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Teacher-Directed Violence and Stress: the Role of School Setting

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Abstract

Teacher-directed violence (TDV), or violence in schools directed toward teachers, is a growing concern in contemporary schools (Bounds & Jenkins, 2016; Espelage et al., 2013). Existing research suggests that some teachers are more at risk of TDV (e.g., teachers whom are White, female, homosexual, religious, older, or those teaching high school) but it is unclear if teachers from all school settings (i.e., rural, urban, or suburban) experience similar levels of TDV and stress associated with TDV. Additionally, there has been no research in the United States examining how teachers cope with teacher-directed violence. Little is known about to whom teachers reach out for social support and if that social support is effective in moderating teacher stress. Past research demonstrates that teaching is a high-stress occupation (Fimian, 1988), and some of this stress could be related to experiences of violence. The current study examined differences in TDV experiences among 117 rural, urban, and suburban teachers in the Midwest. Analyses revealed that teachers in urban schools experienced the highest levels of TDV, followed by teachers in rural schools, then suburban teachers. A similar result was found when teachers were asked about stress they experienced that was specific to violence at work. Interestingly, when assessing work stress, suburban teachers had the highest levels of work stress, followed by urban, then rural teachers.

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Most research on violence in schools has examined interpersonal violence among peers (e.g., peer victimization, bullying, cyberbullying; Espelage et al., 2011), but teachers can also be the target of violence. Espelage et al. (2011) defined teacher-directed violence (TDV) as violence within a school setting in which teachers are the victims, such as obscene gestures, obscene remarks, intimidation, or physical assaults (McMahon et al., 2014; Reddy et al., 2013), and can be perpetrated by parents, students, colleagues, or administrators (Bounds & Jenkins, 2016; McMahon et al., 2014). Overall, research suggests that TDV can have emotional, physical, and psychological effects on teachers, including lower self-efficacy and increased rates of stress (Espelage et al., 2011; Reddy et al., 2013) which can lead to difficulties with classroom management and burn out (Kauppi & Porhola 2012; Ozkilic & Kartal, 2012).

Though all teachers are at risk of TDV, only one investigation has explored differences in TDV between rural, urban, and suburban teachers (i.e., Martinez et al., 2016). Research has revealed that teaching is a high-stress profession (Travers & Cooper, 1996) and teacher-directed violence may increase that stress (Dzuka & Dalbert, 2007; Ozkilic & Kartal, 2012). Moreover, student-on-student victimization research has shown that youth in rural, suburban, and urban schools experience and witness different types and rates of victimization. Though urban schools are often thought to have the highest levels of peer victimization, some studies have found that rural youth experience more serious peer victimization (Atav & Spencer, 2002; Smokowski, Cotter, Rovberson, & Guo, 2013). If youth in urban and rural schools are involved in serious violent acts at schools, it is logical that teachers in are also at an increased risk of being exposed to or the victim of violence. Schools experiencing geographic, transportation, and economic difficulties may have greater difficulty implementing violence prevention programming, thus

increasing both student and educator risk of violence (Leadbeater, Sukhawathanakul, Smith, Yeung Thompson, Gladstone, & Sklar, 2013). Since schools in different geographic settings experience unique risks for both teachers and students, it is important to examine student-on-teacher violence in these different settings.

Teacher-Directed Violence

Teacher-directed violence has been examined more thoroughly by researchers outside of the United States. Türküm (2011) examined teacher-directed violence among 360 participants (49.7% female) from all socioeconomic areas in Turkish schools. Türküm identified that teachers experience verbal and emotional victimization more than physical violence from students. Verbal violence was reported more often than other types of violence. Another study outside of the United States was conducted in Finnish schools by Kauppi and Pörhöla (2012) and included 215 participants (83.9% female). Participants reported the frequency with which they experienced teacher-directed violence in the past week. A majority of teachers, 67.4%, reported bullying from students as occurring "hardly ever," 25.6% reported bullying as "occasionally," 3.3 % of teachers reported bullying as "almost every week" 3.7% of teachers reported "almost daily". Thirty-seven percent (37.5%) of teachers attributed their victimization to student-related characteristics, 29.5% of teachers attributed victimization to institutional problems, 13.1% attributed victimization to problems with themselves as teachers, and 9.8% of teachers attributed their victimization due to multiple reasons/factors.

A study conducted by McMahon et al. (2014) was one of the first studies on teacher-directed violence in the U.S., which included 2,998 teachers from the Northeast, Midwest, South, and Western areas of the U.S. McMahon and colleagues examined three major forms of teacher-directed violence: physical attacks, harassment, and property offenses, which were broken down

into eleven different forms of teacher-directed violence. The category of physical attacks included physical attacks resulting in a visit to a physician, physical attacks not resulting in a visit to a physician, weapon pulled, and objects thrown. Harassment included obscene remarks, obscene gestures, verbal threats, intimidated, and internet victimization. Property offenses included theft of property and damage to personal property. The results of this study identified that 80% of the teachers surveyed experienced one type of victimization at least once that school year. Thirty-one percent of the surveyed teachers reported experiencing at least one of all three forms of TDV (i.e., physical attacks, harassment, and property offenses). McMahon et al. (2014) found that 2,175 of 2,998 (73%) participants reported experiencing harassment or obscene gestures, obscene remarks, verbal threats, and intimidation. These results are consistent with findings from previous research showing that verbal violence is the most common type of TDV (Dzuka & Dalbert, 2007; Martinez et al., 2016; Türküm, 2011).

McMahon et al. (2014) research indicated that teachers reported students as the most common perpetrator, with 94% of teachers experiencing TDV reporting victimization by students. When allowed to indicate more than one perpetrator, teachers' also reported violence from parents of students (37%), colleagues (21%), and others/strangers (17%). Male teachers in urban settings reported more victimization than female teachers; however, female teachers experienced more verbal victimization than male teachers, which is consistent with other studies results (Espelage et al., 2013; Türküm, 2011).

Martinez et al. (2016) examined teacher characteristics, self-blame, and administration support in relation to multiple victimization (i.e., experience more than one type of victimization). Teachers with more teaching experience reported less victimization than teachers with less teaching experience. The study also revealed that greater administrator support was

related to less victimization from both students and colleagues. Male teachers were more likely to report multiple victimization than female teachers.

Bounds and Jenkins (2016) examined TDV in relation to social support and teacher stress. They examined 11 different types of TDV (i.e., obscene remarks, obscene gestures, verbal threats, intimidation, theft of property, damage to personal property, physical attacks resulting in a visit to physician, physical attacks not resulting in a visit to a physician, weapon pulled, object thrown, and internet victimization), which were the types of TDV examined by McMahon et al. (2014). The study included 134 teachers from across the Midwest. Their results were similar to other studies (Martinez et al., 2016; McMahon et al., 2014) with 52% of participants experiencing TDV at least once within the past 3-6 months and verbal violence the most common type reported.

Research on teacher-directed violence has been limited, but is becoming more prominent in the United States. Much of the research has produced similar findings. Teachers tend to experience verbal violence more often than other types of teacher-directed violence (Bounds & Jenkins, 2016; McMahon et al., 2014; Türküm, 2011). Teachers may experience differing rates of TDV based on their own characteristics (McMahon et al., 2014; Mooji, 2011).

Stress

The teaching profession can be highly stressful, which sometimes leads to reduced job satisfaction, burnout, and decreased effectiveness as a teacher (Reddy et al., 2013). The impact of stress often leads teachers to employ many tactics to buffer their stress including seeking out others to confide in, using positive coping strategies (e.g., working out, relaxation strategies, or meditation), and using negative coping strategies (e.g., avoidance or distancing).

Research has found that teachers are stressed by demanding workloads, lack of support from colleagues, and decreased decision-making abilities, which often cause them more negative psychological outcomes like symptoms of depression or anxiety (Sauter et al., 1999). Mahan et al. (2010) found that ongoing stressors at work were highly correlated with anxiety and depression in secondary school teachers in urban settings. Mahan et al. found that unsafe neighborhoods or work environments were the highest ongoing stressor, followed by unfriendly coworkers, unmotivated students, and unprepared students.

Pas, Bradshaw, and Hershfeldt (2012) also found that teachers are commonly stressed by students that they feel are disruptive, difficult, unmotivated, and have many behavior problems. Teachers who reported that they were not prepared for the high demand of classroom management of difficult students had higher and faster rates of burnout than teachers who reported that they were prepared for the classroom management demand. Other studies have also found that student behavior is directly related to the stress level and higher rates of burnout for teachers. There is a possibility that students who are viewed as difficult or disruptive may perpetrate TDV, which has been found to cause stress in teachers (Ozkilic & Kartal, 2012).

Stress can be related to the geographic area in which the teacher works. Most research has focused on urban school settings, with a majority of teachers reporting high levels of stress (Mahan et al., 2010; Pas, Bradshaw, & Hershfeldt, 2012). However, it is true that most causes of stress for teachers (e.g., heavy workloads, negative coworkers, underfunding, and lack of school influence) can be found in urban, suburban, and rural schools (Goldstien & Boyd, 2008).

School Setting Type

Only one study has examined differences in TDV based on school setting (urban, suburban, rural; Martinez et al., 2016). They found that rural teachers reported the lowest levels

of victimization, followed by suburban then urban schools, but these researchers only investigated overall levels of TDV, not specific types of TDV. There is a strong argument for exploring differences in TDV among rural, suburban, urban schools because communities in these settings have unique characteristics, risks, and outcomes.

Rural schools tend to have smaller populations of students and those students tend to be predominately Caucasian (Johnson & Strange, 2007), while urban schools tend to have larger populations of students with greater ethnic and racial diversity (Horng, 2005). Urban schools often have larger class sizes, poorer working conditions, insufficient resources for students, and poorer staff relationships compared to rural schools (Horng, 2005), as well as difficulty recruiting and keeping highly qualified teachers and paraprofessionals (Horng, 2005; Lankford, Loeb, & Wyckoff, 2002) with 30 - 50% of urban teachers leaving the profession within the first five years of teaching (Brunetti, 2001; Gritz & Theorbald, 1996; Stanford, 2001). However, the National Education Association has found that rural schools may also have difficulty providing competitive teacher salaries, opportunities for advancement, and resources for their students (Johnson & Strange, 2007).

Though teaching is a stressful occupation in general (Johnson, Cooper, Cartwright, Donald, Taylor, & Millet, 2005), there is some variation in teacher stress, turnover, and rates of school violence among schools in urban, suburban, and rural communities. Abel (1999) found that teachers who worked in urban school settings had higher levels of stress from poor working conditions and student misbehavior compared to rural schools; however, rural teachers who reported stress from time pressure and student misbehavior had a high rate of burnout as well. Ingersoll (2011) and Smith and Smith (2006) reported higher teacher turnover rates in urban, high poverty, public schools compared to other types of schools, with participants citing

dissatisfaction with salary, administrative support, difficult students, school safety, and lack of influence over decision-making as primary reasons for leaving. Overall, urban and rural communities each have more social and community problems than suburban communities, but urban and rural schools tend to have different problems from each other (Goldstien & Boyd, 2007).

Current Study

The profession of teaching has a high rate of burnout and there are many sources of stress for educators; however, being the target of teacher-directed violence may be one stressor that impacts teachers and their ability to appropriately educate students in their classroom. It is important to consider the setting of the school (i.e., rural, suburban, or urban) when researching TDV because previous research suggests that student-on-student violence varies among these settings, which suggests that teachers in those schools may also have different experiences with violence. Given the dearth in the literature, the goal of the current study is to examine potential differences among rural, urban, and suburban teachers in overall and specific forms of teacher-directed violence as well as stress.

Method

Participants

All information on participants personal and school information was obtained through self-report. The sample included 117 K-12 educators across the state of Illinois. Seventy-nine female teachers and 29 male teachers completed the survey. Years of experience ranged from 1 year to 42 years (mean = 16 years). A majority of participants (N = 69) taught ninth through twelfth grade, 20 teachers taught through fourth grade, and 18 teachers taught fifth through eighth grade. Fifty-three participants worked in urban schools, 35 participants worked in

suburban settings, and 20 worked in rural settings. Age ranged from 22 years old to 63 years old (mean = 42 years).

Measures

Teacher-directed violence. To assess teacher-directed violence, the survey developed by McMahon and colleagues (2014) for the American Psychological Association Classroom Violence Directed Against Teachers Task Force was used. Questions for this survey included "Have you experienced any of these types of violence from your students in the past 6 months?" which is followed by a list of 11 forms of victimization: obscene remarks, verbal threats, intimidation, obscene gestures, obscene graffiti, damage to personal property, object(s) thrown, physical attacks, cyber harassment, theft of personal property, and weapon pulled (McMahon et al., 2014). A twelfth option, "other", allowed teachers to enter their own response. A thirteenth option was "I have not experienced violence from students". For the current study, when a participant chose any of the 11 types or "other" were then asked follow up questions: "How many times in the past 6 months have you experienced these types of violence?" with options ranging from "1 to 2 times", "3 to 4 times", "5 to 6 times", and "6 + times". An alpha coefficient was calculated for the first 11 forms of victimization, which was .886 for the current sample.

Teacher Stress. To assess teachers' stress at work and in their personal lives, the Teacher Stress Inventory (TSI) was used. The TSI (Fimian, 1988) is a measure of teacher stress or "work stress" in 10 different major areas. The scale consists of 49 items, with each item rated on a 5-point Likert scale from 1 (*no strength or noticeable)* to 5 (*major strength or extremely noticeable)*. There is adequate evidence for both reliability and validity of the TSI (Tinsley & Weiss, 1975). Interrater reliability was .82 for subscales examining manifestations of stress.

Internal consistency for the TSI total score was .92, with subscale internal consistencies ranging from .75 to .88. Test-retest reliability was .76 for the total TSI score (Fimian, 1986).

The TSI is used to measure behavioral, physiological, and other symptoms of stress. The current study used only two subscales from the TSI: Work-Related Stressors and Professional Distress because they best represented sources of stress relevant to the study. The other sources of stress that were not included were Time Management, Motivation, and Professional Investment. The other five subscales measure stress manifestations (i.e., emotional, fatigue, cardiovascular, gastronomic, and behavioral manifestations) which were not a focus of the study. The subscale for Work-Related Stressors was found to have an eigen value of 1.57 and an alpha of .80. The subscale for Professional Distress was found to have an eigen value of 1.12 and an alpha of .82 (Fiman & Fasteau, 1990). Both subscales are considered significantly related to each other and to stress overall (Fiman & Fasteau, 1990). Each subscale was scored individually by adding up the total number of responses and dividing by the number of items on the subscale. The TSI total scores were calculated by adding up scores from the two subscales and dividing by two. The overall score provides a collective measure of the sources of teacher stress.

Stress was also measured through self-report. Teachers were asked “Do you experience stress from your job?” with the option of “yes” or “no”. A follow-up question was asked for those teachers who responded “yes” through the question “Please rate your stress at work” which was followed by 5 ratings of stress. This included “not much”, “little”, “somewhat”, “much” and “a great deal”.

Procedure

Following IRB approval, data was collected through Qualtrics, a Web-based survey program (Qualtrics, Provo, UT). An email invitation was sent to educators through email

listservs, as well as through email addresses obtained from school district websites in the state of Illinois. Educators from 17 different school districts participated in the study, primarily from the state of Illinois. The authors utilized the Illinois Interactive Report Card (iirc.niu.edu) to locate schools that were in rural, suburban, and urban areas, then the district websites were consulted to obtain teacher email addresses. The authors chose 3-4 school districts within each category. Educator-focused listservs were accessed through the university. Since recruitment occurred through listservs, it is not possible to calculate an overall response rates. Emails included a link to the online survey, where participants consented to participate anonymously. Participants were directed to complete the survey on their own time and with their own personal computers. Participants who completed the survey fully were entered into a raffle for one of three Amazon gift cards.

Results

Types of Violence by Setting. To address the first research question, frequencies were calculated for each type of teacher-directed violence. Obscene Remarks was the most frequently experienced type of violence with 34.26% of teachers reporting they had received obscene remarks at least 1-2 times in the past 4-6 months. In the past 4-6 months, 34.26% of teachers received obscene remarks, 24% verbal threats, 23% obscene gestures, 22% damage to personal property, 21% obscene graffiti, 18.52% intimidation, 18.52% theft of personal property, 16.7% objects thrown, 14% physical attacks, 6% cyber harassment, 1% weapon pulled, and 1% other (see Figure 1).

A one-way ANOVA was conducted to determine if there was a statistically significant difference in the average amount of TDV experienced by teachers in urban, suburban, and rural schools (see Table 1 for means and standard deviations). There was a statistically significant

difference in TDV experiences, with urban teachers having a mean TDV score of 7.1, suburban teachers 2.7, and rural teachers 2.3, $F(2, 107) = 9.71$, $p < .001$. Post hoc analyses using Tukey HSD (i.e., follow up tests to determine if there were differences between each of the settings) indicated that rural and suburban teachers did not differ significantly, but that urban teachers experienced significantly more TDV than both rural and suburban teachers.

In addition to examining differences among urban, suburban, and rural teachers on overall levels of TDV, we were interested in examining differences in the individual types of TDV: Remarks, Verbal Threats, Intimidation, Gestures, Graffiti, Damage to Property, Objects Thrown, Physical Attacks, Cyber Harassment, Theft, and Weapon Pulled. There were not statistically significant differences among the three settings for Damage to Property ($F(2, 107) = 2.42$, $p = .094$), Objects Thrown ($F(2, 107) = 3.84$, $p = .025$), Physical Attacks $F(2, 107) = 1.41$, $p = .248$), Cyber harassment ($F(2, 107) = .51$, $p = .600$), Theft ($F(2, 107) = 3.25$, $p = .043$), and Weapon Pulled ($F(2, 107) = .51$, $p = .600$).

There were differences among urban, suburban, and rural teacher for Remarks ($F(2, 107) = 18.57$, $p < .001$), Verbal Threats ($F(2, 107) = 6.433$, $p = .002$), Intimidation ($F(2, 107) = 7.32$, $p = .001$), Gestures ($F(2, 107) = 6.88$, $p = .002$), and Graffiti ($F(2, 107) = 5.94$, $p = .004$). In each type of TDV, urban teachers had the highest mean, followed by rural, then suburban teachers; however, post hoc analyses showed that rural and suburban had statistically similar means for Remarks, Verbal Threats, and Intimidation with urban teachers report statistically significant higher levels of each of these. For Gestures and Graffiti, urban teachers had significantly higher scores than suburban teachers, but there were not statistically significant differences between rural and either urban or suburban.

Stress by Setting. Stress was assessed two ways: a question asking about stress from violence and more global questions about general work stress and personal stress. To assess differences in stress specific to violence, a one-way ANOVA indicated that there was a statistically significant difference in stress due to violence among teachers from different settings, $F(2, 71) = 4.99$, $p = .009$. Urban teachers had the highest levels, followed by rural, then suburban. Post hoc comparisons indicated that urban teachers experienced significantly more stress from violence than suburban teachers, but rural teachers had statistically similar levels of stress from violence as both suburban and urban teachers.

There was also a statistically significant difference in Work Stress among urban, suburban and rural teachers, $F(2, 100) = 5.28$, $p = .007$. Suburban teachers had the highest levels of work stress, followed by urban, then rural teachers. Post hoc comparisons showed that suburban teachers had significantly greater levels of work stress compared to both urban and rural teachers, and urban and rural teachers were not significantly different in levels of work stress. There were not statistically significant differences in Personal Distress among the three settings, $F(2, 100) = .160$, $p = .852$.

Discussion

The current study found that obscene remarks were the most common type of teacher-directed violence compared to obscene gestures, intimidation, obscene graffiti, damage to personal property, objects thrown, physical attacks, cyber harassment, theft of personal property, and weapon pulled, with 34.36% of teachers reporting experiencing receiving obscene remarks at least 1-2 times in the past 4-6 months. This finding was similar to previous research conducted on TDV (Duzka & Dalbert, 2007; McMahon et al., 2014). Obscene remarks may be the most

reported type of teacher-directed violence because verbal violence may be more common in general, amongst both students and teachers, than physical violence.

Teachers working in urban settings (74.7%) reported more teacher-directed violence than those in suburban or rural settings. Urban communities often have high levels of violence; thus, it makes sense that violence at home and in the community settings could spill over into the school setting. Social issues like poverty, community violence, and difficult home lives could potentially impact students and may be carried over to the school setting (Ingersoll, 2011; Smith & Smith, 2006). Past literature has found that more urban teachers than rural or suburban teachers report having difficult students in their classrooms (Abel, 1999; Horng, 2005). With difficult students often described as non-attentive, unresponsive to directions, disruptive in class, and impolite or overtly negative towards the teacher (Abel, 1999; Horng, 2005). As mentioned above, these behaviors may be related to the urban environment in which they reside. These "difficult students" may be victimizing their teachers which contributes to the challenges in dealing with already difficult students.

Urban teachers also reported higher rates of obscene remarks, verbal threats, and intimidation than rural or suburban teachers and higher rates of gestures and obscene graffiti than suburban teachers. This may also be attributed to students' experiences outside of the school setting within their community and home lives. For instance, those students who hear their parents curse may curse at other adults. Similar to overall TDV, types of violence may spill over from outside of the school setting (Ingersoll, 2011; Smith & Smith, 2006). Those students who view their outside surroundings as violent often state that their school is just as violent, and come to school prepared to protect themselves (Goldstien & Boyd, 2007).

In the current study, teachers in urban schools reported higher levels of stress than suburban and rural teachers, which was consistent with past literature (Abel, 1999; Smith & Smith, 2006). Teachers who work in urban areas have reported many more reasons that their profession directly impacted their stress level (e.g., class sizes, poorer working conditions, poor staff relationships Horng, 2005; Smith & Smith, 2006). Violence might be a tipping point for some teachers, causing them to be more stressed than those teachers in rural or suburban school settings.

Although urban teachers had higher levels of overall stress, suburban teachers reported higher levels of work distress. This may be because teachers in suburban settings experience more pressure for their students to perform at high levels (Grant, 2000). Grant (2000) found that administrators and principals in suburban settings often pressure their teachers to recognize the importance of standardized testing and to meet high expectations. This was different in urban or rural schools because teachers reported that their administrators did not place as much importance on meeting certain expectations on standardized testing. If urban and rural teachers do not experience the added pressures of reaching a certain level of performance on standardized testing, this may partially explain why they had lower levels of work distress than suburban teacher in the current study.

Limitations

This study contained several limitations that impact the findings, as well as the generalizability to other studies. The sample size was study was relatively small. It is important to have a large sample to ensure that all types of teachers are represented appropriately. In addition, larger sample sizes help studies generalize to future studies, as well as generalize to other studies. The use of a larger sample size would also allow researchers to have the statistical

power to include control variables (i.e., school climate, classroom management styles, community safety) that may also be related to stress and TDV. Future studies should use larger sample sizes that includes many types of teachers from various settings across the United States.

A second limitation was that all teachers who participated were from the Midwest, limiting the study geographically and demographically. Future research should be conducted in a larger geographic area to include a more representative sample based on gender, race, type of school setting, and grade level taught are considered. This information could help generalize future studies to most educators, not just the ones in the surrounding area of the study.

A final limitation to the study is the amount of time between the event of teacher-directed violence and its measurement. If TDV was measured immediately after the event itself, rather than a few weeks to months' after, results for stress may have been higher. The overall impact of TDV may have been decreased because of the duration of time between the event itself and the measurement of it. To address this, future studies could ask teachers about TDV that had occurred closer to the measurement itself. Rather than months, the time frame could be limited to 4-6 weeks.

Implications and Future Directions

Results from this study may help pave the way for future studies in the area of teacher-directed violence. Future research should be conducted on a national scale to continue to assess the amount and type of TDV that is being experienced. Findings from the current study show that more than half of teachers experienced some type of TDV. Because TDV can have negative side-effects, it may be crucial to understand who and what type of violence is occurring in order to help teachers in their effectiveness as teachers and with their school climate.

Other research should examine what maintains TDV between students and teachers. Researchers should also examine the culture of the school setting, the climate of schools, student-teacher relationships, and teaching and discipline styles. This research could help determine the proactive changes we could make in the school setting, versus the reactive changes in policy. Future research may use Patterson's Coercive Model to explain the maintenance in negative or violent relationships between teachers and students in the school setting (Patterson, 1976).

The findings of the study may have various implications for the practice of school psychology. Those who work in school settings have direct access to teachers who may experience teacher-directed violence. School psychologists are well-equipped to help support teachers with these experiences through direct consultation for classroom management, minor professional counseling, and recommending outside sources for other counseling services. School psychologists may also be able to support teachers experiencing teacher-directed violence by helping them approach the administration with their current concerns and negative experiences. Some school psychologists may be able to help make system changes for their schools by helping write policy protecting teachers from teacher-directed violence. They may also make system changes by giving professional development to districts or buildings on teacher-directed violence, helping promote positive social climate within their schools, and providing information and education about teacher-student relationships and interactions.

In order for the educational system to work effectively teachers must be protected. If their effectiveness in teaching is impacted by teacher-directed violence, then more research should be done to fully understand how to impact teachers positively through programs and trainings for those in the school setting.

Compliance with Ethical Standards

Conflict of Interest: Both authors declare that they have no conflict of interest.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

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Table 1. *Means and standard deviations by school setting*

	Suburban		Rural		Urban		Total	
	M	SD	M	SD	M	SD	M	SD
Overall TDV	2.35	3.91	2.71	4.50	7.11	6.24	4.81	5.77
TDV Types								
Remarks	0.60	0.82	0.46	0.70	1.60	1.10	1.05	1.08
Verbal Threats	0.20	0.52	0.20	0.47	0.66	0.81	0.43	0.70
Intimidation	0.25	0.55	0.20	0.63	0.79	0.93	0.50	0.83
Gestures	0.45	0.94	0.23	0.60	0.92	1.02	0.61	0.94
Graffiti	0.25	0.64	0.17	0.45	0.70	0.93	0.44	0.79
Damage to Property	0.15	0.37	0.40	0.81	0.57	0.77	0.44	0.74
Objects Thrown	0.15	0.49	0.43	0.70	0.74	1.02	0.53	0.87
Physical Attacks	0.05	0.22	0.23	0.43	0.30	0.72	0.23	0.57
Cyber Harassment	0.10	0.45	0.09	0.28	0.19	0.62	0.14	0.50
Theft	0.15	0.37	0.23	0.60	0.55	0.87	0.37	0.73
Weapon Pulled	0.00	0.00	0.00	0.00	0.02	0.14	0.01	0.10
Stress								
Stress from Violence	2.00	0.85	1.78	1.00	2.65	1.18	2.26	1.14
Work Stress	2.83	0.81	3.54	0.62	3.07	0.90	3.17	0.84
Personal Distress	2.36	1.28	2.50	0.91	2.38	1.11	2.41	1.08

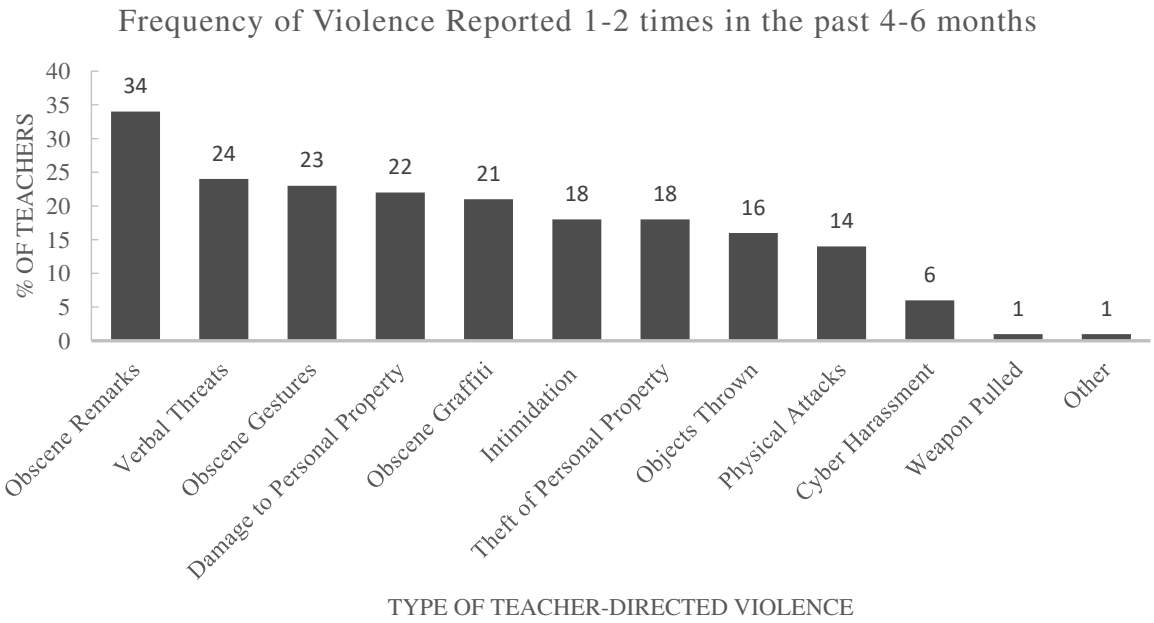

Figure 1 – Frequency of teacher-directed violence reported 1-2 times in the past 4-6 months.