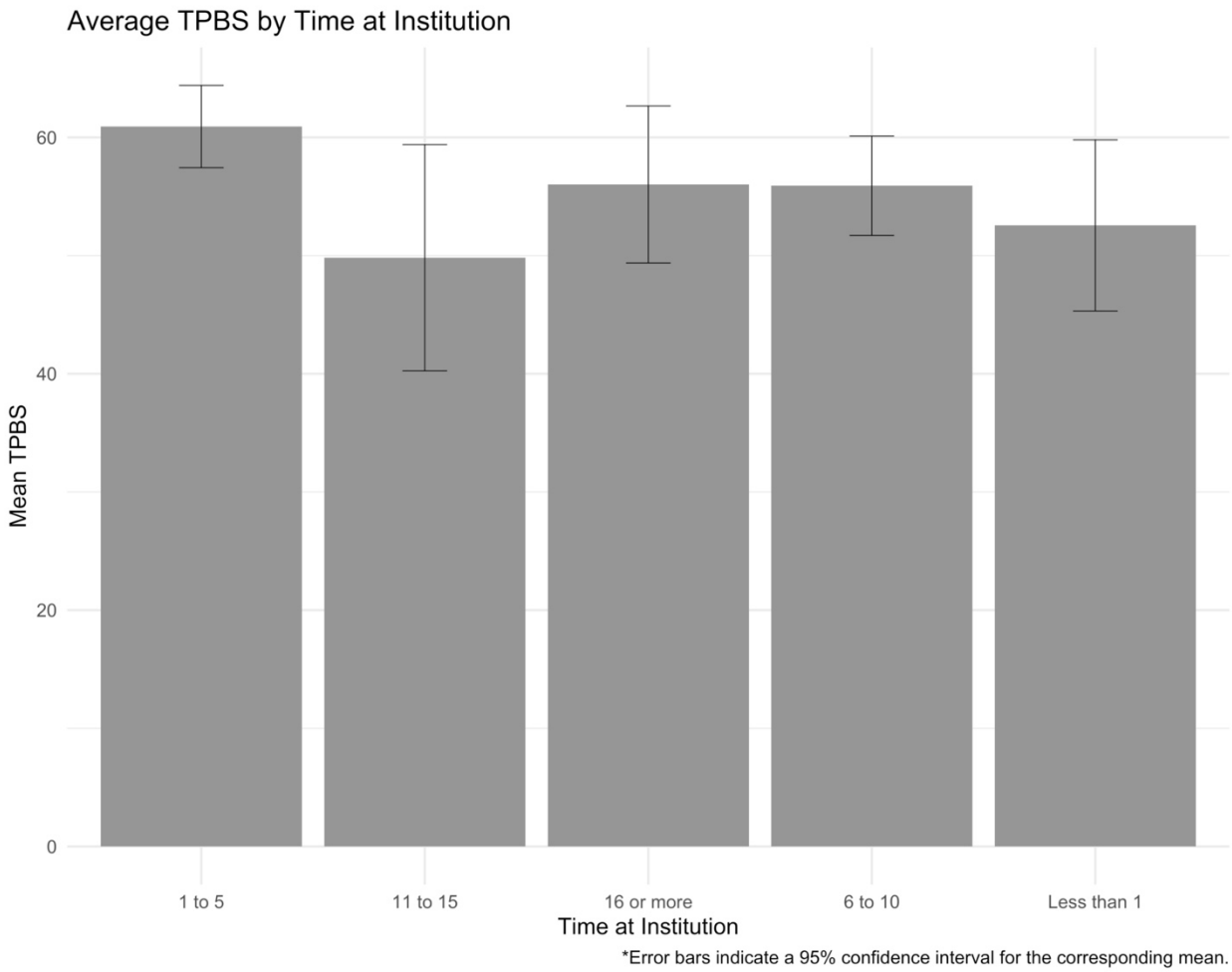


Figure 10. A column chart showing average job control score by status

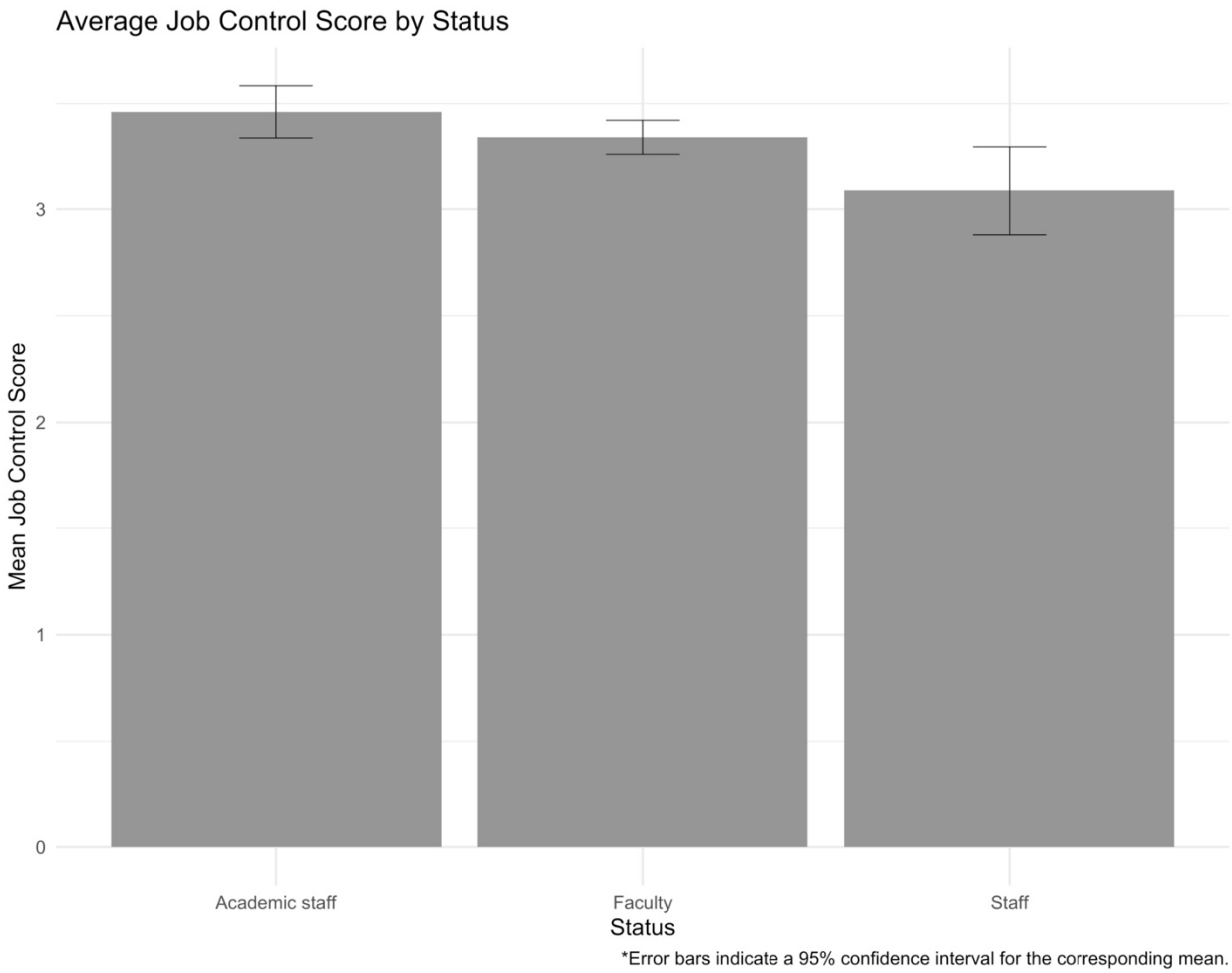


Figure 11. A column chart showing average TWRBS and TPBS by status

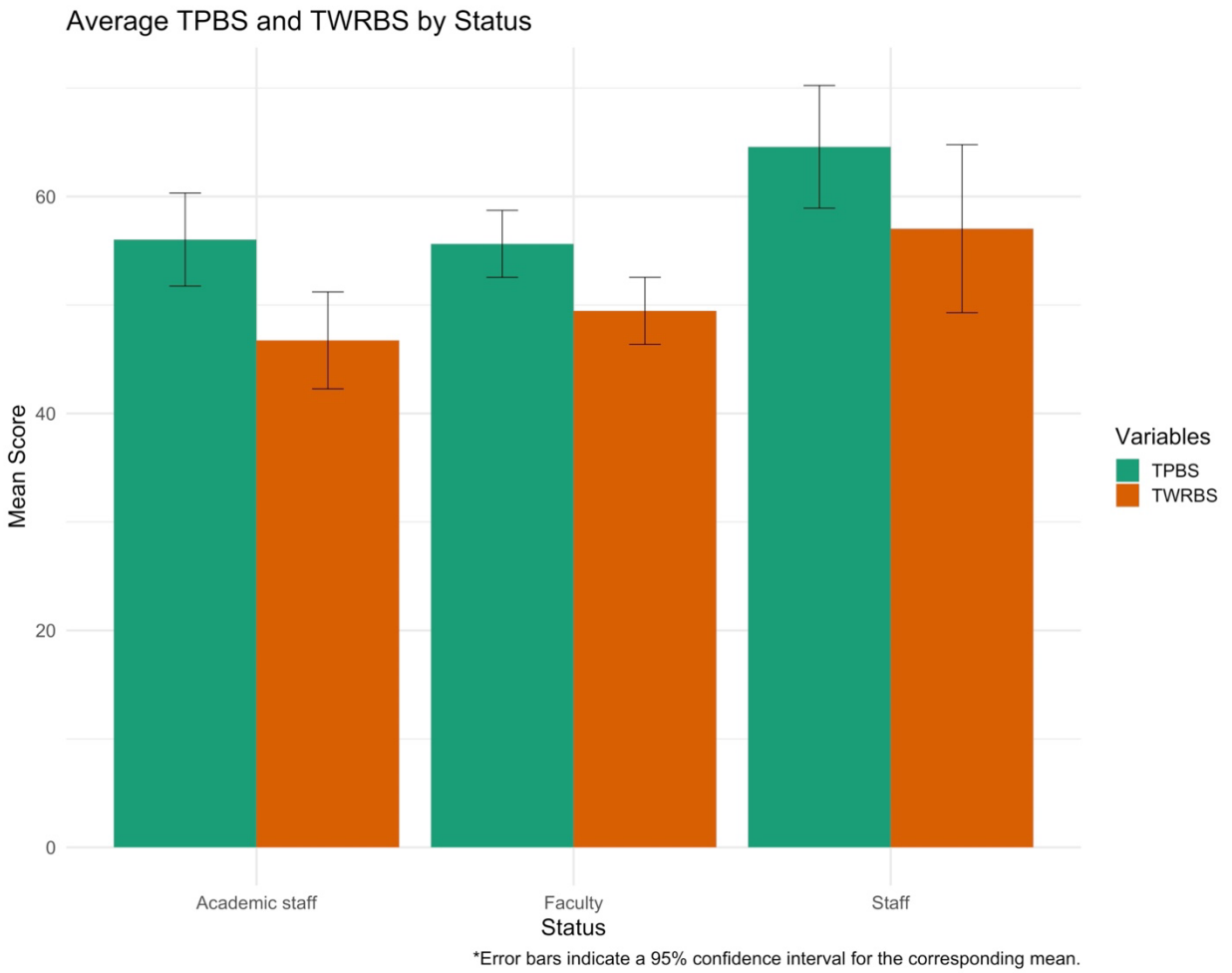


Figure 12. A column chart of average TCRBS by whether or not the institution a participant works at has tenure or a similar status or not

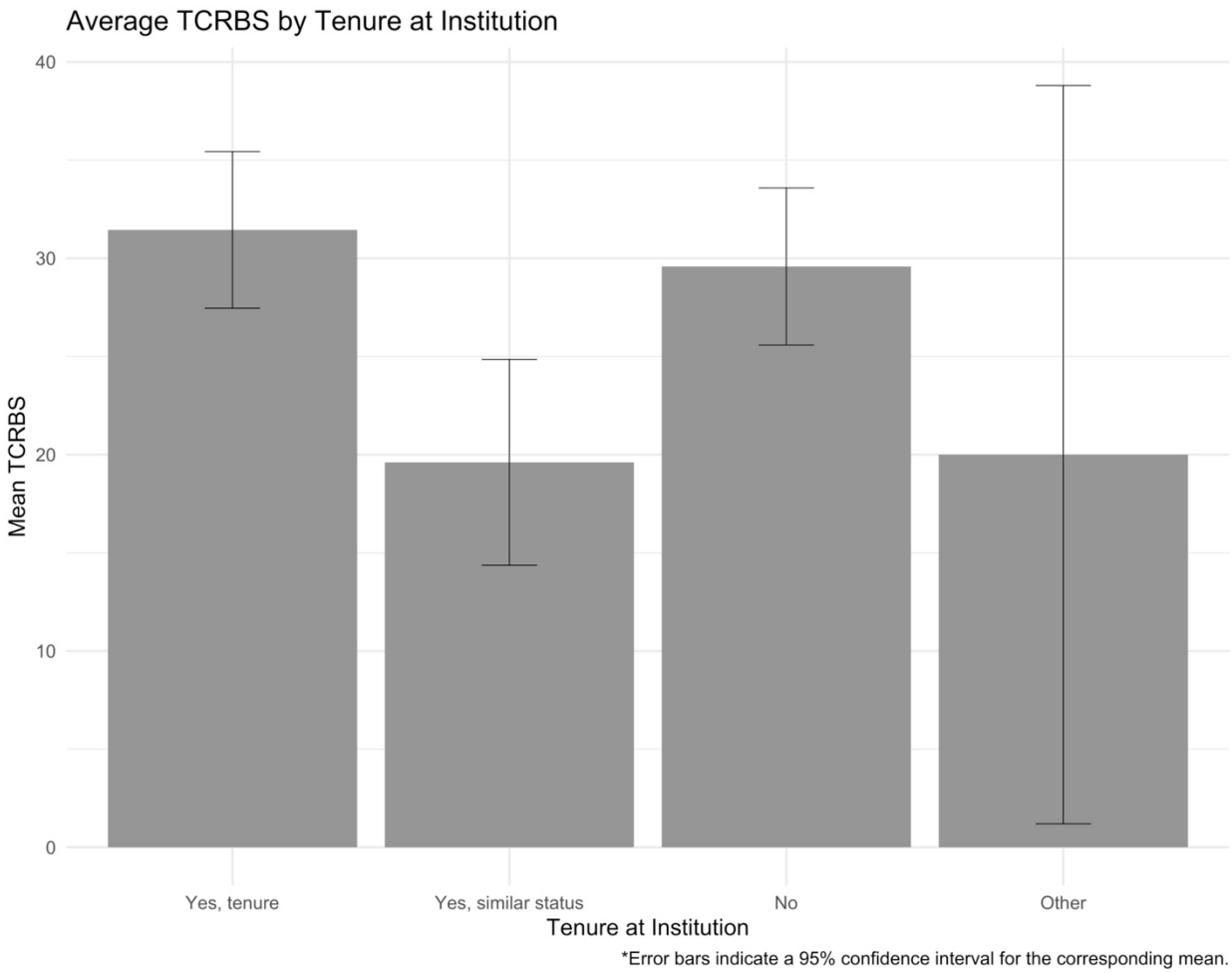


Figure 13. A column chart showing average TPBS based on whether or not the participant has attained tenure or a similar status

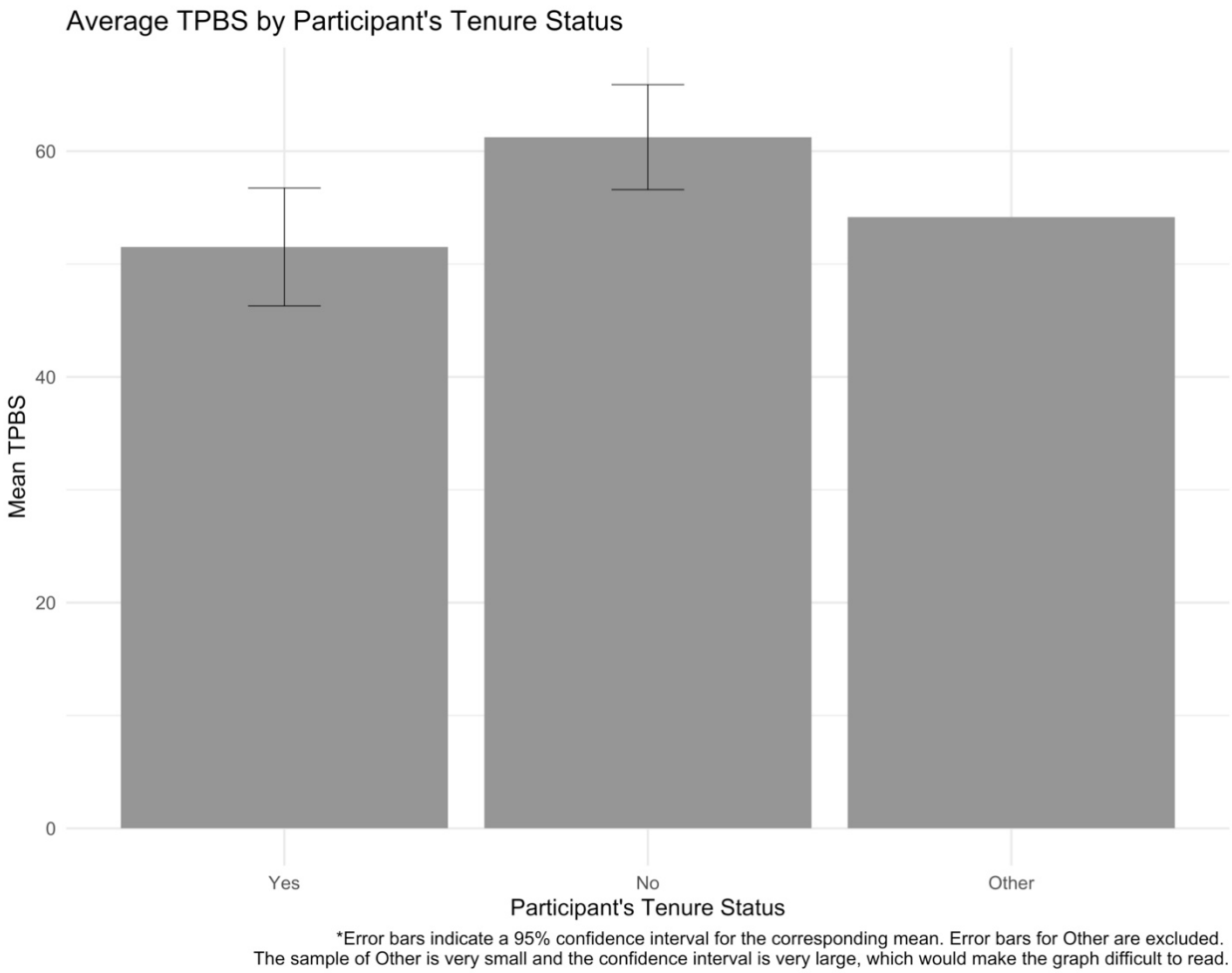


Figure 14. A column chart showing average TCRBS based on whether or not a participant received training to do library instruction

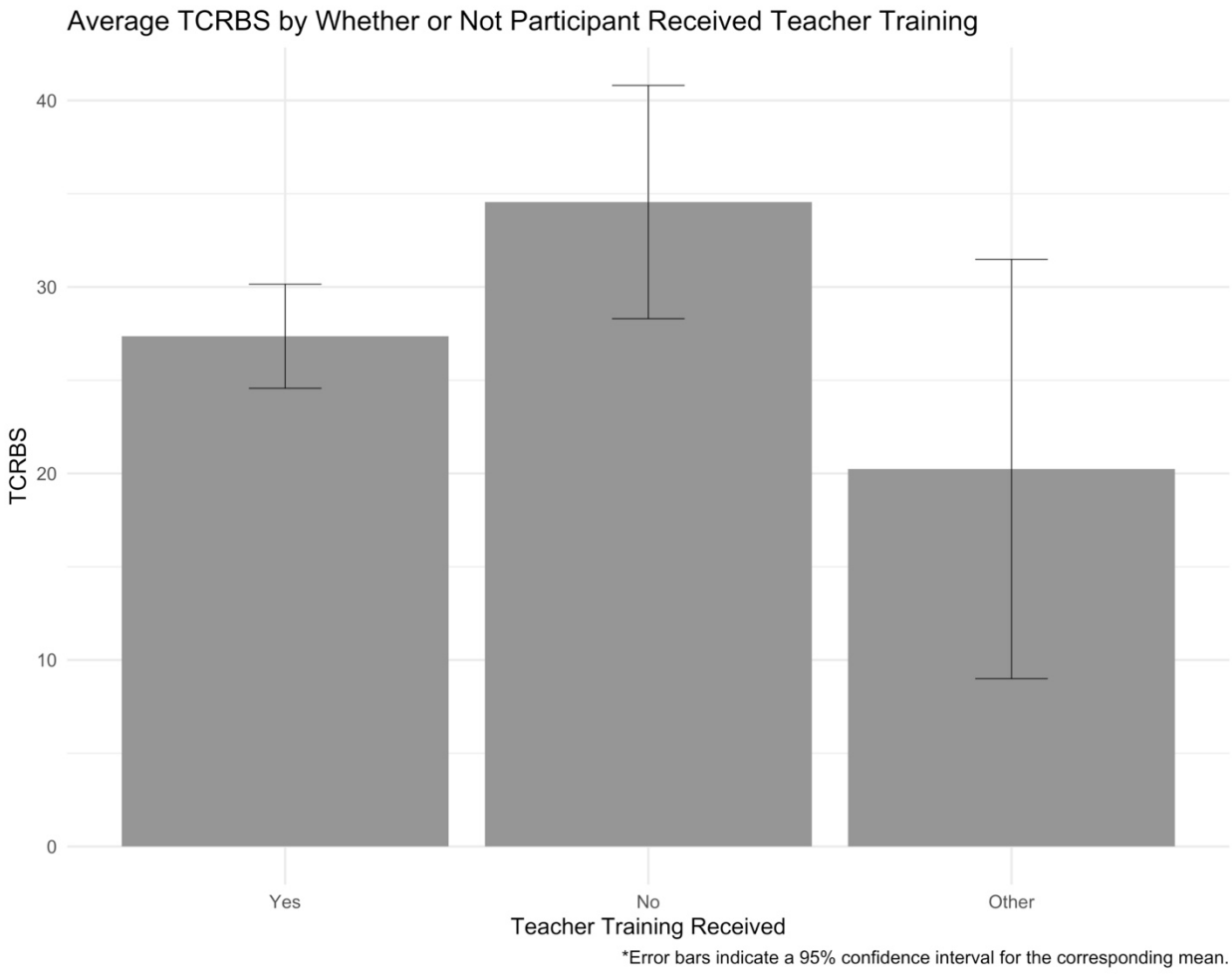


Figure 15. A column chart showing average job control score based on teaching workload

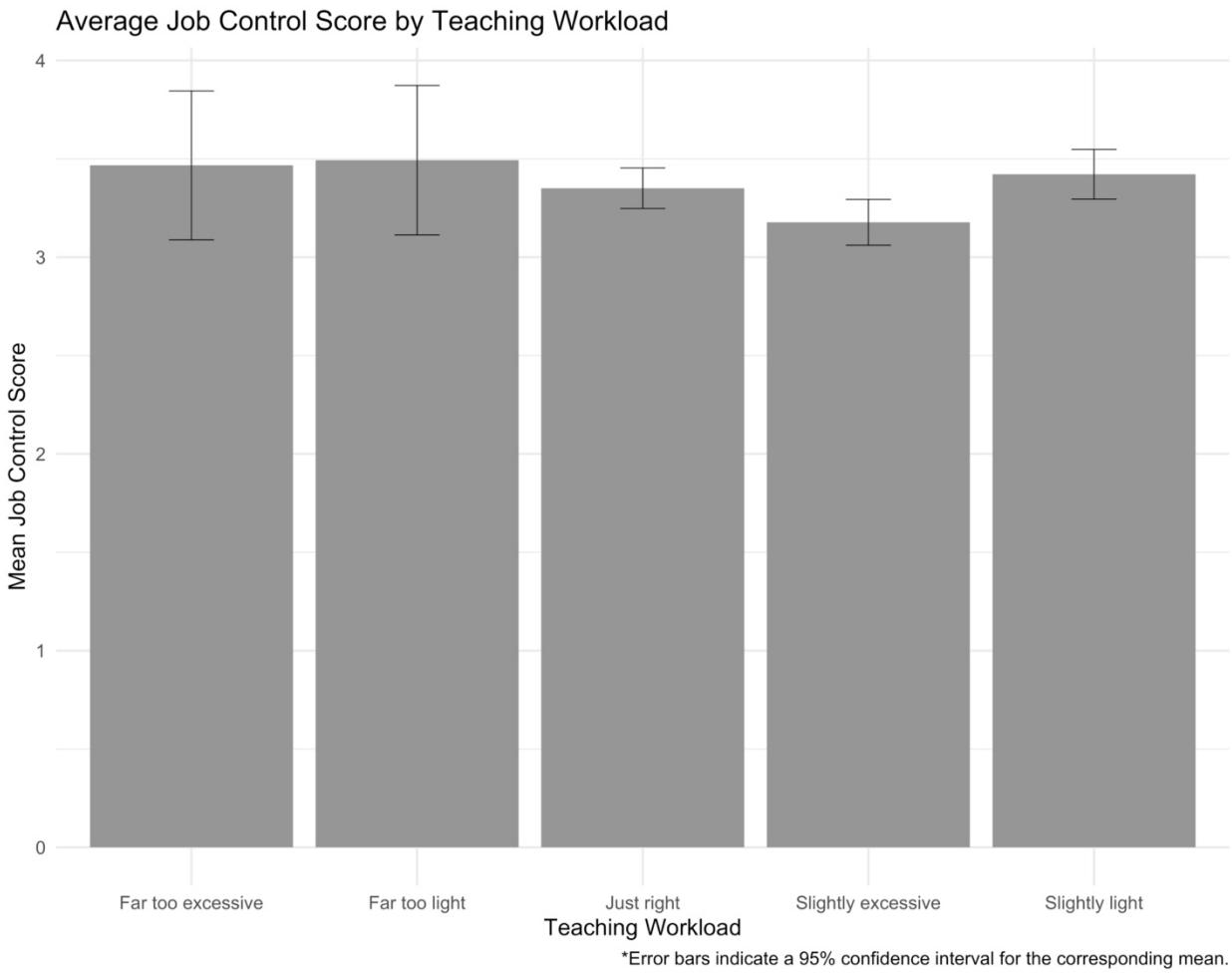
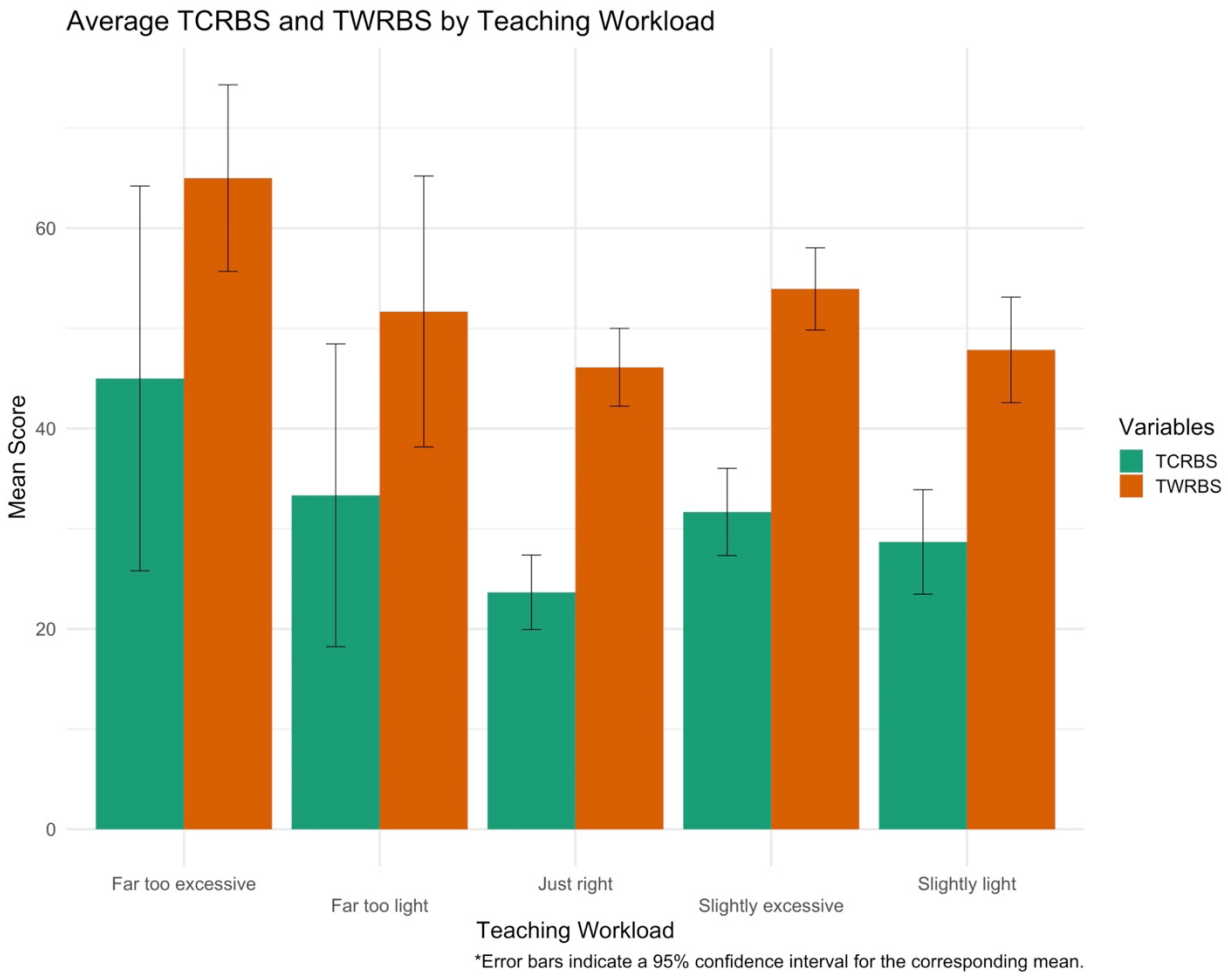


Figure 16. A column chart showing average TWRBS and TCRBS by perceived teaching workload)


Average TCRBS and TWRBS by Teaching Workload
Mean Score
60
40
20
0
Far too excessive
Far too light
Just right
Slightly excessive
Slightly light
Teaching Workload
Variables
TCRBS
TWRBS
*Error bars indicate a 95% confidence interval for the corresponding mean.