Risk and Resilience Factors Contributing to K-12 Teachers' Mental Health During the Post-Pandemic Recovery
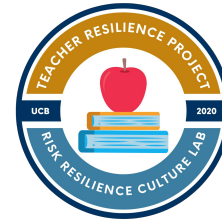
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Quennie Dong, Ed.S.

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UC Berkeley-U of Maryland

Introduction

Mental Health:

A state of well-being where individuals manage stress, recognize potential, work effectively, and contribute to their community

(World Health Organization, 2004)
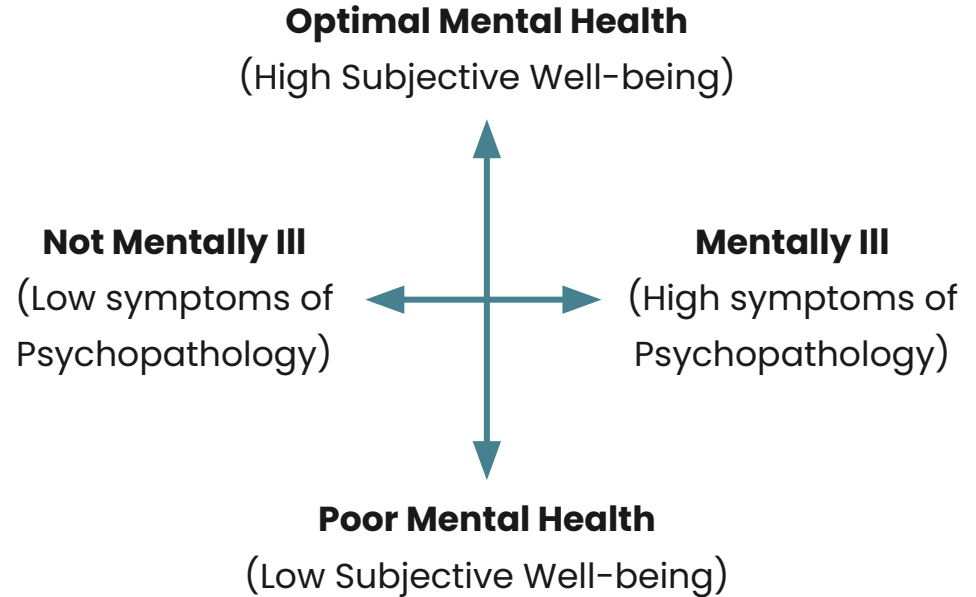
Introduction

Dual-Factor Model of Mental Health

(Greenspoon & Saklofske, 2001)

=

Psychopathology

+

Subjective Well-being

Optimal Mental Health
(High Subjective Well-being)

Not Mentally Ill
(Low symptoms of Psychopathology)

Mentally Ill
(High symptoms of Psychopathology)

Poor Mental Health
(Low Subjective Well-being)

Introduction

Risk and Resilience Theory (Masten, 2016):

- Risk Factors: Conditions or variables that increase the likelihood of a negative outcome
- Resilience Factors: Conditions or variables that help individuals or systems withstand, adapt to, and recover from adverse conditions
  - Promotive Factors: Directly reduce the impact of risk, leading to positive outcomes even in the presence of adversity
  - Protective Factors: Modify the effects of risk factors, mitigating potential negative outcomes through buffering or moderating effects

Introduction

- **Teacher Mental Health → Student Outcomes**: Influences students' social, emotional development, academic performance, and well-being (Beilock et al., 2010; Naghieh et al., 2015).
- **Teacher Mental Health → Professional Development**: Affects teaching performance and development (Gorsy & Panwar, 2015; Steinhardt et al., 2011).
- **Health Issues**: Teachers with high physical and mental health issues (Health and Safety Executive, 2019; Naghieh et al., 2015).
- **Post-Pandemic Rise in Mental Health Issues**: Emphasizes the need for mental health support for teachers (Vadivel et al., 2021).
- **Our Focus**: Investigates the impact of teacher victimization on mental health.

Introduction

Teacher victimization

A wide range of aggressive behaviors that teachers face, primarily from students (Espelage et al., 2013; Yang et al., 2019)

Significant increase (NCES, 2023)

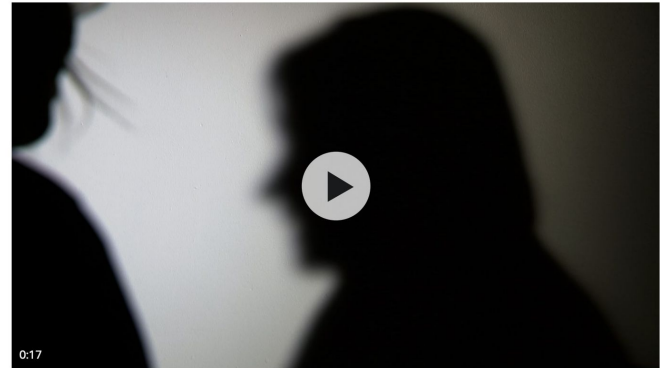Global issue (Wilson et al., 2011; Yang et al., 2019; Moon & McCluskey, 2016)

Teachers speak out over rising pupil violence

3 days ago   ⌣ Share

By Louise Hosie
BBC News

0:17

An anonymous Aberdeen teacher says a violent incident at work left her with concussion

Teachers in Aberdeen have told BBC News they are traumatised, fear for their safety and are scared to go to to work because of escalating pupil violence.

Introduction

Hanna Barczyk for NPR

Consequences:

Decreased commitment, increased burnout, and reduced self-confidence among teachers

(Dzuka & Dalbert, 2007; Moon & McCluskey, 2016; Moon et al., 2015; Skåland, 2016)

Research Gap:

The direct influence of teacher victimization on teachers' psychological distress

Introduction

Several factors positively influence teachers' psychological distress:

- **Self-Efficacy** (Capone & Petrillo, 2020; Muenchhausen et al., 2021; Nabavi et al., 2017): A teacher's belief in their ability to effectively perform job-related tasks and positively impact students' learning behavior (Klassen et al., 2011).
- **Collective Efficacy** (Capone & Petrillo, 2020; Klassen, 2010): "The perceptions of teachers in a school that the effort of the faculty as a whole will have a positive effect on students" (Goddard et al. 2000, p. 480).

Introduction

Several factors positively influence teachers' psychological distress:

- **School Connectedness:** "The extent to which teachers feel personally accepted, respected, included, and supported by others in the school social environment" (Goodenow, 1993; p. 80)
- **School climate** (McLean et al., 2017; Skaalvik & Skaalvik, 2009): "The quality and character of school life" (Cohen, McCabe, Michelli, & Pickeral, 2009, p. 182).

Purpose of the Study

01

What is the prevalence of psychological distress among K-12 teachers during the pandemic recovery?

02

How is teacher victimization associated with teacher mental health (i.e., psychopathology and well-being)?

03

Do self-efficacy, collective efficacy, school connectedness, and school climate mitigate the impact of teacher victimization on teacher psychological distress?

Methods

- The sample comprised a total of **507 K–12 teachers** across the U.S.
  - Gender: 74.56% female, 24.85% male, and 0.59% non-binary
  - Age Range: 21 to 65, with a mean age of 41.12 (SD = 10.15)
  - Racial and Ethnic Backgrounds: 73.18% Caucasian/White, 5.13% Black or African American, 8.88% Hispanic/Latino/a/Mexican, 9.07% Asian American, and 3.75% identifying as Other
  - Classroom Setting: 85.01% of the participants were engaged in teaching in regular classrooms, whereas 7.3% specialized as special education classroom teachers. 7.69% of participants reported working in other types of classroom settings, such as co-taught classrooms.
- Data collection occurred between the Spring and Summer of 2023 using the snowball sampling method.

Methods: Measures

Predictor

- **Teacher Victimization**: Multidimensional Teacher Victimization Scale (MTVS; Yang et al., 2019)

Outcome Variables

- **Complete Mental Health**
  - **Psychological Distress**: Depression, Anxiety, and Stress Scale (DASS-10; Halford & Frost, 2021)
  - **Teacher Well-being**: Teacher Well-being Questionnaire (TSWQ; Renshaw et al., 2015)

Methods: Measures

Moderators

- **Collective Efficacy** (Developed)
- **School Climate**: Delaware School Climate Survey - Educator (Bear et al., 2014)
- **School Connectedness and Self-Efficacy** (TSWQ; Renshaw et al., 2015)

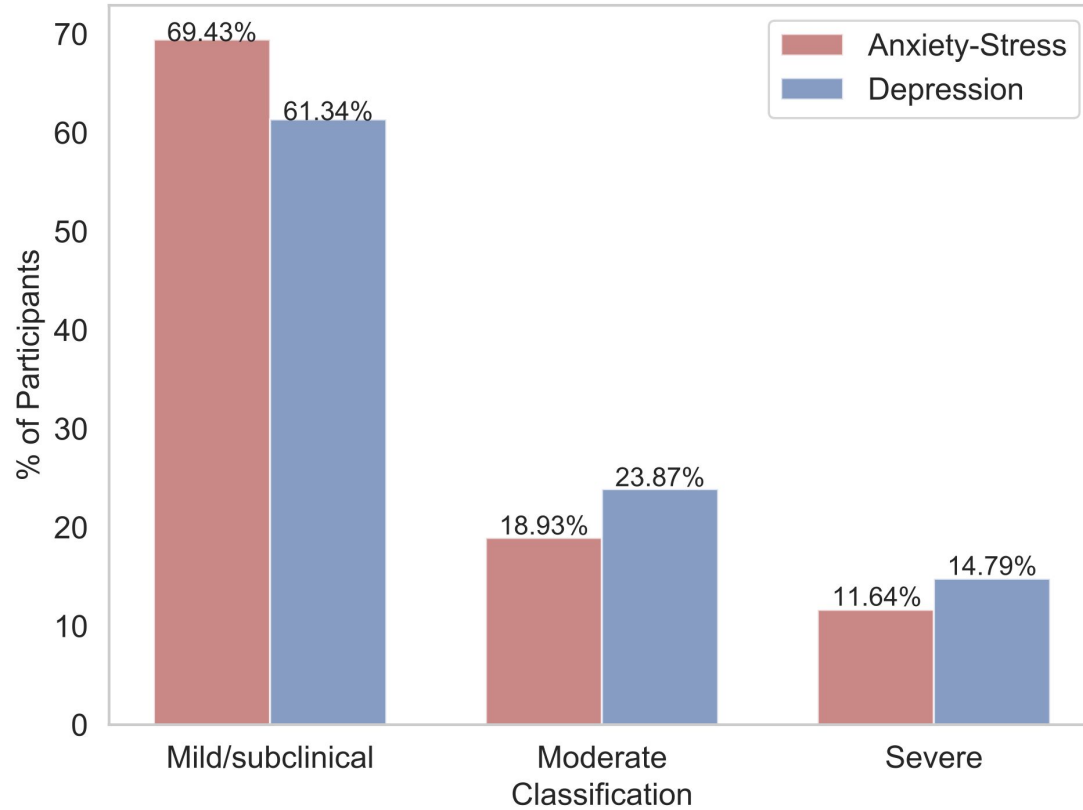**Covariates**

- Gender
- Ethnicity

Methods: Data Analysis Procedure

- Tools: *Statsmodels* package in Python 3.7.0 for linear regression and moderation analyses and the *lavaan* package in R for CFA
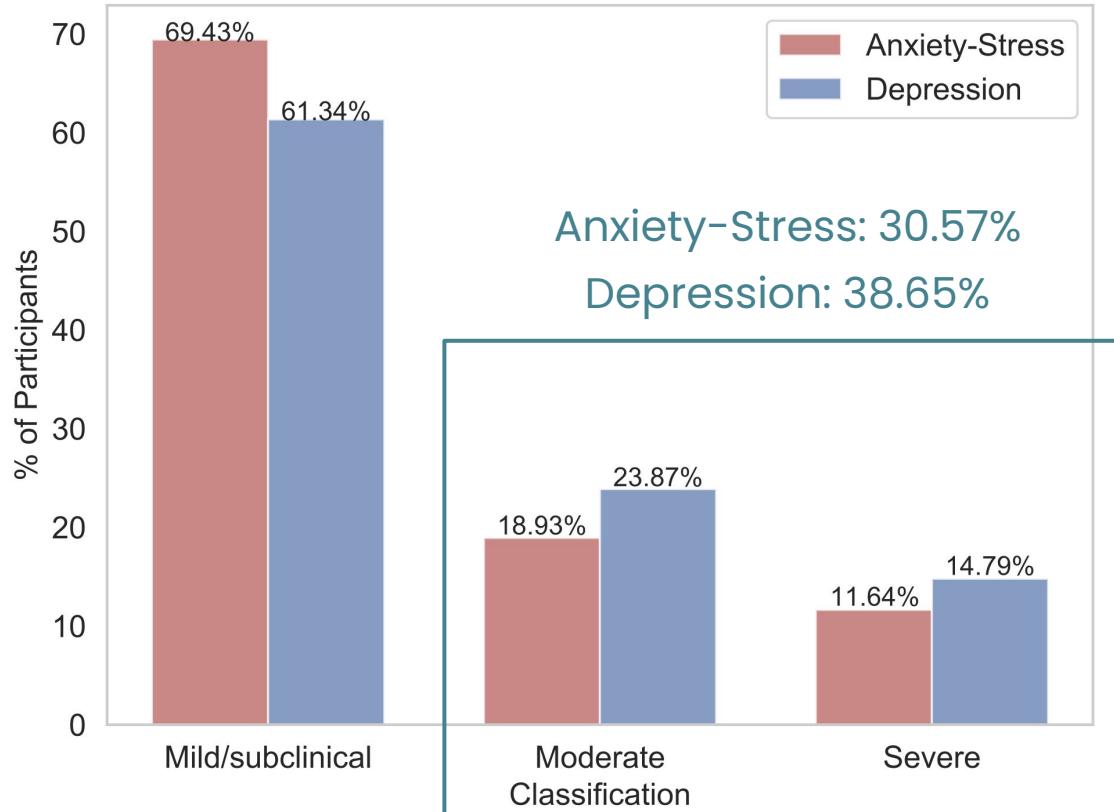
Stages

| Data Preparation: screened for missing data (none found) | Multicollinearity & Normality: checked through VIFs, skewness, and kurtosis | Linear Regression: Investigated the impact of teacher victimization on mental health | Moderation Analysis |

Results: K-12 Teachers' Psychological Distress

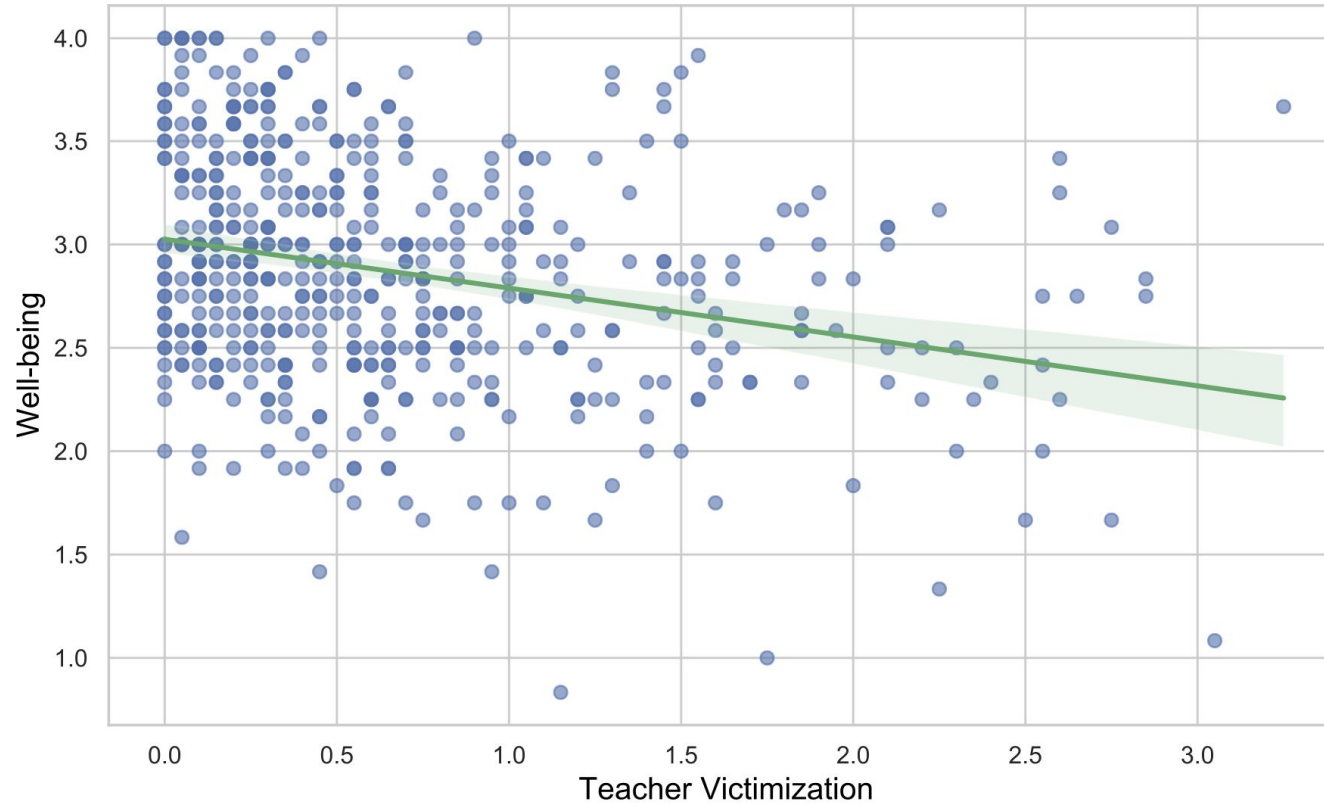# Results: K-12 Teachers' Psychological Distress

Results: Correlations
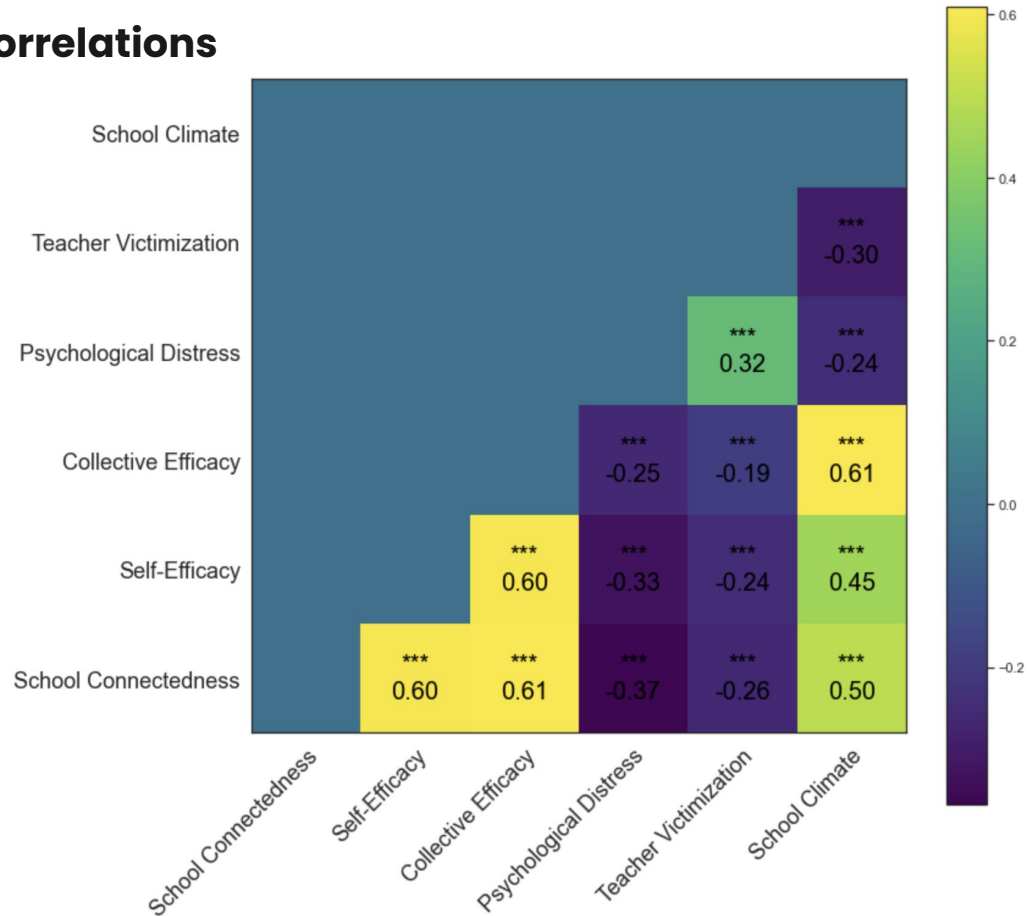
Results: Teacher Victimization and Teacher Well-being: A Regression Analysis

- Model Significance: The regression model was significant, $F(7, 499)=7.25$, $p<.001$, explaining 9.2% of the variance in psychological distress ($R^2 = .092$, Adj. $R^2 = .080$)

- **Teacher victimization**: Negatively associated with **well-being** ($B=-.237$, $p<.001$)

- Gender and Ethnicity: No significant association with well-being compared to females and White/Caucasian groups

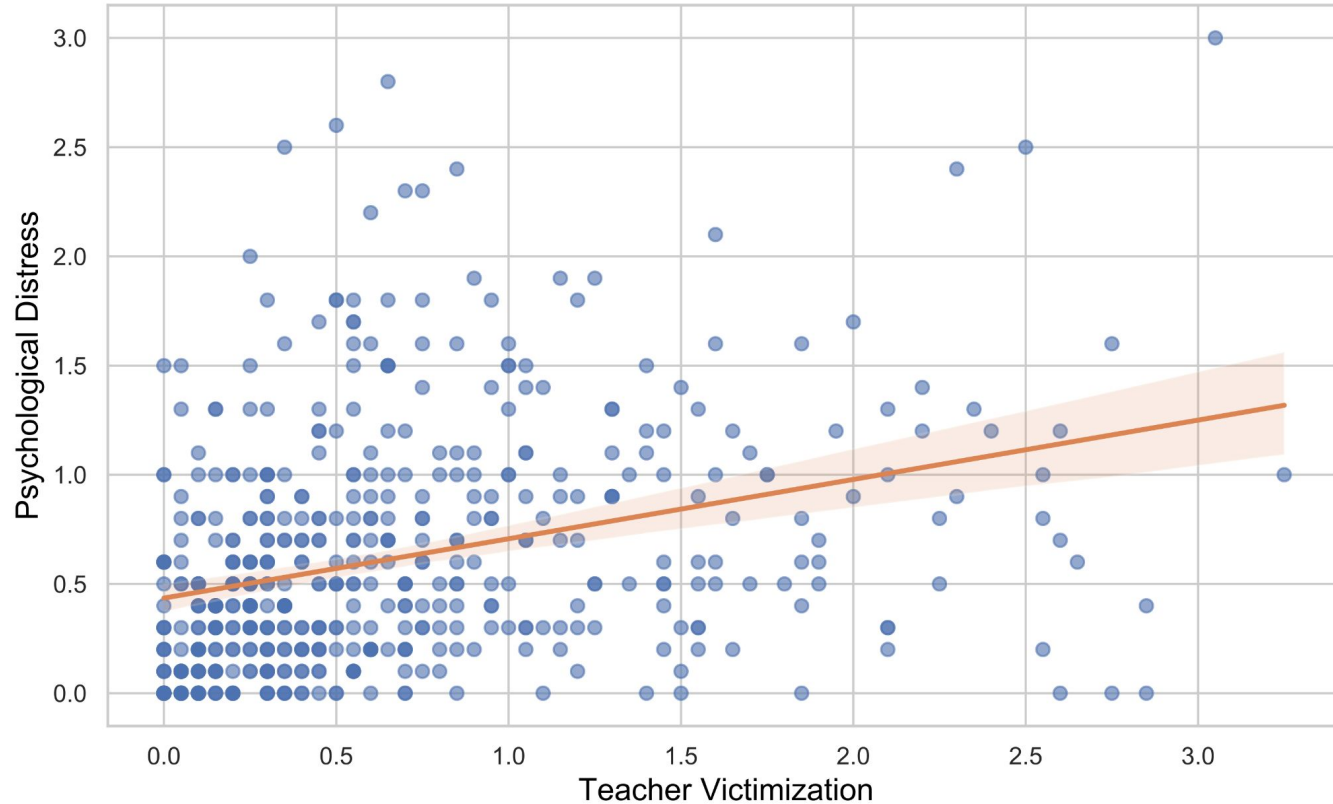**Results:** **Teacher Victimization and Teacher Well-being: A Regression Analysis**

B=−.237, *p*<.001

Results: Teacher Victimization and Psychological Distress: A Regression Analysis

- Regression Model Significance: $F(7, 499)=10.89$, $p<.001$, explaining 13.3% of the variance in psychological distress ($R^2 = .133$, Adj. $R^2 = .120$)
- **Teacher victimization**: Positively associated with **psychological distress** (B=0.269, $p<.001$)
- Gender Differences:
  - Individuals identifying as other genders reported higher levels of distress compared to females (B=.827, $p=.006$)
  - No significant difference in distress between males and females
- Ethnicity: No significant association with psychological distress compared to White/Caucasian

Results:

Teacher Victimization and Psychological Distress: A Regression Analysis

B=0.269, *p*<.001

Results: Moderating effect of school connectedness on the relationship between teacher victimization and psychological distress
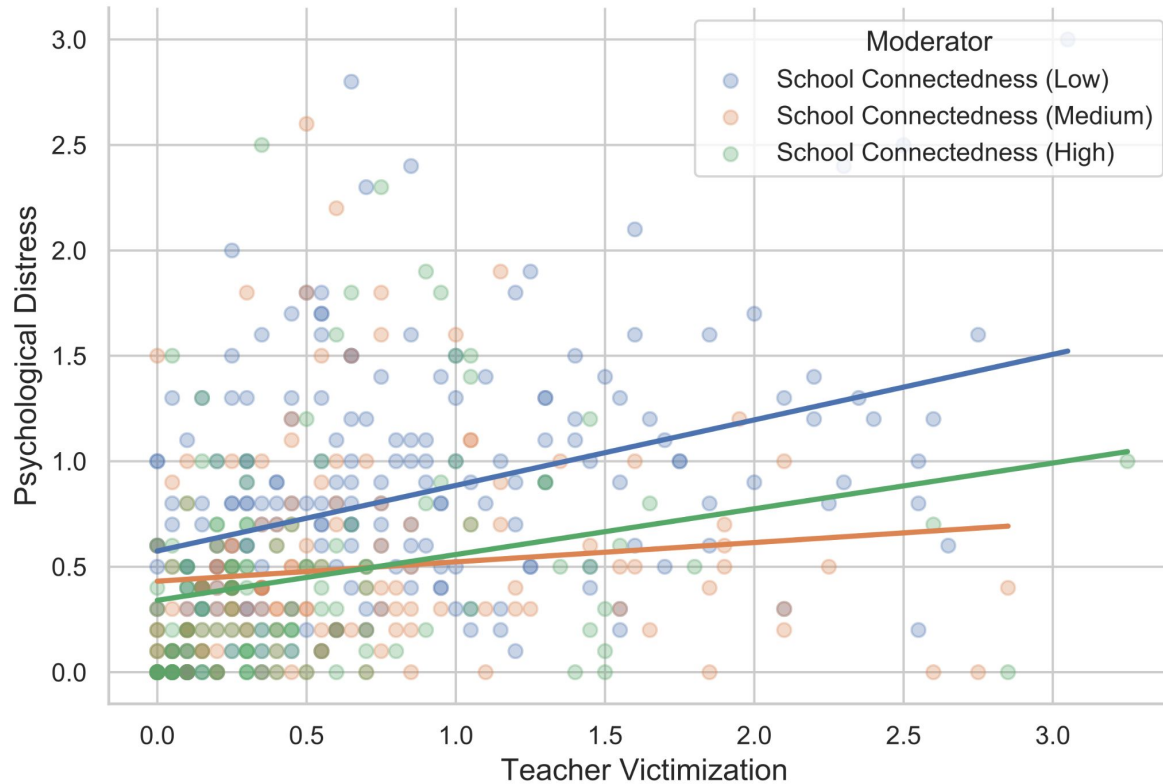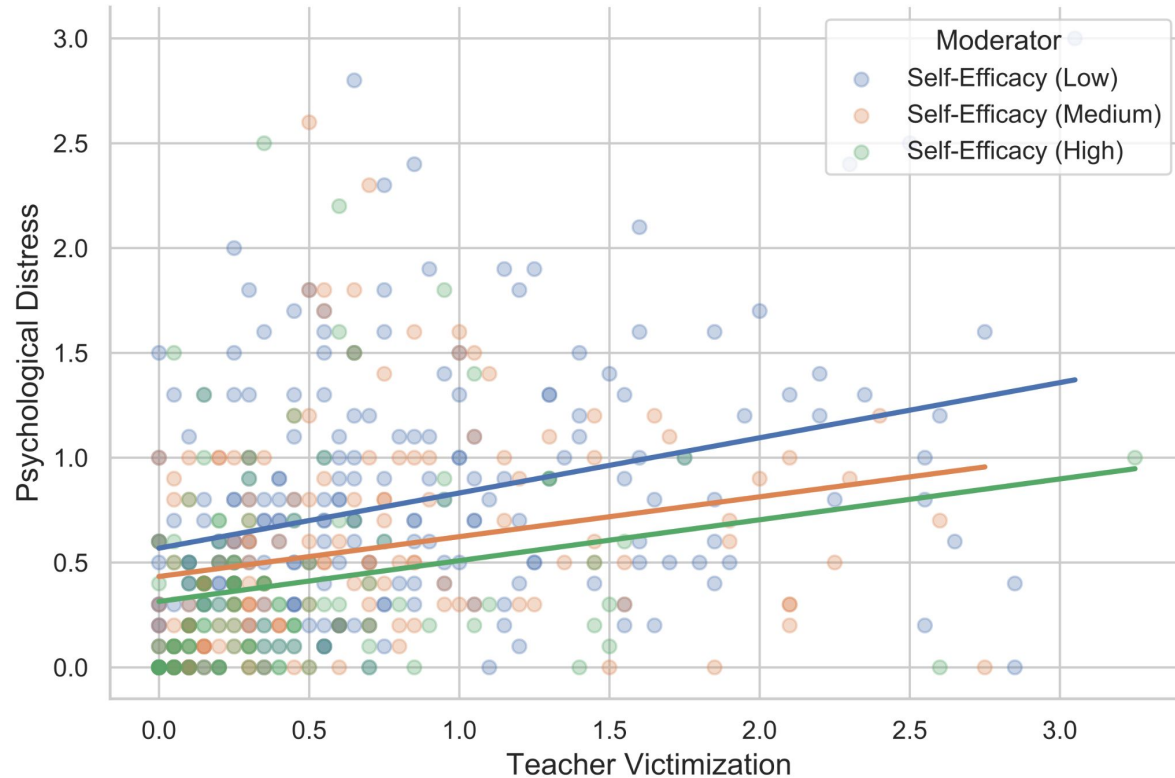

The overall model was significant, $F(9, 497)=16.23$, $p<.001$, explaining 22.7% of the variance in psychological distress ($R^2 = .227$, Adjusted $R^2 = .213$).

Teacher victimization ($B=.450$, $p<.001$) and connectedness ($B=-.154$, $p<.001$) were significant predictors.
The interaction between teacher victimization and connectedness was significant ($B=-.091$, $p=.20$).

Results:

Moderating effect of self-efficacy on the relationship between teacher victimization and psychological distress
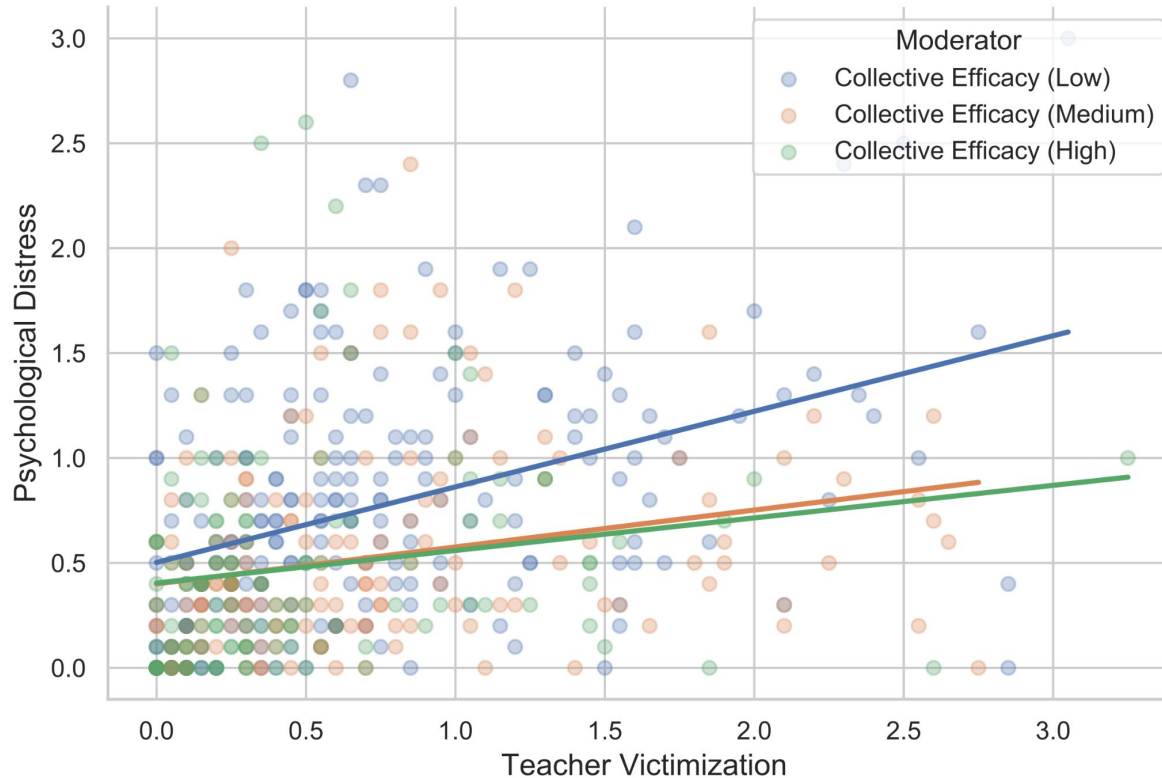

The overall model was significant, $F(9, 497)=14.81$, $p<.001$, explaining 21.1% of the variance in psychological distress ($R^2 = .211$, Adjusted $R^2 = .197$).

Teacher victimization ($B=.555$, $p<.001$) and self-efficacy ($B=-.174$, $p=.001$) were significant predictors.
The interaction between teacher victimization and self-efficacy was significant ($B=-.121$, $p=.026$).
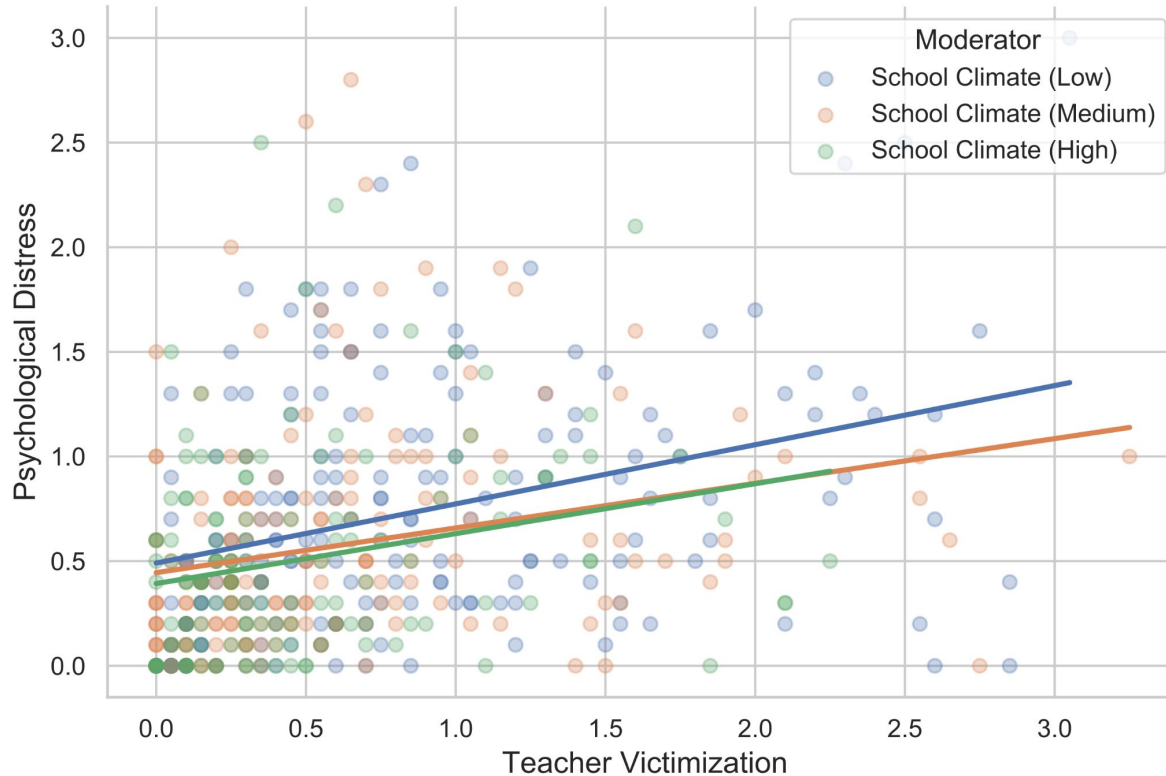
Results: Moderating effect of collective efficacy on the relationship between teacher victimization and psychological distress

The overall model was significant, $F(9, 497)=12.90$, $p<.001$, explaining 18.9% of the variance in psychological distress ($R^2 = .189$ Adjusted $R^2 = .175$).

Teacher victimization ($B=.657, p<.001$) was a significant predictor. The interaction between teacher victimization and collective efficacy was significant ($B=-.161, p=.004$).

Results: Moderating effect of school climate on the relationship between teacher victimization and psychological distress

The overall model was significant, $F(9, 497)=10.60, p<.001$, explaining 16.1% of the variance in psychological distress ($R^2 = .161$; Adj. $R^2 = .146$).

However, the interaction term between teacher victimization and school climate was **not** significant ($B=-.112, p=.199$), suggesting that school climate did not significantly moderate the relationship between teacher victimization and mental health.

Discussion: The prevalence of mental health issue during the pandemic recovery

- Anxiety-Stress: 30.57% of 507 K-12 teachers had moderate to severe anxiety-stress scores.
- Depression: 38.65% had moderate to severe depression scores.

- Higher than Ozamiz-Etxebarria et al. (2021)'s meta-analysis findings: anxiety (17%), depression (19%), stress (30%) during COVID-19.
- Highlights the need to investigate teachers' mental health during post-pandemic recovery.
- Shows the importance of considering the larger context of teacher shortages and high attrition rates.

Discussion: Teacher Victimization as a Risk Factor for Mental Health

- Findings: Teacher victimization is a risk factor for teachers' mental health (Psychological distress and well-being).
- Literature Support:
  - Supports findings by Harvey et al. (2017) and Theorell et al. (2015)'s meta-analysis on workplace bullying and mental health.
  - Verkuil et al. (2015) also found increased workplace bullying predicts depression, anxiety, and stress.
- Our Findings provide some of the initial evidence of the impact of teacher victimization on mental health.

Discussion: School Connectedness, Self-efficacy, and Collective Efficacy as Promotive Factors

- Self-efficacy, school connectedness, and collective efficacy are generally promotive factors for teachers' psychological distress.
- Each factor moderates the relationship between teacher victimization and psychological distress.
- Highlights the need to promote these factors among K-12 teachers to mitigate the impact of victimization.
- Literature Support:
  - Yu et al. (2015) found self-efficacy mediates work stress and job burnout.
  - Klassen (2010) found collective efficacy mediates job stress from student behavior on job satisfaction.

Discussion: School Connectedness
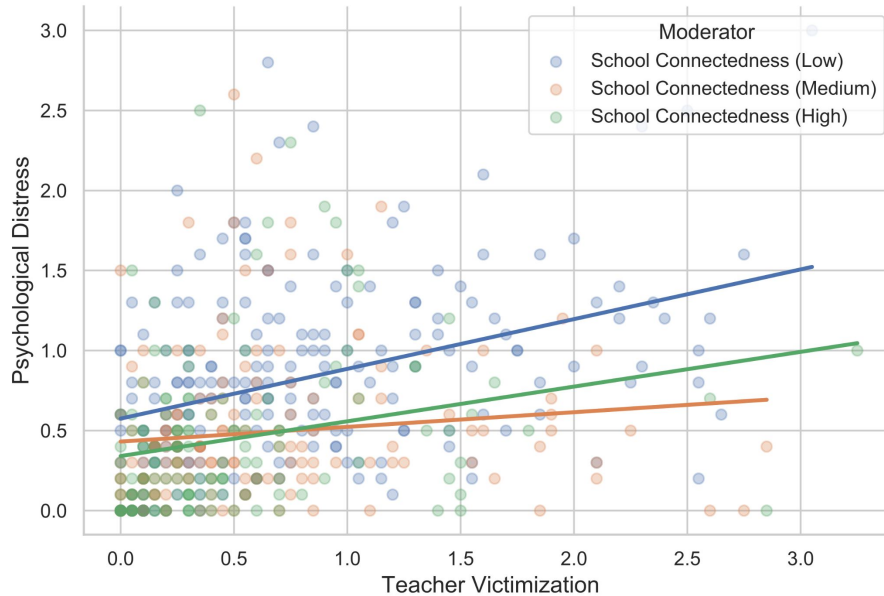
- Teachers with medium school connectedness showed lower increase in psychological distress as victimization increases than teachers with high school connectedness
- Stronger school connectedness would not necessarily mean lower in distress (Yang et al., 2021).

Discussion: School Connectedness and Self-Efficacy as Promotive Factors
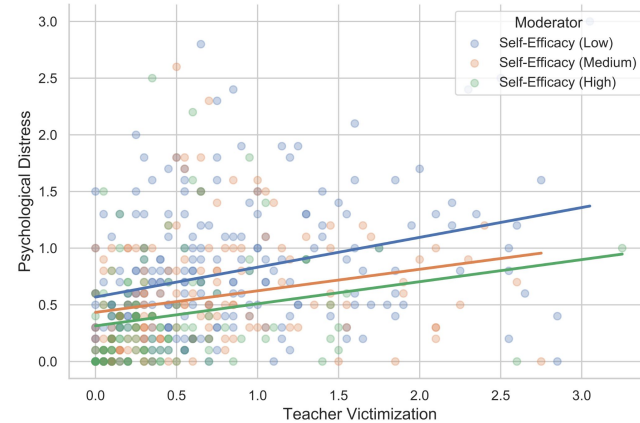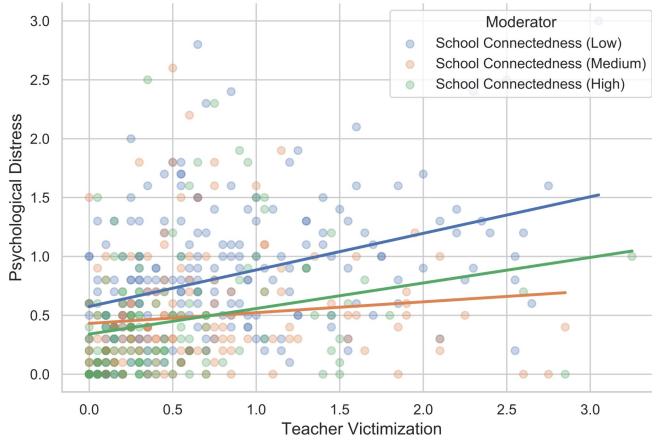
- Among moderators, well-being indicators (i.e., school connectedness and self-efficacy) → moderated the relationship.
- Mental health is a complex interplay between positive and negative factors.

Discussion: School Climate

- No evidence found for school climate moderating the relationship between teacher victimization and psychological distress.
- School Climate: A broad construct encompassing safety, relationships, teaching practices, and organizational environment.
- Positive school climate is beneficial but may dilute its direct impact on specific mental health issues from victimization.
- Conclusion: The generalized nature of school climate measures may not fully capture specific elements influencing how teachers cope with victimization.

Limitations and Future Studies

- **Cross-Sectional Limitation**: Cross-sectional nature limits causality. Longitudinal studies are needed to infer causality between victimization and mental health.
- **Lack of Qualitative Data**: Relies solely on quantitative data, which cannot capture the underlying reasons, context, and personal experiences.
- **Lack of Sample Diversity**: Predominantly Caucasian/White sample (73.18%) limits generalizability. Future studies should include more diverse populations.
- **Future Research**: Should use longitudinal designs, mixed-methods, and diverse populations to better understand causal relationships and moderating effects.

Research, Practice, and Policy Implications

- **Research:** Highlights the role of teacher victimization on mental health and moderating effects of self-efficacy, collective efficacy, and school connectedness.
- **Practice**: Emphasizes the need to address stressors from the COVID-19 recovery period by focusing on individual and collective perceptions, self-efficacy, collective efficacy, and school connectedness.
- **Policy**: Calls for developing and enforcing policies to reduce teacher victimization, considering the adverse impact of teacher victimization on teacher mental health.

Thanks!

Do you have any questions?
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