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Teacher-Directed Violence and Anxiety and Stress: Predicting Intentions to Transfer and Quit

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Abstract

Teacher well-being and experiences of violence have become issues of national concern, and teacher shortages have increased since the onset of COVID-19. In this national study, we examined verbal and physical violence against teachers from multiple aggressors and the role of anxiety and stress in predicting intentions to transfer positions or quit the profession. The majority of the sample of 9,370 pre-Kindergarten–12th grade teachers was White (79%) and female (79%). Descriptive analyses revealed that 25% of teachers reported intentions to transfer schools and 43% of teachers reported intentions to quit teaching. Structural equation model results indicated pre-COVID-19 verbal and threatening violence from students, parents, colleagues, and administrators predicted teacher anxiety and stress and intentions to transfer schools (R^2 ranged from .18 to .23) and quit the profession during COVID-19 (R^2 ranged from .34 to .36). Anxiety and stress significantly mediated the relation between verbal and threatening violence across all aggressors and teacher intentions to transfer schools and quit the profession. Physical violence from certain aggressors predicted anxiety and stress and intention to transfer schools (R^2 ranged from .15 to .18) and quit the profession (R^2 ranged from .32 to .34). Further, teacher and school characteristics, such as identifying as a person of color and teaching at the middle and high school levels, were associated with greater intentions to transfer schools and quit the profession. Implications for school-based research, practice, and policy are discussed to address violence and promote positive work and learning environments for all school stakeholders.

Impact and Implications

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Teachers who experience verbal and threatening violence from students, parents, colleagues, and administrators are at increased risk for anxiety and stress, which predict greater intentions to transfer schools and quit the profession. Physical violence from certain aggressors also predicts anxiety and stress and intentions to transfer schools and quit the profession. Effective, comprehensive policies and practices are needed to address violence across aggressors to enhance school safety and climate, teacher mental health, and retention.

Keywords

teacher attrition; teacher violence and aggression; mental health; stress and anxiety; COVID-19

Educators shape the future of our nation, and thus, threats to their well-being and a shrinking workforce are of the utmost concern. Unfortunately, violence directed against educators is a crisis of national and global scope (e.g., Badenes-Ribera et al., 2022; Berkowitz et al., 2022) that threatens educator well-being and contributes to turnover. Victimization and violence are experiences that can vary in nature and severity across verbal (e.g., intimidation, bullying, threats) and physical (e.g., objects thrown, physical attacks) offenses (Longobardi et al., 2019). A recent meta-analysis revealed that over half of teachers experienced violence from students within the previous 2 years (Longobardi et al., 2019). It is not surprising that teachers report students as primary sources of verbal (McMahon, Davis, et al., 2020) and physical violence (e.g., McMahon, Peist, et al., 2020), as they spend most of their school day interacting with students. In addition to violence from students, teachers experience violence from other stakeholders in the school community, including parents, colleagues, and administrators (e.g., McMahon et al., 2014). Parent and caregiver violence against teachers is a significant problem (Badenes-Ribera et al., 2022; McMahon et al., 2023) that contributes to poorer teacher well-being (Steiner et al., 2022). However, less is known about how violence from other aggressors (e.g., administrators, colleagues) affects teacher mental health and retention (Longobardi et al., 2019).

Violence in schools is negatively associated with perceptions of safety, instructional time, student engagement, achievement, and social-developmental learning (e.g., Benbenishty & Astor, 2019; Kutsyuruba et al., 2015). There can also be far-reaching effects of teacher-directed violence on the health and well-being of teachers, including depression, anxiety, posttraumatic stress, sleep problems, headaches, and relationship challenges (De Vos & Kirsten, 2015). Ultimately, victimized teachers are more likely to transfer schools or leave the teaching profession (Curran et al., 2019). However, research is needed that examines the mechanisms whereby teacher victimization and well-being influence professional decisions.

Teacher Anxiety and Stress

Consequences of teacher-directed violence include increased stress, anxiety, and burnout (Dzuka & Dalbert, 2007; Steiner et al., 2022). Indeed, poor mental health is a growing concern among teachers in the United States (Kush et al., 2022). Occupational stress among teachers is notably high (Liss-Levinson, 2021), with 52% of K–12 teachers reporting burnout (Marken & Agrawal, 2022), and such stress has worsened during recent decades (Holt et al., 2020).

In addition to consistent job-related stressors, the COVID-19 pandemic has significantly impacted teachers' well-being. Teachers reported deteriorating mental health over the course of the pandemic worldwide (e.g., Kim et al., 2022; Kush et al., 2022; Nabe-Nielsen et al., 2022). In their meta-analysis of eight United States and international studies, Ozamiz-Etxebarria et al. (2021) found that stress was prevalent in about 30% of teachers during the pandemic, while anxiety and depression were reported by 17% and 19% of teachers, respectively. Further, a 2021 report on a nationally representative sample of teachers in the United States indicated that when asked about work-related emotions, 52% were stressed, 52% were burned out, and 34% were anxious (Liss-Levinson, 2021). These rates are not surprising when considering the shifting landscape of the teaching profession during COVID-19. Teachers were faced with ever-changing instructional modes, lack of communication and frustrations with school administration, increased workloads, tensions around mask-wearing, as well as personal and classroom-related health concerns (McMahon et al., 2022a; Robinson et al., 2023).

In addition to COVID-19, the social and political context within the United States over the past several years has compounded teacher violence and mental health concerns. Political tension and polarization impacted teachers, forcing them to manage their daily work demands amidst resistance to health precautions (e.g., masks, vaccines) and politically driven changes to curricula (e.g., book bans, critical race theory, gender identity). Such barriers, on top of the lower salaries that teachers receive in relation to other professions in the United States, have likely exacerbated teacher reports of feeling disrespected in their profession (EdWeek Research Center, 2022; McMahon et al., 2017; Steiner et al., 2022). Taken together, these stressors may contribute to teachers' intentions to transfer schools or leave the profession.

Teachers' Intentions to Transfer and Quit

There are various school climate factors that lead to teacher turnover, including declining teacher mental health, perceived lack of support from parents, administrators, and community members, concerns with discipline policies, classroom placement, low pay, and inadequate funding and resources (e.g., EdWeek Research Center, 2022; Peist et al., 2023). Further, the COVID-19 pandemic has exacerbated transfer and quit rates in schools (National Education Association [NEA] & GBAO Strategies, 2022). Several recent reports found that about one half of teachers want to quit the profession (EdWeek Research Center, 2022; NEA & GBAO Strategies, 2022; McMahon et al., 2022a), and one third of teachers who report a desire to quit end up doing so in the following year (Nguyen et al., 2022). Overall, high rates of teachers' intentions to leave their profession reflect degraded well-being and job satisfaction.

Teachers' intentions to leave the profession have broad implications considering the recent U.S. teacher shortage crisis (Carver-Thomas et al., 2021; NEA & GBAO Strategies, 2022) that has forced some states to implement stopgap measures, such as employing college students and enlisting military personnel to teach (Natanson, 2022). Additional loss of school personnel overburdens those who remain in schools and may significantly interfere with student belonging and success (e.g., König & Frey, 2022).

However, turnover varies across teachers, and demographic differences in intentions to transfer schools or quit the profession are also important to consider. Several studies have found that Black and Latinx teachers report disproportionately high intentions of transferring schools or quitting the profession (e.g., Carver-Thomas et al., 2021; NEA & GBAO Strategies, 2022; Steiner et al., 2022; Steiner & Woo, 2021). In addition, women and midcareer teachers may be more likely to report intentions to leave the profession (EdWeek Research Center, 2022). Teacher resignation rates are also highest in urban schools (Diliberti & Schwartz, 2023). More research is needed to examine these career decisions and the factors that contribute to intentions to leave, including demographic differences, violence from a range of stakeholders, and work-related anxiety.

Theoretical Framework

The job turnover theory used in this study was first proposed by Mobley et al. (1979). In this framework, and indeed in much of the turnover literature (e.g., Griffeth et al., 2000), intentions to quit are deemed the proximal factor that serves as a potent predictor of turnover. Mobley et al. (1979) suggested that distal individual factors and experiences (e.g., poor job conditions) are associated with intermediary mechanisms (e.g., job satisfaction), which in turn predict quitting intentions. Steel and Lounsbury (2009), in their extensive review of the literature on conceptual models of turnover, synthesized the Mobley framework with other research, proposing a model emphasizing affective components of the intermediary mechanism (e.g., satisfaction, job stress, mental health) that stimulate someone to weigh the costs and benefits of staying in a particular job. In cases where the costs outweigh benefits, Steel and Lounsbury (2009) postulated that an individual will report intentions to leave. The current investigation builds upon these mediation theories and examines violence against teachers (distal individual factor) predicting teacher anxiety and stress experienced in the workplace (intermediary affective mechanism), which ultimately leads to intentions to transfer schools or quit the profession (proximal factor). See Figure 1 for our guiding theoretical framework.

The Present Study

In the present study, teacher experiences of violence and work-related anxiety and stress were examined as predictors of pre-K through 12th grade teachers' intentions to transfer schools or leave the education profession. We hypothesized that (a) teacher experiences of verbal and threatening violence and physical violence from students, parents, colleagues, and administrators would have direct effects on teacher anxiety and stress, intentions to transfer schools, and intentions to quit the profession, (b) teacher anxiety and stress would have direct effects on intentions to transfer schools and quit the profession, (c) verbal and threatening violence and physical violence, from students, parents, colleagues, and administrators, would have indirect effects on intentions to transfer schools and quit the profession through the pathway of anxiety and stress, and (d) teacher characteristics (i.e., race/ethnicity, teaching experience) and school characteristics (i.e., school level, urbanicity) would be associated with intention to transfer schools and quit the profession. For example, teachers of color and teachers in urban schools are hypothesized to have higher transfer and quit intentions than White and rural school teachers.

Method

Participants

The sample consisted of 9,370 U.S. teachers—including general education and special education teachers and instructional and content specialists—from all 50 states who completed an online survey about school safety. Participants were 79.0% female and 20.2% male, with fewer than 1% identifying as nonbinary, transgender, or multigender. Participants were 79.4% White, 6.4% Black, 5.5% Hispanic, 5.1% Multiracial, 1.6% Asian/Pacific Islander, and 2.0% Native American/Alaska Native or “other” race. The proportions for gender and race are consistent with national demographic patterns of teachers (Taie & Goldring Westat, 2020). Respondents had a range of fewer than one to more than 45 years of experience ($M = 14.22$ years, $SD = 9.32$, $Mdn = 13.00$). Teachers taught in elementary (41.1%), middle (21.0%), and high schools (33.2%), as well as in pre-K–12th grade schools (4.7%), and in rural (26.9%), suburban (44.5%), and urban (28.6%) settings. The mode of classroom instruction varied, with approximately 54.5% of the educators teaching fully in-person, 27.7% doing hybrid teaching, and 17.8% teaching fully online.

Measures

For this cross-sectional study, we assessed teacher victimization, anxiety and stress, and intentions to transfer schools or quit the profession. All measures were developed based on the school violence literature or adapted from previously published measures. Measures were examined for validity and pilot tested with the larger overall sample of 14,966 teachers, school psychologists, social workers, counselors, staff, and administrators. The full sample was used to develop the scales to maximize statistical power and ensure they were representative of the experiences of educators across diverse roles. We conducted exploratory factor analyses (EFA, direct oblimin rotation) and confirmatory factor analyses (CFA, maximum likelihood estimation) separately for each measure to create the scales and validate their scores. For the EFAs, items were retained if the coefficients were $>.30$. CFAs were used to provide support for the factor structures that emerged from the EFAs. We determined model fit using criteria specified by Hu and Bentler (1999), such as root-mean-squared error of approximation, $RMSEA < .05$, comparative fit index, $CFI > .90$, and standardized root-mean-square residual, $SRMR < .08$.

Educator Victimization Scale—The Educator Victimization Scale (McMahon et al., 2022b) assessed the frequency of both Verbal and Threatening Violence and Physical Violence perpetrated by students, parents, colleagues, and administrators prior to COVID-19. We chose to focus on pre-COVID-19 victimization experiences given that many schools operated remotely or in a hybrid instructional modality during the COVID-19 pandemic. The scale was adapted from the original American Psychological Association (APA) Task Force victimization scale (McMahon et al., 2014), and participants responded using a frequency scale (0 = *never*, 1 = *once*, 2 = *a few times*, 3 = *monthly*, 4 = *weekly*, 5 = *daily*). The Verbal and Threatening scale consists of eight items (e.g., “I received obscene remarks or gestures” and “I was verbally threatened”). The Physical Violence scale consists of three items (e.g., “I had objects thrown at me” and “I was physically attacked [e.g., bitten, scratched, hit]”). The EFAs affirmed two distinct violence subscales: (a) Verbal and

Threatening and (b) Physical Violence. A CFA with both violence factors showed improved model fit compared to a one-factor structure with model fit ranging between .06 and .10 for RMSEA, .89 and .94 for CFI, and .86 and .92 for Tucker-Lewis index (TLI) across different aggressors. Next, Verbal and Threatening Violence and Physical Violence subscales were created for each aggressor (e.g., students, parents, colleagues, administrators), by first dichotomizing items (i.e., never vs. at least once) and then summing across violent behaviors. There were eight subscales (Verbal and Threatening Violence—student: $\alpha = .82$, $\omega = .85$; parent: $\alpha = .80$, $\omega = .83$; colleague: $\alpha = .81$, $\omega = .84$; administrator: $\alpha = .81$, $\omega = .86$; Physical Violence: student: $\alpha = .86$, $\omega = .87$; parent: $\alpha = .73$, $\omega = .74$; colleague: $\alpha = .68$, $\omega = .69$; administrator: $\alpha = .75$, $\omega = .75$). The ranges for the standardized factor loading of the CFAs of each subscale were as follows: Verbal and Threatening Violence—student: $\beta = .39-.74$, parent: $\beta = .27-.73$, colleague: $\beta = .29-.74$, administrator: $\beta = .31-.81$, Physical Violence—student: $\beta = .78-.84$, parent: $\beta = .49-.68$, colleague: $\beta = .21-.49$, administrator: $\beta = .41-.68$.

Educator Work Anxiety and Stress Scale—The Educator Work Anxiety and Stress Scale was developed by the Task Force (McMahon, Espelage, et al., 2022). For this three-item scale, respondents were asked to rate how often they felt the following since COVID-19 on a 5-point Likert-type scale ranging from not at all to almost always. Items were “I find my work stressful,” “I have anxiety when thinking about school,” and “My anxiety affects my job performance.” Model fit statistics for the anxiety measure are not reported here, as the model is just-identified when the latent construct contains only three indicators. Scores on this scale yielded strong internal consistency estimates ($\alpha = .86$; $\omega = .87$). Standardized factor loadings ranged from $\beta = .73$ to $.96$

Educator Transfer and Quit Scale—The Educator Transfer and Quit Scale (McMahon, Astor, et al., 2022) was developed by the Task Force and includes two subscales of three items each assessing teacher intentions to transfer schools and quit the profession at the time of survey completion. For each item, survey respondents were asked to indicate their agreement on a 5-point Likert-type scale (*strongly disagree* to *strongly agree*). Transfer subscale items were “I want to transfer to a different position or school/district,” “I plan to transfer to a different position or school/district,” and “COVID-19 has increased my desire to transfer to a different position or school/district” ($\alpha = .90$; $\omega = .90$). The Quit subscale items were “I want to quit my profession,” “I plan to quit my profession or retire early,” and “COVID-19 has increased my desire to quit my profession or retire early” ($\alpha = .90$; $\omega = .90$). The EFAs and CFAs affirmed the two-factor structure for the intentions to transfer and quit constructs, which showed improved model fit compared to a one-factor model (RMSEA = 0.16, CFI = 0.95 and TLI = .91). Although the RMSEA was above the recommended cutoff, we retained the two-factor solution due to the improved fit and to examine potential differences in the associations between teacher-directed violence and intent to transfer or quit. In the structural equation models (SEMs), we used the scores from the Transfer and Quit subscales. However, in the descriptive statistics, we also note the percent of teachers who reported intentions to transfer or quit by dichotomizing the scale (teachers who “agreed” or “strongly agreed” vs. those who “strongly disagreed,”

“disagreed” or were “neutral”). Standardized factor loadings ranged from $\beta = .82$ to $.91$ for the Quit subscale and from $\beta = .74$ to $.96$ for the Transfer subscale.

Procedure

The American Psychological Association’s Task Force on Violence Against Educators and School Personnel convened in 2019 to address this understudied topic and to build upon the previous APA Task Force on Classroom Violence Against Teachers assembled in 2008. Institutional review board approval for this study was granted by the University of North Carolina at Chapel Hill. For the teacher survey, the new task force partnered with the National Education Association and American Federation of Teachers to gather input on the survey and distribute to their members via social media (i.e., Facebook, Twitter), newsletters, and emails. The survey was also distributed via email based upon contact information gathered by MCH Strategic Data. MCH Strategic Data is a provider of education data which gathers educator contact information by conducting website scans of public sources of education data and importing this information into a national database. The study was framed as a school safety and climate survey, and teachers were given an opportunity to share their experiences and recommendations to inform practice and policy. No incentives were offered to complete the survey.

The APA Task Force on Violence Against Educators and School Personnel distributed the survey to United States teachers, stratified by region (i.e., west, midwest, south, northeast), urbanicity (i.e., rural, suburban, urban), and school level (i.e., elementary, middle, high school, all grades) and sent two reminders to increase response rates. Participants provided informed consent online before beginning the survey. Cross-sectional survey data were collected from August 2020 through June 2021; most respondents (97%) completed the survey between January and May of 2021. Measures were designed to have participants report their (a) victimization *prior* to COVID-19 (August 2019–March 2020), (b) anxiety and stress *during* COVID-19 (during the current school year; August 2020–June 2021), and (c) intentions to transfer schools or quit the profession (at the time of survey completion; August 2020–June 2021).

Data Analytic Approach

Research questions were tested with SEMs using the lavaan package in RStudio (R Core Team, 2022; Rosseel, 2012). Data were cleaned and prepared for analyses using SPSS Version 26 (International Business Machines Corporation, 2019). Missing data were handled using full information maximum likelihood estimation in lavaan due to its robustness to deviations from normality (Enders & Bandalos, 2001). Missing data percentages ranged from .92% to 30.94% ($M = 21.96\%$) across all study variables. To determine whether the missing data were missing at random, a logistic regression analysis was conducted in which cases missing on each variable were regressed on demographic characteristics. Analyses showed significant associations between demographic characteristics and multiple study outcome variables indicating that data were not missing at random. Thus, demographic variables (i.e., gender, race, teaching experience, school setting, and school level) were taken into account as covariates in subsequent analyses. Model fit was assessed with the following parameters: RMSEA $< .05$, CFI $> .90$, SRMR $< .08$, and TLI $> .90$. Estimates and mediating

effects were standardized for ease of interpretation. As a sensitivity analysis, we conducted additional CFAs to test the validity of the measurement model using this sample, which included a latent factor for each of the measures in the model and no other predictors. Results suggested that the measurement model adequately captured the factor structure of the measures with CFIs ranging from .94 to .96, TLIs between .92 and .94, and RMSEAs around the recommended cutoff ranging from .06 to .08.

The SEMs included the original items of each measure as indicators of the latent variables. Intentions to transfer schools and intentions to quit the profession were examined as distinct dependent variables. Participant-reported anxiety and stress was tested as a mediator in the association between violence and intentions to transfer and quit. Eight separate SEM models were run with five teacher-reported latent variables. Each model included (a) verbal and threatening or physical violence from offender; (b) anxiety/stress; (c) intentions to transfer schools; and (d) intentions to quit the profession. Four models were run for verbal and threatening violence (one for each offender that included student, parent, colleague, administrator) and similarly four models for physical violence, one for each offender. Each model also included the following five demographic predictors: gender, race, years of teaching experience, school setting (i.e., rural, urban, or suburban), and school level (i.e., elementary, middle, high school, all grades).

Results

Findings revealed that 25% of teachers reported intentions to transfer schools and 43% of teachers reported intentions to quit the profession. Means, standard deviations, and bivariate correlations for all variables are presented in Table 1. Only correlations of $|.20|$ or greater were interpreted as meaningful (C. J. Ferguson, 2009). Teaching experience was not meaningfully associated with any other variables. However, student verbal and threatening violence was associated with student physical violence and with verbal violence from colleagues, administrators, and parents, as well as with intentions to transfer and intentions to quit. Parent verbal violence had a meaningful association with anxiety, and anxiety had meaningful associations with intentions to transfer and intentions to quit. Verbal violence from parents, colleagues, and administrators was also associated with intentions to transfer, and verbal violence from parents and administrators was associated with intentions to quit.

The rates of victimization type by aggressor are presented in Table 2. Obscene remarks or gestures, intimidation, and verbal threats were the most common types of verbal and threatening victimization (13.5%–44.3%), and objects thrown and physical attacks were the most common physical victimization experiences (1%–26.8%). Students were the most common aggressors. Intimidation was the most reported type of victimization from parent, colleague, and administrator aggressors (13.5%–29.9%).

SEM Results

Table 3 presents the fit indices for the CFA models examining the scores on the eight scales. As indicated, scores on the eight violence constructs yielded good fit on all four fit indices. Table 4 contains the coefficients from the structural models, which ranged in size and significance. The R^2 (i.e., proportion of variance in the outcome accounted for in the

model) ranged from .15 to .23 for intentions to transfer and .32 to .36 for intentions to quit the profession. Figure 2 depicts the SEM results for verbal and threatening violence for intentions to transfer schools and quit the profession, and Figure 3 depicts the SEM results for physical violence and the same outcomes.

Student Violence—As hypothesized, verbal and threatening violence from students was associated with higher teacher anxiety and stress ($\beta = .14, p < .001$) and intentions to transfer ($\beta = .25, p < .001$) and intentions to quit ($\beta = .19, p < .001$). Teacher anxiety and stress were associated with both intentions to transfer ($\beta = .32, p < .001$) and quit ($\beta = .53, p < .001$). The indirect effects of verbal and threatening violence for intentions to transfer ($\beta = .04, p < .001$) and quit ($\beta = .07, p < .001$) through anxiety and stress were also statistically significant. Physical violence from students was associated with higher teacher anxiety and stress ($\beta = .12, p < .001$) and intentions to transfer ($\beta = .16, p < .001$) and quit ($\beta = .12, p < .001$). Teacher anxiety and stress were associated with both intentions to transfer ($\beta = .33, p < .001$) and quit ($\beta = .54, p < .001$). Indirect effects of physical violence via teacher anxiety and stress for intentions to transfer ($\beta = .04, p < .001$) as well as quit ($\beta = .06, p < .001$) were also significant.

Parent Violence—As hypothesized, verbal and threatening violence from parents was associated with higher teacher anxiety and stress ($\beta = .25, p < .001$) and intentions to transfer ($\beta = .17, p < .001$) and quit ($\beta = .17, p < .001$). Teacher anxiety and stress were associated with both intentions to transfer ($\beta = .31, p < .001$) and quit ($\beta = .52, p < .001$). The indirect effects via anxiety for intentions to transfer ($\beta = .08, p < .001$) and quit ($\beta = .13, p < .001$) were also significant. Physical violence from parents was associated with higher teacher anxiety and stress ($\beta = .07, p < .001$) and intentions to transfer ($\beta = .06, p < .01$), but not with intentions to quit. Teacher anxiety and stress were associated with both intentions to transfer ($\beta = .35, p < .001$) and quit ($\beta = .56, p < .001$). There was an indirect effect of parental physical violence through anxiety and stress for intentions to transfer ($\beta = .02, p < .001$) and to quit ($\beta = .04, p < .001$).

Colleague Violence—Consistent with previous patterns and as expected, verbal and threatening violence from colleagues was associated with higher teacher anxiety ($\beta = .18, p < .001$) and intentions to transfer ($\beta = .20, p < .001$) and quit ($\beta = .13, p < .001$). Further, teacher anxiety and stress were associated with both intentions to transfer ($\beta = .32, p < .001$) and quit ($\beta = .54, p < .001$). The indirect effects through anxiety and stress were significant for both intentions to transfer ($\beta = .06, p < .001$) and quit ($\beta = .10, p < .001$). Physical violence from colleagues was not significantly associated with teacher anxiety and stress; however, it was significantly associated with higher intentions to transfer ($\beta = .07, p < .01$) and quit ($\beta = .06, p < .01$). Further, teacher anxiety and stress were associated with both intentions to transfer ($\beta = .35, p < .001$) and quit ($\beta = .56, p < .001$).

Administrator Violence—As predicted, verbal and threatening violence from administrators was associated with higher teacher anxiety and stress ($\beta = .19, p < .001$) and intentions to transfer ($\beta = .28, p < .001$) and quit ($\beta = .17, p < .001$). Further, teacher anxiety and stress were associated with both intentions to transfer ($\beta = .30, p < .001$) and quit ($\beta =$

.53, $p < .001$). The indirect effects through anxiety and stress were also significant for both intentions to transfer ($\beta = .06, p < .001$) and quit ($\beta = .10, p < .001$). Physical violence from administrators was not associated with teacher anxiety and stress. Administrator physical violence was associated with higher intentions to transfer ($\beta = .04, p < .05$) but not with intentions to quit. Teacher anxiety and stress were associated with both intentions to transfer ($\beta = .35, p < .001$) and quit ($\beta = .56, p < .001$).

Teacher and School Characteristics—Teacher and school characteristics (i.e., race/ethnicity, years of experience, school level, urbanicity) were associated with victimization, anxiety and stress, and intentions to transfer and quit (see Table 4 for specific relationships). Based on SEM results, identifying as Black, Latinx, Asian or Pacific Islander, and other races (each compared to White) was associated with significantly higher levels of transfer and quit intentions across most models, although the coefficients were modest, ranging from $\beta = .02$ to $.06$. More teaching experience was associated with lower intentions to transfer across all aggressors and types of violence ranging from $\beta = -.13$ to $-.11$. Conversely, more teaching experience was associated with higher intentions to quit across all aggressors and victimization types ranging from $\beta = .07$ to $.08$. Compared to elementary schools, teaching in middle schools and high schools was associated with higher intentions to transfer and quit across most models with significant associations ranging from $\beta = .02$ to $.07$. Compared to rural schools, working in urban schools was associated with higher intentions to transfer across verbal and physical violence from all aggressors ranging from $\beta = .05$ to $.09$ but was not associated with intentions to quit. Gender was not associated with intentions to transfer or quit.

Discussion

Research on teacher victimization, mental health, and turnover in schools is limited; yet these issues represent a rising crisis in the United States. In this study, we found high rates of teachers who reported intentions to transfer schools and quit the profession. These findings are concerning and consistent with other recent studies (e.g., EdWeek Research Center, 2022; NEA & GBAO Strategies, 2022; Steiner et al., 2022). Teacher verbal and threatening victimization from the four aggressor groups was directly related to their anxiety and stress and to teacher intentions to transfer schools and quit the profession. Moreover, indirect effects of verbal and threatening violence on intentions to quit or transfer through teacher anxiety and stress were significant across models. However, the direct and indirect effects of physical victimization differed by aggressor and intentions to transfer or quit, indicating that physical violence may only contribute to anxiety and stress and decisions to transfer or quit in specific contexts. This study is one of the first to examine pathways to teachers' intentions to transfer or quit while accounting for teacher experiences with violence from different aggressors and workplace anxiety and stress. Understanding these mechanisms can inform intervention development and teacher retention efforts.

Violence and the Intent to Transfer or Quit

Student Violence—Both student verbal and threatening and physical violence predicted intentions to transfer and quit. There were also indirect effects of both verbal and physical

student violence on teacher intentions to transfer and quit via anxiety and stress. Students were the most common aggressors in this study, similar to previous studies (Longobardi et al., 2019). Teachers regard their relationships with students as a focal point of their profession, and the inability to maintain these relationships can affect teacher self-esteem (Rots et al., 2012). Given the centrality of teacher–student relationships and the frequency of student violence against teachers, it is understandable that this violence leads to work-related anxiety and stress, which predicts intentions to transfer or quit the profession (e.g., Mack et al., 2019).

Parent Violence—Although student violence consistently predicted both transfer and quit intentions across violence type, direct and indirect effects of violence perpetrated by parents differed by type of violence and outcome. The direct effects of verbal and threatening violence and the indirect association through anxiety and stress were significant for both transfer and quit intentions. Physical violence, on the other hand, only directly predicted transfer intent but indirectly predicted both transfer and quit intentions through anxiety and stress. This finding points to the importance of teacher anxiety and stress resulting from parental violence and the need to provide resources to help teachers manage anxiety and stress and connect more effectively with parents. Although few studies focus on parental violence against teachers beyond prevalence rates, parent violence against teachers is quite common (e.g., Badenes-Ribera et al., 2022; McMahon et al., 2014). Several factors contribute to violence from parents, including conflicting perceptions about discipline, disagreements about who is accountable for student behavior, disagreements about grades or academic decisions, and lack of physical security or resources at schools (McMahon et al., 2023). These factors also contribute to teacher anxiety, which is subsequently associated with job satisfaction (K. Ferguson et al., 2022). Schools, and administrators in particular, play a key role in engaging parents and strengthening school–community–family relationships to prevent and address violence and support those affected when it occurs. Strengthening teacher–parent and school–community relations may reduce conflicts, anxiety, and stress, and ultimately reduce teacher turnover.

Colleague Violence—Though violence from colleagues was not as prevalent in this sample as violence from students or parents, both verbal and threatening violence and physical violence from colleagues predicted transfer and quit intentions. Verbal and threatening (but not physical violence) also indirectly effected transfer and quit intentions via anxiety and stress. Colleague physical violence did not lead to anxiety and stress. It is possible that the association between colleague physical violence and transfer and quit intentions may occur via other pathways, such as trauma, anger, burnout, or fear, which were not assessed in this study. Although physical violence from colleagues was low in this sample (see Table 2), it still led to teacher considerations to transfer schools or quit the profession. A recent RAND report found that fellow staff were the most common perpetrators of racial discrimination against teachers (Steiner et al., 2022). Colleagues can serve as an important source of support in the school community, which in turn may bolster teacher well-being, mental health, connection, and desire to stay in their schools. However, teachers who experience violence from colleagues may become isolated from peers and lack needed support, resulting in more feelings of anxiety. Notably, research examining colleague

violence against teachers is scant, and this topic warrants further attention to unpack teacher experiences and address and prevent offenses.

Administrator Violence—Intimidation was the most common form of administrator violence, followed by bullying (see Table 2). As with colleagues, physical violence from administrators was rare. These administrator behaviors illustrate a negative use of the power differential between teachers and administrators. Verbal and threatening administrator violence contributed directly to anxiety and stress and transfer and quit intentions and indirectly effected transfer and quit intentions through anxiety and stress. When administrators use verbal or threatening violence against teachers, teachers may have few, if any, options for redress. This inability to address harm may explain teachers' anxiety and subsequent desire to leave their jobs (e.g., Peist et al., 2020).

In contrast, administrator physical violence was only associated with transfer intentions and not associated with anxiety and stress or quit intentions. Perhaps physical violence at the hands of administrators more imminently affects teachers' perceptions of their particular situation, school setting, and climate rather than themselves or the teaching profession, thus leading to intentions to transfer but not intentions to quit. For example, teachers may attribute the physical violence as reflecting the administrator's competencies rather than their own inabilities. Similar to colleague physical violence, perhaps administrator physical violence is associated with other mental health outcomes not assessed in this study. In addition to direct administrator violence against teachers, principal responses to teacher-directed violence by others can have significant effects on teachers. For example, lack of principal support has been linked to higher levels of multiple forms of student and colleague violence directed against teachers (Martinez et al., 2015). Further, *how* principals respond to teachers' experiences of violence—such as by ignoring, minimizing, or blaming teachers—can be even more victimizing than the initial event (McMahon et al., 2017). The findings from the present study add to the limited body of research examining administrator violence against teachers and its potential consequences, and this is an area for further research.

Teacher and School Characteristics

Consistent with the hypothesis, our results indicate that teachers of color report higher intentions to transfer and quit compared to White teachers. Given that one third of teachers of color across the nation have reported being the recipients of some type of discrimination (Steiner et al., 2022), it is not surprising that these teachers consistently report worse mental health (K. Ferguson et al., 2022; Steiner et al., 2022; Steiner & Woo, 2021) and greater intentions to leave their jobs (Carver-Thomas et al., 2021; EdWeek Research Center, 2022; NEA & GBAO Strategies, 2022; Steiner & Woo, 2021). Black teachers and teachers working in underresourced urban schools may face higher levels of workplace stressors (Dixon et al., 2019) and often have more work-related demands, such as expectations to spend more of their time on noninstructional duties in addition to their classroom teaching responsibilities (EdWeek Research Center, 2022). In addition to workplace stressors, there are problems in recruiting and retaining teachers of color (Carver-Thomas, 2018; Young & Easton-Brooks, 2020).

Our findings also indicate that teachers with more teaching experience reported lower levels of interest in transferring and higher levels of interest in quitting. Findings in the literature are mixed, as studies have found that midcareer teachers were more likely to report wanting to leave their job (e.g., EdWeek Research Center, 2022), and early career teachers are also vulnerable to turnover (e.g., Bass et al., 2016). However, our data were collected during COVID-19, a time during which teacher safety concerns and challenges in rapidly preparing and implementing online and hybrid learning may have led more experienced teachers to want to leave the profession. Also, given that more experienced teachers may be closer to retirement, they may prefer to leave their position by retiring early rather than transferring to a new environment, especially amid concerns for their own health during the pandemic.

Middle and high school teachers reported greater intentions to transfer and quit compared to elementary teachers. This finding is consistent with research that has found higher turnover rates in middle and high school teachers compared to elementary teachers (Nguyen et al., 2020; Redding & Henry, 2018), yet differs from other studies that found elementary teachers were more at risk of turnover compared to secondary school teachers (e.g., Torpey, 2018). The COVID-19 pandemic may have contributed to these differential rates, as high school teachers reported lower confidence in teaching online, more COVID-19 safety concerns, and less reassurance from preventative measures compared to elementary school teachers (Traga Philippakos et al., 2022). McMahon, Cafaro, et al. (2022) found that middle and high school teachers reported higher levels of verbal harassment than elementary teachers. Further, although high school teachers report lower levels of physical violence than elementary teachers (McMahon, Cafaro, et al., 2022), physical violence from older students may be especially frightening and anxiety provoking and lead teachers to want to transfer or quit the profession. Relatedly, high school teachers may also experience greater burnout than elementary teachers (Beer & Beer, 1992).

In the present study, urban teachers were more likely to express interest in transferring, consistent with previous research that indicates urban teachers are more likely to experience violence in their schools (Bounds & Jenkins, 2018; McMahon, Cafaro, et al., 2022) and greater anxiety than those in rural settings (Abel & Sewell, 1999). The combination of higher rates of violence, anxiety and stress, and options to transfer given there are more schools in urban school districts likely contribute to higher rates of intent to transfer. In addition to violence, teachers in urban settings report several factors that contribute to turnover, including the physical quality of school facilities and lack of supportive relationships with colleagues and administrators (Waddell, 2010). Importantly, teachers of color are two to three times more likely to work in urban settings compared to White teachers, exacerbating the risk of workplace stressors, anxiety, and intentions to transfer (Ingersoll & May, 2011). Teacher demographics are important to consider in terms of victimization experiences, mental health, and turnover.

Limitations

This study has several limitations. First, although we introduced time into the assessment (pre-COVID-19 violence, anxiety and stress during COVID-19 lockdown year, and transfer and quit at the time of the survey), this study was cross-sectional and retrospective. Second,

there may be biases in recall that affected teacher responses prior to COVID-19, and the timing of survey completion may have affected their responses. Third, there may be source bias as all responses were obtained from a single source. Fourth, our measure of anxiety and stress consisted of only three items, and a more robust measure is recommended for future study. Fifth, this study did not include interviews or other sources of data to analyze the possible personal and contextual nuances that may be involved in career decisionmaking. Sixth, we were unable to assess independently documented rates of transferring and quitting; intentions to transfer or quit provide important data about teacher experiences, yet differ from actual teacher turnover. Finally, teachers who had more concerns about school safety and experiences with violence may have been more likely to complete the survey, compared to teachers who had not experienced violence.

Implications for School-Based Research, Practice, and Policy

Research—Given significant rates of school violence and teacher turnover, researchers should continue to examine patterns of violence, mental health, and individual and contextual influences in relation to teacher turnover. There are likely many sources of job stressors that contribute to teacher stress and anxiety, and in turn, attrition, such as workload, lack of resources, lack of respect, unclear expectations, and low pay; a comprehensive assessment of these factors is needed. Longitudinal research can facilitate uncovering mechanisms that contribute to teacher turnover and the impact of current teacher shortages on student outcomes. Mixed-method research may facilitate development of solutions informed by school context and teacher voice. Additional focus on measurement development is also needed (Reddy et al., 2018).

Though the present study does not include actual rates of teachers leaving the profession, examining intentions is an important component to consider. Given the consistently predictive impact of victimization and stress and anxiety on intentions to transfer and quit, intentions to transfer and quit may be an indicator of job dissatisfaction (Nguyen et al., 2022) or teacher disempowerment (Peist et al., 2020) rather than real-world attrition (Ryan et al., 2017), at least for some teachers. However, examining these hypotheses requires empirical studies, given the multifaceted issues facing educators in American schools (e.g., violence, burnout, lack of respect, discrimination, political polarization, inadequate pay).

Researchers should also examine the unique experiences of teachers of color that put them at higher risk of negative experiences and protective factors that mitigate adverse outcomes such as anxiety, stress, and turnover. Examining successful schools and resilient teachers that face difficult circumstances is an important area to explore, including individual, school, and community factors that contribute to resiliency. As one example, teachers cite support from administrators as a source of strength following victimization (McMahon et al., 2017). Indeed, more effective school leadership has been significantly associated with lower levels of burnout (Pas et al., 2012) and warrants further study as a potential pathway for supporting teacher mental health, reducing victimization, and preventing turnover. Future research may also consider sense of belonging, availability of mental health support, and quality of relationships with colleagues as other potential sources of resilience.

Practice—Findings from the present study support the need for teacher well-being initiatives. Prevention and intervention programming must be designed to offer specialized, evidenced-based support for the most vulnerable educators, informed by teacher voice. Research has shown that well-being interventions can be designed to effectively reduce teacher anxiety and stress. Examples of these programs include cultivating awareness and resilience in education and mindfulness-based stress reduction. Jennings et al. (2013) found that teachers who participated in cultivating awareness and resilience in education reported improvement in burnout/time-related stress, efficacy, and overall well-being. Flook et al. (2013) found that an adapted version of the mindfulness-based stress reduction was effective in reducing symptoms of burnout and increasing selfcompassion. Lever et al. (2017) suggested that successful intervention programs have several key components, including (a) tailoring programs to the needs of employees, (b) targeting multiple components of wellness (e.g., stress, burnout, mindfulness), and (c) allowing school staff time to participate in the wellness program. Increasing peer and administrator support for teachers provides another avenue of intervention to share successful strategies and reduce stress.

Interventions that strengthen administrator leadership skills may reduce teacher desire to transfer and quit. For example, a randomized controlled trial of the McREL balanced leadership program focused on enhancing principal leadership skills and practices through professional development resulted in lower principal and teacher turnover rates compared to schools that did not participate in the program (Jacob et al., 2015). Researchers suggest that this may be a result of principal turnover having a mediating effect on teacher turnover—that is, when principals stay, teachers are more likely to stay as well.

More broadly, schoolwide prevention strategies are needed to address school violence and teacher victimization, given its ubiquity and offenses from multiple school stakeholders (e.g., students, parents, colleagues, and administrators) as revealed in this study. Ideally, strategies should be multipronged and include teacher training, coaching, and mentorship in topics such as effective classroom management, schoolwide policies (e.g., mission statements, rules) that establish clear behavioral expectations, behavioral interventions, and efforts to promote positive school climate. Interventions should not be limited to student aggressors or victims, but instead comprehensively reduce verbal and threatening and physical violence across multiple stakeholders and improve schools as work settings and learning environments.

Policy—Policies should be enacted to consistently fund school-based mental health programming for not only students but also for educators and other school stakeholders, including parents and community agency personnel (e.g., police, social services). Effective policies are also needed to (a) improve school climate, including giving teachers voice, agency, and respect; (b) enact clear and consistent discipline and harassment policies; (c) promote positive reinforcement to reduce school violence; and (d) address aggression and violence among students, between students and teachers, and among adult stakeholders. Finally, policies are needed regarding educator training programs at both the preservice and in-service levels to support adequate training for teachers in evidence-based strategies to address violence and aggression. Evidence-based programs include social-emotional learning approaches, trauma-informed practices, restorative justice practices, working with

diverse populations, and de-escalation strategies. Preventing violence will reduce stress and anxiety and ultimately reduce teacher turnover and dissatisfaction with their profession and their jobs.

Conclusion

This study is one of the first to explore the mediating role of teacher anxiety and stress for teacher-directed violence from a range of aggressors and intentions to transfer schools or quit the profession. Very few studies to date have examined possible mechanisms that contribute to teachers wanting to leave their schools. By taking into account teacher experiences of violence with stakeholders across the ecology of the school, we have a better understanding of the rates and types of violence across aggressors, the roles of anxiety and stress, and potential intervention strategies that will reduce teacher turnover.

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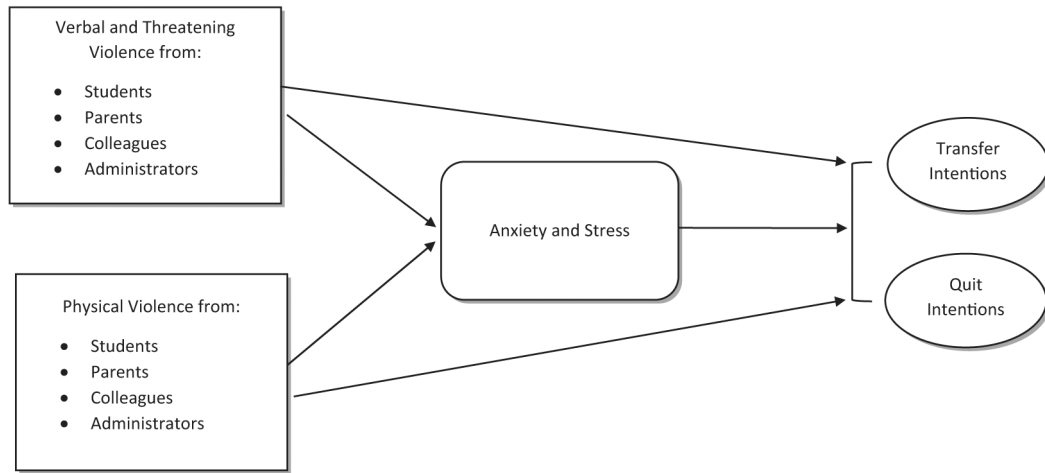


Figure 1. Theoretical Framework of Teacher-Directed Violence Predicting Anxiety and Stress and Transfer and Quit Intentions

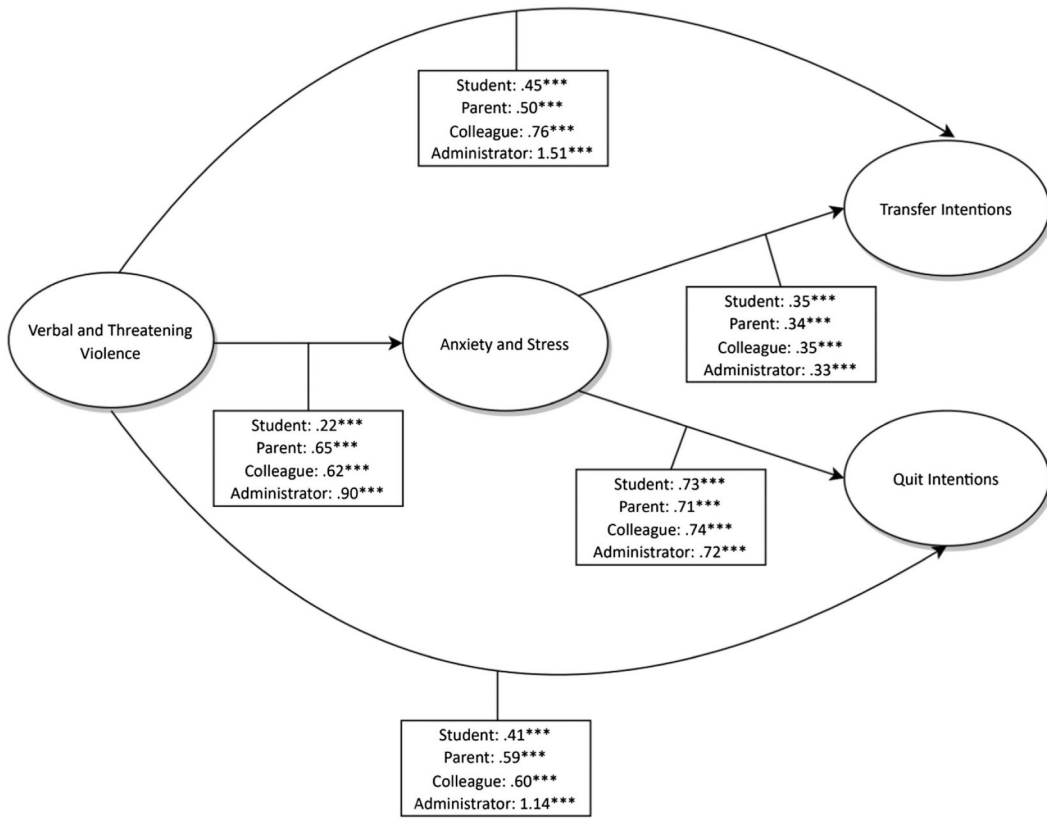


Figure 2. SEM Results for Teacher-Directed Verbal and Threatening Violence Predicting Anxiety and Stress and Intentions to Transfer or Quit

Note. This figure represents results from four separate SEM models, one for each offender (i.e., student, parent, colleague, administrator), with standardized linear regression coefficients. Analyses control for teacher gender, race/ethnicity, teaching experience, school level, and school urbanicity. SEM = structural equation model.

*** $p < .001$.

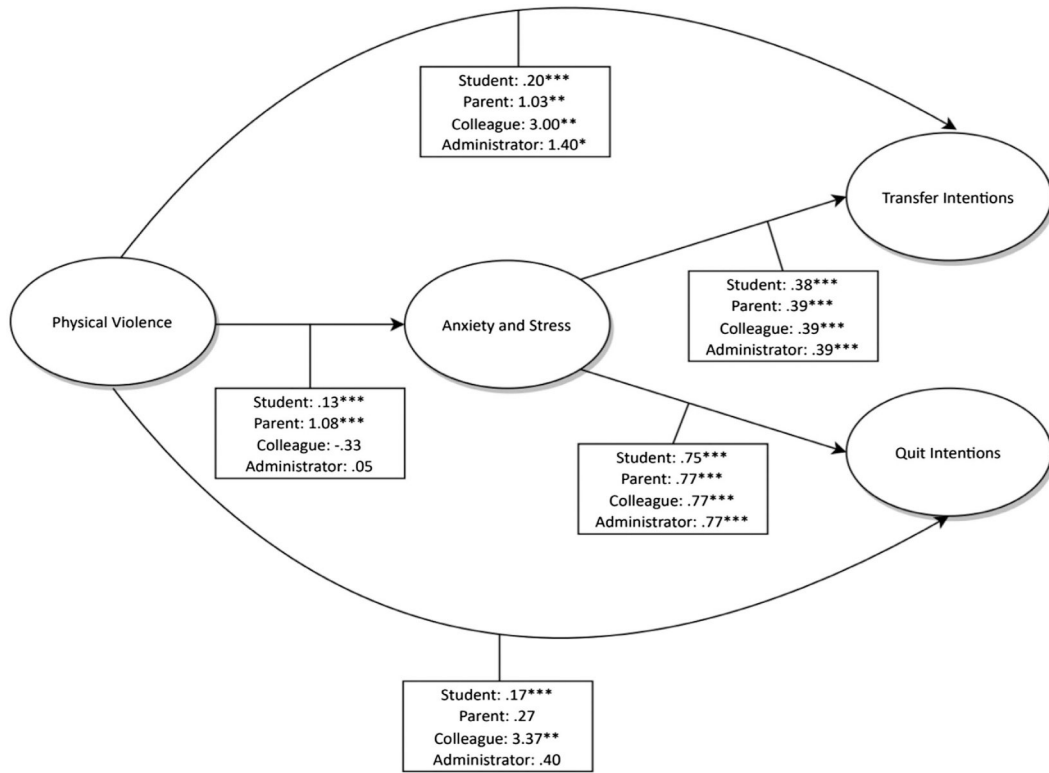


Figure 3. SEM Results for Teacher-Directed Physical Violence Predicting Anxiety and Stress and Intentions to Transfer or Quit

Note. This figure represents results from four separate SEM models, one for each offender (i.e., student, parent, colleague, administrator), with standardized linear regression coefficients. Analyses control for teacher gender, race/ethnicity, teaching experience, school level, and school urbanicity. SEM = structural equation model.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 1

Descriptive Statistics

Scale	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12
1. Teaching experience	14.20	9.30	—											
2. Student verbal violence	1.48	0.62	-.02	—										
3. Student physical violence	1.52	0.87	-.03	.48*	—									
4. Parent verbal violence	1.29	0.44	.04	.62*	.36*	—								
5. Parent physical violence	1.01	0.06	.01	.10*	.12*	.20*	—							
6. Colleague verbal violence	1.16	0.36	.03	.35*	.19*	.44*	.12*	—						
7. Colleague physical violence	1.00	0.05	.01	.09*	.04	.07*	.01	.19*	—					
8. Administrator verbal violence	1.16	0.37	.05*	.35*	.19*	.45*	.11*	.54*	.14*	—				
9. Administrator physical violence	1.00	0.04	.03	.06*	.04	.09*	.13*	.14*	.37*	.12*	—			
10. Anxiety and stress	3.44	1.04	-.10*	.13*	.11*	.24*	.06*	.17*	-.01	.18*	.01	—		
11. Intentions to transfer	1.94	1.17	-.15*	.26*	.17*	.25*	.06*	.23*	.04	.29*	.03	.39*	—	
12. Intentions to quit	2.40	1.27	.05*	.21*	.13*	.27*	.05*	.19*	.04*	.24*	.02	.52*	.54*	—

Note. Violence assessed prior to COVID-19; anxiety during COVID-19 school year; transfer and quit during COVID-19 at survey completion.

* $p < .001$.

Table 2

Teacher Victimization Item Rates by Aggressor

Teacher victimization item	Aggressor							
	Student		Parent		Colleague		Administrator	
	n	%	n	%	n	%	n	%
Verbal and threatening violence								
Obscene remarks or gestures	4,148	44.3	2,088	22.3	775	8.3	292	3.1
I was intimidated	2,220	23.7	2,802	29.9	1,265	13.5	1,743	18.6
I was the target of slurs or verbal attacks based on my race, ethnicity, gender, sexual orientation, or religion	1,349	14.4	787	8.4	434	4.6	253	2.7
I was verbally threatened	2,336	24.9	1,276	13.6	286	3.1	361	3.9
I was bullied (e.g., repetitious, aggressive behavior that involves and imbalance in power)	892	9.5	1,002	10.7	796	8.5	963	10.3
I was publicly humiliated	824	8.8	694	7.4	661	7.1	814	8.7
I experienced cyber/internet bullying	359	3.8	462	4.9	123	1.3	94	1.0
I was sexually harassed	453	4.8	117	1.2	299	3.2	112	1.2
Physical violence								
I had objects thrown at me	2,514	26.8	48	0.5	21	0.2	16	0.2
I had an ordinary object (e.g., pencil, scissors) used as a weapon against me	1,058	11.3	12	0.1	7	0.1	11	0.1
I was physically attacked (e.g., bitten, scratched, hit)	1,778	19.0	35	0.4	18	0.2	7	0.1

Note. Victimization items were dichotomized (0 = *never*, 1 = *at least once*) to illustrate victimization rates; however, summed scores were used for analyses.

Table 3

Structural Equation Model Fit Indices

Model	χ^2	df	CFI	TLI	SRMR	RMSEA	RMSEA 90% CI
Student verbal violence	5420.87*	293	0.914	0.90	0.04	0.045	[0.044, 0.046]
Student physical violence	3572.69*	168	0.934	0.92	0.05	0.049	[0.047, 0.050]
Parent verbal violence	4339.92*	293	0.928	0.92	0.04	0.040	[0.039, 0.041]
Parent physical violence	2808.50*	168	0.939	0.92	0.04	0.043	[0.042, 0.044]
Colleague verbal violence	3967.77*	293	0.934	0.92	0.04	0.038	[0.037, 0.039]
Colleague physical violence	2813.16*	168	0.937	0.92	0.04	0.043	[0.042, 0.044]
Administrator verbal violence	4266.39*	293	0.932	0.92	0.04	0.040	[0.039, 0.041]
Administrator physical violence	2831.10*	168	0.938	0.92	0.04	0.043	[0.042, 0.045]

Note. CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root mean square residual; RMSEA = root mean squared error of approximation; CI = confidence interval.

* $p < .001$.

Table 4

Structural Equation Model Results

Predictor	Student aggressor				Parent aggressor				Colleague aggressor				Administrator aggressor			
	Verbal		Physical		Verbal		Physical		Verbal		Physical		Verbal		Physical	
	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β
Anxiety (R ²)	.02		.02		.06		.04		.03		.001		.04		.001	
Violence	.22*** (.02)	.14	.13*** (.02)	.12	.65*** (.04)	.25	1.08*** (.30)	.07	.62*** (.05)	.18	-.33 (.96)	-.01	.90*** (.07)	.19	.05 (.54)	.01
Transfer (R ²)	.21		.18		.18		.15		.19		.16		.23		.15	
Violence	.45*** (.03)	.25	.20*** (.02)	.16	.50*** (.04)	.17	1.03*** (.30)	.06	.76*** (.06)	.20	3.00** (1.01)	.07	1.51*** (.08)	.28	1.39* (.55)	.04
Anxiety and stress	.35*** (.02)	.32	.38*** (.02)	.33	.34*** (.02)	.31	.39*** (.02)	.35	.35*** (.02)	.32	.39*** (.02)	.35	.33*** (.02)	.30	.39*** (.02)	.35
Male	.02 (.03)	.01	.02 (.03)	.01	.02 (.03)	.01	.01 (.03)	.01	.02 (.03)	.01	.01 (.03)	.01	.01 (.03)	.01	.01 (.03)	.01
Other gender	.22 (.17)	.02	.29 (.18)	.02	.23 (.18)	.02	.26 (.18)	.02	.23 (.18)	.02	.25 (.18)	.02	.28 (.17)	.02	.25 (.18)	.02
Black	.26*** (.05)	.06	.26*** (.05)	.06	.22*** (.05)	.05	.21*** (.05)	.05	.22*** (.05)	.05	.21*** (.05)	.05	.21*** (.05)	.05	.20*** (.05)	.05
Hispanic	.14* (.06)	.03	.15** (.06)	.03	.11 (.06)	.02	.12* (.06)	.03	.11 (.06)	.02	.12* (.06)	.03	.11* (.06)	.02	.12* (.06)	.03
Asian/PI	.23* (.10)	.03	.24* (.10)	.03	.19 (.10)	.02	.21 (.11)	.03	.19 (.10)	.02	.21* (.11)	.03	.19 (.10)	.02	.21* (.11)	.03
Other race	.14** (.05)	.03	.15** (.05)	.04	.12** (.05)	.03	.14** (.05)	.03	.12* (.05)	.03	.14** (.05)	.03	.12* (.05)	.03	.14** (.05)	.04
Teaching experience	-.01*** (.01)	-.11	-.01*** (.01)	-.11	-.01*** (.01)	-.12	-.01*** (.01)	-.11	-.01*** (.01)	-.12	-.01*** (.01)	-.11	-.02*** (.01)	-.13	-.01*** (.01)	-.11
Middle school	-.02 (.03)	-.01	.13*** (.03)	.05	.04 (.03)	.02	.07* (.03)	.03	.06 (.03)	.02	.07* (.03)	.03	.05 (.03)	.02	.07* (.03)	.03
High school	-.02 (.03)	-.01	.13*** (.03)	.06	.03 (.03)	.02	.04 (.03)	.02	.02 (.03)	.01	.04 (.03)	.02	.02 (.03)	.01	.04 (.03)	.02
All grades	-.10 (.06)	-.01	-.03 (.06)	-.01	-.09 (.06)	-.02	-.09 (.06)	-.02	-.10 (.06)	-.02	-.10 (.06)	-.02	-.10 (.06)	-.02	-.10 (.06)	-.02
Suburban	-.01 (.03)	-.01	-.01 (.03)	-.01	.01 (.03)	.01	.01 (.03)	.01	-.01 (.03)	-.01	.01 (.03)	0	-.01 (.03)	-.01	.01 (.03)	.01
Urban	.11*** (.03)	.05	.16*** (.03)	.07	.18*** (.03)	.08	.20*** (.03)	.09	.18*** (.03)	.08	.20*** (.03)	.09	.15*** (.03)	.06	.20*** (.03)	.09
Quit (R ²)	.36		.34		.35		.32		.34		.33		.35		.32	
Violence	.41*** (.03)	.19	.17*** (.02)	.12	.59*** (.05)	.17	.27 (.35)	.01	.60*** (.06)	.13	3.37** (1.19)	.06	1.14*** (.09)	.17	.40 (.63)	.01

Predictor	Student aggressor				Parent aggressor				Colleague aggressor				Administrator aggressor			
	Verbal		Physical		Verbal		Physical		Verbal		Physical		Verbal		Physical	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	
Anxiety and stress	.73*** (.02)	.53	.75*** (.02)	.54	.71*** (.02)	.52	.77*** (.02)	.56	.74*** (.02)	.54	.77*** (.02)	.56	.72*** (.02)	.53	.77*** (.02)	.56
Male	-.04 (.04)	-.01	-.05 (.04)	-.02	-.04 (.04)	-.01	-.06 (.04)	-.02	-.05 (.04)	-.02	-.06 (.04)	-.02	-.06 (.04)	-.02	-.06 (.04)	-.02
Other gender	-.01 (.20)	0	.06 (.21)	.01	-.01 (.20)	0	.03 (.21)	.01	.01 (.20)	0	.03 (.21)	.01	.05 (.20)	.01	.03 (.21)	.01
Black	.19*** (.06)	.04	.18*** (.06)	.04	.16*** (.06)	.03	.14*** (.06)	.03	.15*** (.06)	.03	.14*** (.06)	.03	.15*** (.06)	.03	.14*** (.06)	.03
Hispanic	.18*** (.07)	.03	.19*** (.07)	.03	.15*** (.07)	.03	.16*** (.07)	.03	.15*** (.07)	.03	.16*** (.07)	.03	.16*** (.07)	.03	.16*** (.07)	.03
Asian/PI	.13 (.12)	.01	.14 (.12)	.01	.10 (.12)	.01	.12 (.12)	.01	.10 (.12)	.01	.12 (.12)	.01	.10 (.12)	.01	.12 (.12)	.01
Other race	.17*** (.05)	.03	.17*** (.06)	.03	.15*** (.06)	.03	.17*** (.06)	.03	.15*** (.06)	.03	.17*** (.06)	.03	.15*** (.06)	.03	.17*** (.06)	.03
Teaching experience	.01*** (.01)	.08	.01*** (.01)	.08	.01*** (.01)	.07	.01*** (.01)	.08	.01*** (.01)	.07	.01*** (.01)	.08	.01*** (.01)	.07	.01*** (.01)	.08
Middle school	.01 (.04)	.01	.14*** (.04)	.05	.06 (.04)	.02	.08*** (.04)	.03	.08*** (.04)	.02	.08*** (.04)	.03	.07 (.04)	.02	.08*** (.04)	.03
High school	.06 (.03)	.02	.20*** (.04)	.07	.11*** (.03)	.04	.11*** (.03)	.04	.10*** (.03)	.04	.11*** (.03)	.04	.10*** (.03)	.04	.11*** (.03)	.04
All grades	-.10 (.07)	-.02	-.03 (.07)	-.01	-.09 (.07)	-.02	-.09 (.07)	-.02	-.09 (.07)	-.02	-.09 (.07)	-.02	-.09 (.07)	-.02	-.09 (.07)	-.02
Suburban	.05 (.03)	.02	.06 (.04)	.02	.07 (.03)	.03	.06 (.04)	.03	.06 (.04)	.02	.06 (.04)	.03	.06 (.03)	.02	.06 (.04)	.03
Urban	-.03 (.04)	-.01	.02 (.04)	.01	.03 (.04)	.01	.05 (.04)	.02	.03 (.04)	.01	.05 (.04)	.02	.01 (.04)	.01	.05 (.04)	.02

Note. *SE* = standard error; *PI* = Pacific Islander.

* $p < .05$.

** $p < .01$.

*** $p < .001$.