



## **Group Fitness Instructors' Emotional Labor, Contagion, And Work-Related Well-Being**

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### *Abstract*

**International Journal of Exercise Science 19(5): 5008, 2026.** Group fitness instructors (GFIs) are critical professionals who lead exercise programs providing important health benefits. Despite their central role, exercise science has only begun to investigate the emotional toll of GFI work and its implications for their work-related well-being. Emotional labor, managing emotions to fulfill job requirements via surface acting (masking) or deep acting (changing felt emotions), is particularly relevant for public-facing roles. Surface acting is generally related to more negative well-being than is deep acting. Emotional contagion, how easily GFIs are influenced by the emotional tone set by participants, may also influence well-being. This study used a correlational design to test whether emotional labor and contagion are associated with work-related well-being. GFIs ( $n=180$ ) completed anonymous online surveys. Methods and hypotheses were pre-registered. Analyses were conducted with structural equation modeling using a  $p<.05$  significance threshold. As hypothesized, surface acting was associated with more emotional exhaustion ( $\beta=.51$ ), less job satisfaction ( $\beta=-.22$ ), and more turnover intention ( $\beta=.22$ ). Partially supporting hypotheses, deep acting was linked to less turnover intention ( $\beta=-.27$ ) and higher emotional contagion was associated with higher turnover intention ( $\beta=.50$ ). These are the first findings to show in GFIs the association of emotional labor and contagion with these well-being outcomes. Findings extend research by identifying distinct strategies associated with exhaustion, satisfaction, and turnover intentions among GFIs. Results suggest that interventions should focus on the management of emotional demands. These may reduce emotional exhaustion and turnover intentions while supporting sustainable employment for GFIs, with positive implications for fitness professionals, organizations, and their clients.

**Keywords:** Burnout, emotional exhaustion, turnover intention, job satisfaction, emotional well-being

### **Introduction**

Fitness centers, gymnasiums, and community centers are popular venues for physical activity given the comfort of facilities and range of activities available.<sup>1</sup> Physical activity is related to psychosocial well-being, and the social nature of group programs appears to be especially beneficial to well-being.<sup>1</sup> Group fitness classes, exercise sessions programmed and led by a group fitness instructor (GFI), have physical, social, and mental benefits to participants above

those of solo exercise.<sup>2,3</sup> The need for fitness trainers and instructors, a category that includes GFIs, is projected to increase 12% within the next decade, which is far more rapid than average occupational growth (3%)<sup>4</sup> and more than other occupations in fitness and recreational sports.<sup>5</sup>

Exercise science has begun to document influences on well-being of GFIs. Existing studies focus on physical injuries, eating disorders, nutrition, and body image.<sup>6</sup> However, few studies focus on GFIs' general emotional well-being.<sup>6,7</sup> Prioritizing GFIs' psychological health is important because work-related stress can profoundly harm mental and physical well-being.<sup>8</sup> GFIs' health is also important for delivery and support of exercise, as GFI well-being is essential to effective group fitness experiences for the wider public.

This study investigates whether specific work-related emotional processes (emotional labor strategies and experiences of emotional contagion) among GFIs are associated with work-related emotional well-being outcomes (emotional exhaustion, job satisfaction, and turnover intention). The present study extends prior research by focusing specifically on the link between GFI emotional processes and the emotional exhaustion component of burnout. Exhaustion is the most prominent dimension of burnout in exercise science professionals.<sup>9</sup> Further, the study tests the links of emotional processes with job satisfaction and turnover intention, two variables important for effective performance.<sup>7</sup> Additionally, by expanding beyond a single cultural and instructional context, this study broadens existing findings and clarifies how emotional labor strategies and contagion relate to elements of work-related well-being among GFIs.

Studying emotional labor in GFIs in particular is necessary not only due to their vital role in providing fitness opportunities for others, but also because their work role differs from those of other professions studied. Findings from research with teachers<sup>10-12</sup> and coaches,<sup>13</sup> which show that emotional labor influences burnout, job satisfaction, and turnover intention, provide a foundation for the present study. However, data from other professions may not generalize to GFIs. More than other professions, GFIs are typically expected to be highly physically engaged while instructing and they interact in gym environments with multiple participants at a time, who pay for successful and satisfying service. Further, understanding GFI experience is relevant to other professionals applying exercise science to client activities. As with other workers supporting exercise activities (such as personal trainers),<sup>14</sup> GFIs themselves are part of the experience, requiring aesthetic and affective labor to maximize benefit to consumers. Also, GFIs may have less training and professional support than teachers and coaches. In contrast to the education and licensure requirements of teachers and many coaches, GFIs are commonly part-time employees and certification is often necessary for employment. With the goal of supporting GFIs and enhancing their work, our study extends research on emotional labor and well-being to the specific circumstances of GFIs by focusing on how their use of emotional labor and experience of emotional contagion is linked to work-related well-being outcomes (emotional exhaustion, job satisfaction, and turnover intention).

#### *Work-related emotional processes among GFIs*

Emotional labor among GFIs.

*Emotional labor* refers to employees' management of their emotions to meet job expectations<sup>15</sup> and is particularly relevant to public-facing roles.<sup>7,10,16</sup> Emotional labor has negative effects on employee well-being, including increases in dimensions of burnout and decreases in personal

accomplishment and job satisfaction.<sup>10,16</sup> Two central components of emotional labor are (1) surface acting: when employees change their emotional expression without altering their felt emotions, and (2) deep acting: when employees change their felt emotions according to the situation.<sup>10,16</sup> A recent meta-analysis reports that surface acting shows strong negative associations with emotional well-being and job outcomes, while deep acting research is more varied and shows less negative associations.<sup>16</sup> This pattern is theoretically expected because surface acting demands effortful suppression of genuine feelings and creates emotional dissonance, leading to strain.<sup>17</sup> In contrast, deep acting involves changing inner feelings, so that expressed and felt emotions align which reduces dissonance and strain.<sup>18</sup>

A growing body of research in related sport and education settings provides evidence for the differing effects of surface and deep acting. Surface acting is linked to burnout and reduced job satisfaction in coaches<sup>13</sup> and to anger<sup>10</sup> and burnout<sup>11</sup> in teachers. In contrast, deep acting is associated with positive emotions in teachers.<sup>10</sup> One study suggests these findings generalize to GFIs. Surface acting among Pilates instructors in Korea increased burnout, while deep acting reduced it.<sup>7</sup> Based on this research on emotional labor in service work and populations similar to GFIs, more surface acting among GFIs should relate to more negative well-being outcomes and more deep acting should relate to more positive well-being outcomes.

#### Emotional contagion among GFIs.

GFI emotional experience may be related not only to the labor involved in managing their emotions, but it may also be affected by the emotions of participants in their classes. Emotional contagion is the transfer of emotions from one person to another, and it can occur in athletic settings.<sup>19</sup> However, no research has directly examined how GFIs are affected by their participants' emotions via emotional contagion. As recognized in the affective labor literature, affective atmospheres are co-produced by presenter and audience.<sup>20</sup> In an interactive work context where the presenter/employee (GFI) is expected to display and create positive emotions, their own susceptibility to emotional contagion may influence their overall experience and well-being (as well as the emotional experience of the participants). Contagion is amplified when those being influenced are more susceptible to it.<sup>21</sup> In the context of GFI work, susceptibility to emotional contagion indicates how easily an instructor is influenced by the emotional tone set by participants. As contagion could increase the emotional burden on GFIs or provide positive experiences (that is, the fitness participants could collaborate in creating a positive atmosphere helping the GFI – or work against that), it may produce positive or negative influences on GFI well-being. *We therefore made an exploratory, non-directional hypothesis that GFIs' susceptibility to emotional contagion would relate to their work-related well-being outcomes.*

#### Work-related well-being outcomes

Given the likelihood that emotional labor and contagion are part of GFI's work experiences and prior research indicating connections with well-being in other populations, we argue that these processes may affect GFI work-related well-being outcomes of emotional exhaustion, job satisfaction, and turnover intention.

#### Emotional exhaustion.

A combination of burnout and emotional labor may contribute to GFIs' decline in work efficiency and quality.<sup>7</sup> Burnout, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, is well-documented across various professions;<sup>6,22</sup> however, there is

limited research on the impact of burnout on GFIs.<sup>6</sup> Moreover, there is no research with GFIs that isolates the three components of burnout. Sport research frequently identifies emotional exhaustion as the most prominent dimension of burnout,<sup>9</sup> arguing that it is the primary component of sport burnout in combination with physical exhaustion, and that the other dimensions are secondary. Although emotional labor has been linked to general burnout among Pilates instructors,<sup>7</sup> no research has focused on emotional exhaustion in GFIs. We therefore focus on emotional exhaustion: the feeling of chronic emotional depletion.<sup>6</sup> *Given the pattern of findings in similar professions, we hypothesized that among GFIs surface acting would relate to more emotional exhaustion and deep acting to less.*

Job satisfaction and turnover intention.

Job satisfaction encompasses the judgments employees have toward their job and is related to mental/physical health and turnover.<sup>23</sup> Turnover intention refers to an employee's desire to leave their job. Research on teachers and coaches has found surface acting to be associated with worse job outcomes<sup>10-13,16</sup> and deep acting to be associated with better job outcomes.<sup>10,12,16</sup> The same pattern was found in a sample of Korean Pilates instructors.<sup>7</sup> *We therefore hypothesized that among our broader sample of US GFIs, more surface acting will relate to less job satisfaction and higher turnover intention, while deep acting will relate to more job satisfaction and less turnover intention.*

## Methods

We used a correlational design to test our hypotheses. To facilitate open and reproducible science,<sup>24</sup> we preregistered our methods, main hypotheses, and analyses before data collection through Open Science Framework (OSF, [tinyurl.com/GFIELEWB](https://tinyurl.com/GFIELEWB)). The full protocol and survey are available there. Supplementary procedures, analyses, and the study data are available at an OSF supplementary address ([tinyurl.com/GFIELEWB-Sup](https://tinyurl.com/GFIELEWB-Sup)). Instead of the series of Pearson correlations in the preregistration, we used Structural Equation Modeling (SEM). SEM better accounts for measurement error and is able to test the entire model together.<sup>25</sup> For surface acting and deep acting, there is no difference in support for each hypothesis from the preregistered analyses procedure. However, in the preregistered analyses, we used all emotional contagion items because Cronbach's alpha reliability was low. This resulted in loss of some participants. In these analyses, the scale was not related to any outcomes. In the SEM reported here, we modified the emotional contagion scale based on the Confirmatory Factor Analysis (CFA) allowing us to use all the data. The SEM revealed a significant association of emotional contagion with turnover intention. The preregistered analyses are available at OSF supplementary site.

## Participants

The survey sample consisted of 180 GFIs located in the United States. Only GFIs who were 18 years or older and affirmed we should use their data were included. Exclusion processes for invalid responses are described in Protocol. Our sample size aligns with that of comparable GFI research.<sup>6,7</sup> This study was approved by the University of Denver Institutional Review Board (#2147916-3). This research was carried out fully in accordance with the ethical standards of the *International Journal of Exercise Science*.<sup>26</sup>

We distributed study information via phone call, email, and/or in-person flyers to 81 local gyms in the Denver metro area. Recruitment materials invited respondents to share the survey link

on their social media, thus opening participation to GFIs outside this metro area. The first 120 participants were compensated with a USD 10 electronic Amazon gift card. All participants were entered into a raffle for one of three USD 50 electronic Lululemon gift cards. We used the software program G\*Power<sup>27</sup> to conduct a priori power analysis, specifying a medium effect size of Cohen's  $f = .25$ , a one-tailed test,  $\alpha = .05$ , and power  $(1-\beta) = .85$ . This analysis indicated a required sample size of  $N = 120$ , so our pre-registered goal was to have usable survey responses from at least 120 GFIs. The survey was active from February 29<sup>th</sup>, 2024 until April 1<sup>st</sup>, 2024.

Participants self-identified their race/ethnicity and gender in open-ended response boxes. We combined responses into categories commonly used by our respondents. We created three mutually exclusive groups for race/ethnicity analyses: monoracial White, monoracial Black, and "Other." Gender responses were categorized as "woman," "man," and "non-binary." Participants chose one of seven age ranges (18-21, 22-25, 26-30, 31-35, 36-40, 41-50, 51+). We also asked about GFI job history, years of experience, hours of work per week, and training.

The majority of our sample identified as women (65%), with 31.7% as men, 1.1% as non-binary, and 2.2% missing gender data. This is comparable to 2022 Census Bureau figures for GFIs reported at 63% women and 37% men.<sup>28</sup> Most participants self-identified race/ethnicity as monoracial White (60%) or monoracial Black (27%). The remaining 13% identified as Latinx (7), Asian (7), and American Indian (1) or held multiple identities, including White/Latinx (2), Black/White/Latinx (2), Black/White (1), and White/Pacific Islander (1). Three participants did not report their race/ethnicity. The 60% White of our sample is lower than the 75% of GFIs identified as White in Census Bureau data.<sup>28</sup> Regarding age, 53% of respondents were between 18-30 years old, while 47% were 31 years or older. This can be compared with Census data that 41.8% of GFIs are aged 20-34.<sup>28</sup> Most of our sample taught exclusively high intensity classes (57.2%), others taught exclusively low intensity classes (29.4%), and some taught both (13.3%). Years of experience as a GFI ranged from 1-37 ( $M = 6.91$ ,  $SD = 6.97$ ,  $Mdn = 5$ ). Ninety percent of the sample reported working fewer than 40 hours per week, with half reported six hours or fewer per week.

### *Protocol*

Data were collected through an anonymous online survey. Interested GFIs accessed the survey by scanning a QR code on the recruitment flyer or email to participate at their convenience. The QR code directed participants to a Qualtrics survey, where they reviewed study information and an informed consent statement and confirmation. The survey, estimated to take 10-15 minutes, concluded with a link to a separate form where participants could provide their email address for compensation, request survey results, or express interest in further participation. Email information was collected in a separate survey so the data could not be connected. At the end of the survey, respondents were given a data-quality question asking whether we should or should not use their data (e.g., because they rushed through or did not answer honestly); they were assured that their response to this would not affect their eligibility for the compensation.

We used the following scales to assess variables of interest. The measurement model for each scale was validated using Confirmatory Factor Analysis. Factor loadings and  $R^2$  are reported in Results. Factor loadings are strong across constructs, with even the lower-loading factors averaging above .60, indicating moderate to high reliability. Simple Cronbach's reliabilities prior to CFA ranged between .67 and .92 and are in supplementary materials.

Emotional labor was measured using three surface acting items and three deep acting items of Brotheridge and Lee's validated Emotional Labour Scale.<sup>18</sup> Respondents indicated how frequently they engage in specific emotional labor behaviors using a 5-point scale (1 = Never, 5 = Always).

Emotional contagion was measured using five items we developed for this study. An example item is "I feel as though my participants' emotions affect my own emotions when instructing classes." The measure used a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree).

Emotional exhaustion was measured using Hill's validated nine-item Emotional Exhaustion Questionnaire,<sup>29</sup> and an additional item we added: "In the last 7 days, how much have you felt that these emotional experiences are related to your job as a GFI?" The measure used a 5-point Likert scale (1 = Not at all, 5 = Extremely).

Job satisfaction was measured using Agho and colleague's validated six-item Overall Job Satisfaction Scale<sup>30</sup> using a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). Turnover intention was measured using four validated items from The Three Component Model of Occupational Commitment<sup>31</sup> and two items we added. The measure used a 7-point Likert scale (1 = Very strongly disagree, 7 = Very strongly agree).

The survey included four short open-ended questions to provide ideas for future studies. The questions asked about well-being education/training, what is enjoyable and what is stressful about being a GFI, and what respondents do to cope with stress in their workplace. They were used here only to ensure participants were human (vs. bots/artificial intelligence) and responsive to the questions. For full reporting, a description of the responses are available at the OSF supplementary site.

### *Statistical Analysis*

Prior to any analysis, the dataset was cleaned of invalid respondents. First, of the 402 responses, 333 participants had indicated on the data quality question that their data should be used; the remaining 69 respondents were omitted. Next, because the survey was distributed online, there was a potential presence of bots or AI assisted responses. To remove these artificial responses, we used duration (< 4.5 minutes) and highly dubious survey responses (e.g., instructing more than 60 hours per week) to remove participants unlikely to be genuine. This left 302 respondents. Next, two authors independently read the open-ended responses and discussed evaluations (details at OSF, [tinyurl.com/GFIELEWB-Sup](https://tinyurl.com/GFIELEWB-Sup)). Respondents with more than two suspected AI generated answers within the four open-ended questions were removed. Open-ended responses with only one or two suspected artificial answers were reviewed jointly by the first two authors to decide if the pattern looked artificially generated. After elimination of potential artificial responses, 180 participants remained as valid, qualified participants.

All statistical analyses were conducted using R Statistical Software version 4.5.2<sup>32</sup> with significance set at  $p < .05$ . Each of the six latent constructs (surface acting, deep acting, emotional contagion, emotional exhaustion, job satisfaction, turnover intention) were first tested using CFA to validate the measurement model for each latent variable. Once satisfactory model fit was established for each factor, we constructed a full SEM to examine the structural relationships among predictors and outcomes. Because of prior suggestions that burnout in exercise science professionals may be influenced by individual differences, such as gender,<sup>33</sup> and because Black employees generally report less job satisfaction than White ones, we added covariates including age (7 age ranges),

gender (female, male, non-binary), race/ethnicity (monoracial Black, monoracial White, other), years of experience as a GFI (continuous), and class intensity level (high, low, or both) to the model to control for their potential influence on the outcomes. Missing data were handled using Full Information Maximum Likelihood, which allows for inclusion of incomplete data under the assumption of missing at random.<sup>25</sup> Although the sample size to parameters (N/q) ratio in this study is 1.58, which is below conventional thresholds, SEM research has shown that this ratio does not strongly impact model results beyond the effects of overall sample size and indicator reliability.<sup>34</sup> Our sample size of 180 exceeds the suggested threshold of 100 for models with three or more indicators per factor,<sup>35</sup> supporting model convergence. Additionally, factor loadings are strong across constructs, with even the lower-loading factors averaging above .60, indicating moderate to high reliability. Analyses used a  $p < .05$  significance threshold and effect sizes were interpreted using standardized path coefficients ( $\beta$ ). Standardized  $\beta$  values of approximately 0.10, 0.30, and 0.50 were interpreted as small, medium, and large effects, respectively.

## Results

Confirmatory Factor Analyses were conducted to assess the factor structure of each scale. Relevant results are described below, and full factor loadings and CFA model fit statistics are available on OSF ([tinyurl.com/GFIELEWB-Sup](https://tinyurl.com/GFIELEWB-Sup)).

### *Surface acting scale*

The model specified a single latent factor (surface acting) measured by three observed items. The model was saturated ( $df = 0$ ), and therefore model fit indices such as RMSEA and CFI were not available. Factor loadings were all statistically significant and ranged from 0.54 to 0.83, indicating moderate to strong item-factor relationships. Internal consistency was acceptable, with Cronbach's alpha = 0.74 and composite reliability = 0.76. The  $R^2$  values for the items ranged from 0.29 to 0.69, suggesting acceptable levels of explained variance.

### *Deep acting scale*

The model specified a single latent factor (deep acting) measured by three observed items. The model was saturated ( $df = 0$ ), and therefore model fit indices such as RMSEA, CFI, and TLI were not available. Factor loadings were all statistically significant and ranged from 0.66 to 0.79, indicating moderate to strong item-factor relationships. Internal consistency was acceptable, with Cronbach's alpha = 0.77 and composite reliability = 0.77. The  $R^2$  values for the items ranged from 0.44 to 0.63, suggesting acceptable levels of explained variance.

### *Emotional contagion scale*

The model specified a single latent factor (emotional contagion) measured by five observed items. The original model demonstrated poor fit to the data ( $\chi^2(5) = 34.44$ ,  $p < .001$ ; CFI = 0.815; RMSEA = 0.182). Item EC4 ("I don't really notice how my participants feel during fitness classes") exhibited a particularly low standardized loading (0.298) and very low explained variance ( $R^2 = 0.089$ ), indicating it may not meaningfully contribute to the latent construct. Examination of the modification indices did not reveal any relevant correlations, so item EC4 was removed. After removal of this item, the final model fit was excellent ( $\chi^2(5) = 0.064$ ,  $p = 0.968$ ; CFI = 1.00; RMSEA = 0.00). Internal consistency was acceptable, with Cronbach's alpha = 0.70 and composite reliability = 0.71.

*Emotional exhaustion scale*

The model specified a single latent factor (emotional exhaustion) measured by ten observed items. The model demonstrated excellent fit to the data ( $\chi^2(35) = 42.007$ ,  $p = 0.193$ ; CFI = 0.994; RMSEA = 0.034). Modification indices did not suggest any substantial changes that would meaningfully improve model fit. Although item EE4 demonstrated a relatively low factor loading (0.161,  $p = 0.037$ ) and explained variance (0.026), we retained it to preserve the integrity and content coverage of the scale. Internal consistency was excellent, with Cronbach's alpha = 0.92 and composite reliability = 0.93.

*Job satisfaction scale*

The model specified a single latent factor (job satisfaction) measured by six observed items. The original model demonstrated mediocre fit to the data ( $\chi^2(9) = 23.088$ ,  $p = 0.006$ ; CFI = 0.954; RMSEA = 0.094). Examination of the modification indices revealed that a correlation term for items JS5 ("I like my job better than the average worker does") and JS6 ("I find real enjoyment in my work") would improve model fit. The final modified model had a significantly better fit than without the item correlation ( $\Delta \chi^2(1) = 10.702$ ,  $p < .01$ ) and had a good fit ( $\chi^2(8) = 12.386$ ,  $p = 0.135$ ; CFI = 0.986; RMSEA = 0.056). Internal consistency was good, with Cronbach's alpha = 0.78 and composite reliability = 0.80.

*Turnover intention scale*

The model specified a single latent factor (turnover intention) measured by six observed items. The original model demonstrated poor fit to the data ( $\chi^2(9) = 138.232$ ,  $p < 0.001$ ; CFI = 0.664; RMSEA = 0.284). Examination of the modification indices revealed that including correlation terms for items TI1 ("I intend to pursue alternate employment outside of group fitness instructing in the foreseeable future") and TI2 ("I will likely explore other career opportunities outside of the fitness industry within the next years"), and TI5 ("I plan to be a group fitness instructor for the foreseeable future" - REVERSED) and TI6 ("I want to be a group fitness instructor for the foreseeable future" - REVERSED) would improve model fit. The final modified model had a significantly better fit than without the item correlations ( $\Delta \chi^2(2) = 132.88$ ,  $p < .001$ ) and had a good fit ( $\chi^2(7) = 5.347$ ,  $p = 0.618$ ; CFI = 1.00; RMSEA = 0.00). Internal consistency was acceptable, with Cronbach's alpha = 0.79 and composite reliability = 0.76.

*Emotional labor and outcome intercorrelations*

Surface acting and deep acting  $r(171) = .16$ ,  $p = .017$  were not significantly correlated, indicating that they are distinct and suggesting that individual GFIs may tend to use one, both, or neither. More emotional exhaustion was associated with less job satisfaction,  $r(169) = -.27$ ,  $p < .001$ . Less job satisfaction was associated with more turnover intention,  $r(174) = -.54$ ,  $p < .001$ . There was not a significant correlation between turnover intention and emotional exhaustion,  $r(171) = .06$ ,  $p = .202$ .

*Structural equation modeling*

An SEM was estimated that included surface acting, deep acting, and emotional contagion as predictors, and emotional exhaustion, job satisfaction, and turnover intention as outcome variables. Gender, race/ethnicity, age, fitness class intensity, and years as a GFI were included as covariates. The model demonstrated acceptable fit to the data ( $\chi^2(678) = 943.855$ ,  $p < 0.001$ ; CFI = 0.896; RMSEA = 0.048).

To test our hypotheses regarding the relationships between work-related emotional processes and work-related well-being outcomes among GFIs, we examined the standardized regression coefficients from the structural equation model, presented in the top panel of Table 1.

**Table 1.** Standardized Regressions for Emotional Exhaustion, Job Satisfaction, & Turnover Intention.

| Predictor                                                     | Emotional Exhaustion |         | Job Satisfaction |         | Turnover Intention |         |
|---------------------------------------------------------------|----------------------|---------|------------------|---------|--------------------|---------|
|                                                               | $\beta$              | p-value | $\beta$          | p-value | $\beta$            | p-value |
| Surface Acting                                                | 0.507                | <.001   | -0.222           | 0.001   | 0.218              | 0.017   |
| Deep Acting                                                   | 0.089                | 0.293   | 0.057            | 0.237   | -0.267             | 0.004   |
| Emotional Contagion                                           | 0.154                | 0.423   | -0.111           | 0.313   | 0.498              | 0.018   |
| Gender (vs. Female)                                           |                      |         |                  |         |                    |         |
| Male                                                          | -0.123               | 0.434   | -0.039           | 0.657   | 0.105              | 0.422   |
| Non-binary                                                    | 0.815                | 0.152   | 0.214            | 0.504   | -0.003             | 0.994   |
| Race (vs. Monoracial White)                                   |                      |         |                  |         |                    |         |
| Monoracial Black                                              | 0.445                | 0.013   | -0.076           | 0.450   | 0.262              | 0.094   |
| Other (multi-racial, monoracial non-Black non-White, missing) | 0.152                | 0.401   | -0.164           | 0.116   | 0.004              | 0.980   |
| Intensity (vs. High)                                          |                      |         |                  |         |                    |         |
| Low                                                           | 0.162                | 0.260   | -0.075           | 0.359   | -0.013             | 0.913   |
| Mixed                                                         | 0.120                | 0.534   | 0.010            | 0.926   | 0.043              | 0.789   |
| Age                                                           | 0.132                | 0.326   | 0.136            | 0.083   | -0.279             | 0.026   |
| Yrs as GFI                                                    | -0.008               | 0.418   | 0.001            | 0.878   | 0.014              | 0.104   |

#### *Emotional exhaustion*

Surface acting was significantly positively associated with emotional exhaustion, with the  $\beta$  indicating a large effect of surface acting on emotional exhaustion. Deep acting and emotional contagion were not significant predictors of emotional exhaustion. Regarding demographic variables, compared to GFIs who identified as monoracial White, GFIs identifying as monoracial Black reported significantly higher emotional exhaustion, with the  $\beta$  reflecting a medium-to-large effect. The “Other” racial-ethnic group, gender, class intensity, age, and years of experience as a GFI showed no significant associations with emotional exhaustion.

#### *Job satisfaction*

Surface acting was significantly negatively associated with job satisfaction, with the  $\beta$  reflecting a small-to-moderate effect, indicating that greater surface acting corresponds to lower job satisfaction. Deep acting and emotional contagion were not significant predictors of job satisfaction. Race, gender, class intensity, age, and years of experience as a GFI were not significantly related to job satisfaction.

#### *Turnover intention*

Surface acting was positively associated with turnover intention, with the  $\beta$  showing a small-to-moderate effect, indicating that GFIs with higher use of surface acting had more intention of leaving their job as a GFI. Deep acting was negatively associated with turnover intention, with the  $\beta$  reflecting a moderate effect and indicating that GFIs with higher use of deep acting had less intention of leaving their job as a GFI. Emotional contagion was also positively associated with

turnover intention, with the  $\beta$  reflecting a large effect and indicating that GFIs who experience more emotional contagion had more intention of leaving their job as a GFI. Among demographic covariates, older age groups were associated with lower turnover intention, with the  $\beta$  showing a moderate effect. Race, gender, years of experience as a GFI, and class intensity did not significantly predict turnover intention.

### *Hypothesis outcomes*

Consistent with our hypotheses, surface acting was significantly positively associated with emotional exhaustion and turnover intention and negatively associated with job satisfaction. Deep acting showed a significant negative association with turnover intention, but its associations with emotional exhaustion and job satisfaction were not statistically significant, providing only partial support for our hypotheses. Emotional contagion was significantly positively related to turnover intention but was not significantly associated with emotional exhaustion or job satisfaction, partially supporting the hypothesis regarding its associations. Exploratory analyses revealed monoracial Black GFIs reported more emotional exhaustion than monoracial White GFIs and that older GFIs indicated less turnover intention.

## **Discussion**

The aim of this study was to investigate whether specific work-related emotional processes (emotional labor strategies and experiences of emotional contagion) among GFIs are associated with work-related emotional well-being outcomes (emotional exhaustion, job satisfaction, and turnover intention). Findings highlight the importance of emotional labor in GFIs and its relationship with work-related well-being outcomes. We extend the findings from Pilates instructors<sup>7</sup> to GFIs; the latter lead a wider range of fitness classes, exercises, and movements. We also expand findings on emotion labor in GFIs to a wider cultural context. Further, this study included additional variables, including emotional contagion, job satisfaction, and turnover intention, which provides a more detailed and extensive understanding of how work-related emotional processes are associated with work-related well-being outcomes. Our sample's demographics are similar to 2022 Census Bureau figures for GFIs,<sup>28</sup> supporting some generalizability of these findings to the GFI workforce in the USA. Similarities with findings among Korean instructors<sup>7</sup> suggest cross-cultural consistency in the importance of emotional labor in GFI experiences. More generally, it confirms the importance of exploring the experience of front-line exercise workers, whose job involves both technical and physical skill as well as managing their own and influencing others' emotions.

### *Outcome correlations*

The associations between emotional exhaustion, job satisfaction, and turnover intention provide insights into GFI emotional well-being. Higher emotional exhaustion was linked to lower job satisfaction. Less satisfied GFIs were more likely to consider leaving their GFI roles. However, emotional exhaustion and turnover intention were not directly linked, indicating that exhaustion alone may not drive turnover, and other factors should be investigated and considered to maintain an experienced GFI workforce.

### *Surface acting*

The strongest and most consistent associations were between surface acting and negative outcomes. As hypothesized, changing emotional expression without changing felt emotions

was related to more emotional exhaustion, less job satisfaction, and more job turnover intent. This is aligned with findings in similar occupations regarding emotional exhaustion,<sup>7,11-13,16,36</sup> satisfaction,<sup>12,13,36</sup> and turnover intention.<sup>13</sup> Surface acting appears universally taxing. These findings should motivate support for GFIs. One option might be helping them adopt more authentic, sustainable strategies for managing emotions; another would be changing expectations for projecting particular emotions.

### *Deep acting*

The potential value of more authentic strategies is underscored by the findings for deep acting. Deep acting, or changing felt emotions according to the situation, had a more nuanced relationship with emotional well-being. As hypothesized, the more GFIs reported changing their felt emotions, the less intent they reported to leave their job; this link is sometimes,<sup>12,37</sup> but not always,<sup>13</sup> found in other occupations. Perhaps because the job of a GFI is heavily centered on client relations and emotions, the use of deep acting, an approach that is both more effective and less emotionally exhausting than surface acting, plays a stronger role in influencing job retention in GFIs compared to some other professions.

We found no relation between deep acting and job satisfaction. Research on other occupations sometimes,<sup>12,13</sup> but not always,<sup>36</sup> finds this association. Job satisfaction for GFIs likely stems from factors beyond emotional labor, such as fulfillment derived from helping others achieve their fitness goals, physical benefits of leading classes, or social connections with participants.

Our hypothesis that deep acting would relate to less emotional exhaustion was not supported. Some studies find that deep acting has no relationship with emotional exhaustion,<sup>12</sup> some find it associated with decreased emotional exhaustion,<sup>7,13</sup> and others find a positive relationship with emotional exhaustion.<sup>36</sup> These discrepancies suggest that additional factors, such as the individual's coping strategies or the specific work environment, play a role. More research is needed to better understand the conditions under which deep acting might either mitigate or exacerbate emotional exhaustion in GFIs.

### *Exploratory findings*

We hypothesized that differences in emotional contagion would influence GFIs' work-related well-being outcomes. This was partially supported by an association between emotional contagion susceptibility and turnover intention. To enhance GFI well-being and maintain GFI retention, more research should be done to investigate what aspects of emotional contagion may be contributing to greater desire to leave the job. It may be that individuals who are more susceptible to contagion simply have a more difficult time in occupations requiring constant engagement with others, especially when their emotions and their clients' emotions are part of their job responsibility. Our finding that older GFIs experience less turnover intention is also found in teachers.<sup>12</sup> As the association exists while controlling for years of experience, it appears more related to life stage than time being a GFI.

There is limited research on GFIs that accounts for race and ethnic differences. However, that monoracial Black GFIs indicated significantly more emotional exhaustion than monoracial White GFIs aligns with some findings in service employees that race explains emotional exhaustion because of increased stress.<sup>38</sup> This may be due in part to less workplace support for Black employees,<sup>39</sup> among other results of systemic racism. More research is needed to focus on how

systemic racism affects the well-being of GFIs and general racial differences within the group fitness field. This may be especially important because in the US there is a lower percentage of Black GFIs than in the general population.<sup>28</sup> Supporting demographically wider leadership may support broader participation in group fitness instruction. Additionally, because of our limited sample, monoracial individuals of races other than Black and White and multiracial GFIs were combined as “Other.” The small number and heterogeneity in this group makes an absence of findings less informative. More research needs to center multiracial individuals and other minoritized racial/ethnic groups to better understand their unique GFI experiences and well-being.

Most of our respondents worked six or fewer hours per week, and the vast majority worked less than full-time. However, we did not measure whether participants received benefits or whether they held employee vs independent contractor status. Future research should assess these features of employment, as they may affect workforce experience and the possible supports that could address costs of emotional labor. Additionally, as this is a cross-sectional survey, we could not directly test the causal relations among the variables. The findings do, however, provide a foundation for possible intervention studies that could both establish causal direction and identify ways to enhance emotional well-being for GFIs. Techniques such as mindfulness may offer valuable strategies for GFIs to navigate the emotional demands of their roles as it has been shown to reduce emotional exhaustion and improve job satisfaction.<sup>40</sup>

Also, we suggest qualitative approaches to better understand the work experiences of GFIs and relevant well-being factors other than those already examined. Such research could provide a better understanding of how a variety of factors may interact with emotional labor to influence GFI work-related well-being outcomes. For example, how GFI’s physical capital requires aesthetic labor,<sup>14</sup> how the affective atmosphere is co-produced to allow more exploration of factors building on emotional contagion,<sup>20</sup> and build on our findings of the influence of race, looking at intersectionality in the experience of being a GFI. GFIs are a critical part of the fitness and exercise labor force, yet little research has examined factors that influence their emotional well-being and feelings about their job. This study establishes the importance of considering emotional labor as an influence on GFI well-being, job satisfaction, and intention to stay in the workplace. These new findings in a critical, understudied population should motivate further research understanding the working context and well-being of exercise science professionals working in group fitness settings, such as personal trainers and other client-facing fitness professionals who similarly rely on emotional labor behaviors, and facilitate interventions on identified social-emotional processes supporting them and those whose exercise benefits from group fitness opportunities.

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researcher specializing in social-emotional processes. Author three is a White, cisgender male professor of sport.

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