Work Environment Stressors, Social Support, Anxiety, and Depression Among Secondary School Teachers

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Work environment stressors are a prominent health and safety issue for secondary school teachers, school administrators, parents, and students, as examined in 168 teachers from two urban and five suburban high schools. The purpose of this study was to examine relationships between ongoing and episodic stressors and anxiety and depression, as well as the extent to which anxiety and depression may be predicted by stressors and coworker and supervisor support. The Ongoing Stressor Scale (OSS) and the Episodic Stressor Scale (ESS), the Coworker and Supervisor Contents of Communication Scales (COCS), the State Anxiety Inventory (S-Anxiety), and the Center for Epidemiological Studies Depression Scale (CES-D) were used to measure the variables. Ongoing and episodic stressors were significantly and positively associated with anxiety and depression. Ongoing stressors and coworker support were significant in explaining anxiety and depression among secondary school teachers. Coworker support had an inverse relationship to anxiety and depression.

Work environment stressors are a prominent health and safety issue for secondary school teachers, as well as for most U.S. workers. Previous researchers have reported the detrimental effects of occupational stress on workers, including teachers, who experience a high level of stress and burnout in the classroom (Kyriacou, 2001; Murphy & Sauter, 2003; Sorenson, 2007). Stressors are not restricted to a specific school, city, or state and can influence teachers in public and private elementary, middle, and high schools (Grayson & Alvarez, 2008; Jarvis, 2002; Rieg, Paquette, & Chen, 2007).

The 2003-2004 U.S. Department of Education’s School Survey on Crime and Safety reports that the nation’s public schools have unsafe work environments with potentially dangerous students. The frequency of violence has not increased significantly during the past two decades, but violent and aggressive students are now recognized as a problem in U.S. public school systems (Guerino, Hurwitz, Noonan, Kaffenberger, & Chandler, 2006). Urban high school teachers are more likely to be victims of violent crime at school than are rural or elementary teachers. One or more violent crimes, such as sexual assault, aggravated assault, robbery, or rape, were reported to have occurred in 20% of U.S. public schools (DeVoe et al., 2004; Guerino et al., 2006).

The National Institute for Occupational Safety and Health (NIOSH) concluded that work environments may produce exposures to potential chronic and acute stress-
ors. Some of the sources of stress at work included demanding workloads, decreased decision-making abilities, and lack of support or help from coworkers or supervisors, leading to anxiety, depression, and behavioral and physiological outcomes (Sauter et al., 1999).

THEORETICAL FRAMEWORK
The conceptual model used to guide this study was derived from the Neuman Systems Model (Neuman, 1995, 1996). When secondary school teachers react to a stressor or stressors psychologically (with anxiety or depression), the “flexible line of defense” and the “normal line of defense” are invaded. This study investigated whether the lines of resistance could be activated to protect secondary school teachers’ basic structure (i.e., survival factors such as normal temperature, organ strength or weakness, genetic structure, ego structure) or central core from ongoing and episodic stressors. The sociocultural portion of the model was tested using empirical indicators of coworker and supervisor support. Coworker and supervisor support may mitigate or moderate the relationship between work environment stressors and anxiety or depression. Previous research by Gigliotti (1997, 1999) empirically tested Neuman’s conceptual model using the social support variable as a moderator in the “flexible line of defense,” preventing invasion of the “normal line of defense” and reducing the impact of the stressors.

LITERATURE REVIEW
The literature review examined sources of work stressors, social support measures, and the psychological reactions of anxiety and depression among teachers. The literature failed to support particular work stressors for teachers.

Work Environment Stressors
Chronic stressors were defined as those events occurring during an extended period (Schonfeld, 1990). Lack of support from supervisors, coworkers, and parents emerged in the literature as one of the most frequently identified chronic stressors (Betoret, 2006; Blase, Blase, & Du, 2008; Brewer & McMahan, 2003). A demanding workload (i.e., class size, paperwork, lack of planning time) was a common stressor cited in the veteran and novice teachers’ work environments (Liu & Ramsey, 2008; McCann & Johannessen, 2004; O’Donnell & Lambert, 2008; Pearson & Moomaw, 2005; Flash & Piotrowski, 2006; Rieg et al., 2007).

Episodic stressors in the work environment can be acute or potentially temporary (i.e., not ongoing), producing adverse psychological outcomes (Schonfeld, 1990). In cross-sectional and longitudinal studies, disruptive students or student misbehavior were salient sources of stress for teachers (Geving, 2007; Grayson & Alvarez, 2008; Kokkinos, 2007; Rieg et al., 2007).

Coworker and Supervisor Support
Coworker support was defined as communication with coworkers, and supervisor support was defined as communication with supervisors (Beehr, Jex, Stacy, & Murray, 2000). Social support from coworkers, supervisors, or family members has been identified as one way to reduce the detrimental effects of work environment stressors (Beehr et al., 2000; Kahn, Schneider, Jenkins-Henkelman, & Moyle, 2006). Schonfeld (1990, 1996) posited that social support may also have an interactive or direct effect on health outcomes among teachers. The literature is divided on whether coworker support (Bowlýing, Beehr, & Swader, 2005; Bruk-Lee & Spector, 2006) or supervisor support (Gersten, Keating, Yovanoff, & Harniss, 2001; Thompson & Protta, 2005) is more effective in reducing adverse psychological outcomes.

Anxiety and Depression
Anxiety was defined for this study as a transitory state in which individuals feel threatened, apprehensive, tense, and worried (Spielberger, Gorsuch, Lusbene, Vagg, & Jacobs, 1983). Depression was defined as feelings of guilt, worthlessness, helplessness, and hopelessness, loss of appetite, depressed mood, or disturbed sleep (Radloff, 1977). In a study by Melchior et al. (2007), exposure to work environment stressors led to adverse psychological consequences such as anxiety and depression among healthy young workers. A few studies indicated anxiety occurred due to fear of immediate or future threat (e.g., robbery), and depression occurred due to a loss event (e.g., the death of a significant other) (Eysenck, Payne, & Santos, 2006; Sandin, Chorot, Santed, & Valiente, 2004). Jurado, Gurpegui, Moreno, and de Dios Luna (1998) reported depression increased with years of teaching experience and teacher age.

PURPOSE
In this study, the authors examined relationships among ongoing and episodic work environment stressors, social support from coworkers and supervisors, and psychological reactions such as anxiety and depression among secondary school teachers. Specifically, the researchers studied (1) the main effects of ongoing and episodic work environment stressors and coworker and su-
response from 0 (not at all) to 4 (a great extent) (Schonfeld Scale (OSS), a 32-item scale with a 5-point Likert-type scale ranging from 1.0 to 37.5 ($M$ = 11.11). The majority of the sample were married (64.3%), were White (89.3%), and had earned a master’s degree (56.0%). Total years in teaching ranged from 1.0 to 37.5 ($M$ = 10.8, $SD$ = 9.64). Classroom aide assistance averaged 1.2 hours ($SD$ = 3.09), with a range of 0 to 20 hours. More than three quarters (78.0%) of the 168 teachers worked in high schools. The number of students in a class ranged from 5 to 65 ($M$ = 22.2, $SD$ = 7.33).

**Predictor Variables.** Ongoing work environment stressors were measured using the Ongoing Stressor Scale (OSS), a 32-item scale with a 5-point Likert-type scale ranging from 0 (not at all) to 4 (daily), generating a total score of 0 to 88; a higher score on the OSS indicates a higher level of episodic workplace adversity. Episodic work environment stressors were measured with the Episodic Stressor Scale (ESS), a 22-item instrument that measures the frequency of acute stressors teachers encounter in the work environment (Schonfeld, 1990, 1996). This 5-point Likert-type scale ranged from 0 (not at all) to 4 (daily), generating a total score of 0 to 20. Higher scores indicate a greater level of episodic work environment stressors.

**Sample and Procedure**

The researchers recruited a convenience sample of secondary school teachers, grades 9 through 12, in central New Jersey regional school districts. With the permission of each school district’s superintendent and the principal of each high school, the researchers distributed the study packets, including an invitation letter, a return envelope, and questionnaires, to 756 full-time male and female suburban and urban secondary school teachers through their school mailboxes. Consent for the study was implied if the teachers answered the questionnaires and returned completed survey packets. One hundred eighty-one secondary school teachers responded to the survey (23.9% response rate). Thirteen respondents were excluded from the sample because they did not meet the inclusion criteria. Full-time secondary school teachers who were employed at least 1 year and taught at least three classes daily were included in the study. Secondary school teachers who had no staff or administrative responsibilities and were taking physician-prescribed medication for anxiety or depression were excluded from the study. A total of 168 questionnaires remained for analysis. This sample was sufficient to provide a power of at least .80 given an alpha of .05, four predictor variables within the multiple regression model, and an estimated effect size of .2 (Cohen, 1988).

Respondents included 124 women (73.8%) and 44 men (26.2%) whose ages ranged from 23 to 66 years ($M$ = 42.6, $SD$ = 11.11). The majority of the sample were married (64.3%), were White (89.3%), and had earned a master’s degree (56.0%). Total years in teaching ranged from 1.0 to 37.5 ($M$ = 10.8, $SD$ = 9.64). Classroom aide assistance averaged 1.2 hours ($SD$ = 3.09), with a range of 0 to 20 hours. More than three quarters (78.0%) of the 168 teachers worked in a high school that served more than 1,000 students, and two thirds (66.1%) of the teachers worked in suburban high schools. The number of students in a class ranged from 5 to 65 ($M$ = 22.2, $SD$ = 7.33).

**Instruments**

**Predictor Variables.** Ongoing work environment stressors were measured using the Ongoing Stressor Scale (OSS), a 32-item scale with a 5-point Likert-type scale ranging from 0 (not at all) to 4 (daily) (Schonfeld, 1990, 1996). The total score (range = 0 to 128) was used as an index of ongoing work environment stressors, with a higher score indicating a higher level of ongoing adversity in the work environment of secondary school teachers. Episodic work environment stressors were measured with the Episodic Stressor Scale (ESS), a 22-item instrument that measures the frequency of acute stressors teachers encounter in the work environment (Schonfeld, 1990, 1996). This 5-point Likert-type scale ranged from 0 (not at all) to 4 (daily), generating a total score of 0 to 88; a higher score on the scale indicates a higher level of episodic workplace adversity.

Items were developed for the OSS and the ESS by using quantitative and qualitative techniques with 67 veteran male and female New York City preschool, elementary, and secondary school teachers. The OSS included school-related stressors such as teacher workload, preparation time, school safety issues, administrative behavior or policies, and student behavior. The ESS included encounters with disruptive, aggressive, or threatening students; parental approval and criticism; and administrative concerns. Construct validity of both measures was verified by a lack of confounding with preexisting depressive symptoms and a moderate correlation with future depressive symptoms (Schonfeld, 2000, 2001). Adequate reliability coefficients of .86 for the OSS and .83 for the ESS were observed in a sample of 250 full-time female preschool, elementary school, and junior and senior high school teachers (Schonfeld, 1996). The reliability coefficients for the OSS and the ESS in this study were .84 and .80, respectively.

**Social Support.** Social support in the work environment, especially from coworkers and supervisors, was measured using the Contents of Communication Scale (COCs). The COCs is a 12-item, self-administered instrument designed to assess positive and negative work-related and non-work-related communication in the work environment (i.e., registered nurses in a hospital setting) (Beehr, King, & King, 1990). To assess coworker and supervisor support of secondary school teachers in this study, the researchers modified 5 of the 12 original questions to reflect teachers instead of nurses, school administrators instead of physicians, teaching instead of nursing, and secondary schools instead of hospitals. The questions described possible content of conversations that could occur with respondents’ coworkers or supervisors in schools. Total scores based on a 5-point Likert-type scale [1 (never) to 5 (always)] ranged from 12 to 60. Higher scores indicated a greater level of social support from coworkers or supervisors in the work environment. The reliability coefficients for positive and negative work-related communication and non-work-related communication ranged from .75 to .92 (Beehr et al., 1990). The reliability coefficients for the Coworker and Supervisor COCs in this study were .80 and .92, respectively.

**Outcome Variables.** The State Anxiety Inventory (S-Anxiety) was used to measure short-lived anxiety (i.e., feelings of tension, apprehension, nervousness, and worry) among the teachers. The 20-item, self-report inventory assessed transitory emotional states on a 4-point
Likert-type response ranging from 1 (not at all) to 4 (very much so). Higher total scores indicated higher levels of anxiety (range = 20 to 80) (Spielberger et al., 1983). This scale has shown acceptable content and convergent validity (Martuza & Kallstrom, 1974). Acceptable reliability has been reported in a wide range of publications (Barnes, Harp, & Jung, 2002; Gros, Simms, Antony, & McCabe, 2007; Spielberger et al., 1983). The Cronbach’s alpha for the scale was .95 in this study.

The Center for Epidemiological Studies Depression Scale (CES-D) was used to measure symptoms of depression over the previous week (Radloff, 1977). Depressive symptoms measured by the scale include feelings of helplessness and hopelessness, depressed mood, feelings of guilt and worthlessness, loss of appetite, and sleep disturbances. Depressive symptoms were rated on a 4-point Likert-type scale ranging from 0 (rarely or none of the time) to 3 (most or all of the time). The total score, ranging from 0 to 60, represents the frequency of current depressive reactions; higher scores indicate higher levels of depressive symptoms. A score of 16 or above indicates that respondents may be more likely to be depressed (Orme, Reis, & Herz, 1986). This scale has been widely used and accepted as a valid and reliable instrument for depression risk in various populations (Orme et al., 1986; Roth, Ackerman, Okonkwo, & Burgio, 2008; Schonfeld, 1996). In this study, the Cronbach’s alpha for the CES-D was .92, indicating excellent reliability.

**Data Analysis**

All data were analyzed using SPSS, version 11.0 for Windows, software. A two-tailed .05 significance level was used for all inferential tests. To examine the relationships among study variables, the researchers used Pearson product moment correlation coefficients. Multiple regression analyses were used to test the main effects of ongoing and episodic work environment stressors and co-worker and supervisor support on anxiety and depression (Specific Aim 1), as well as moderating effects of co-worker and supervisor support on the relationships between ongoing and episodic work environment stressors and anxiety and depression (Specific Aim 2). The researchers also tested conformance to the statistical assumptions for multiple regression. For moderation models, the authors centered both predictor and moderator variables by subtracting the sample mean from the actual scores and computing the interaction terms by multiplying the centered predictor by each moderator variable.

**RESULTS**

Descriptive statistics and correlations for study variables are shown in Tables 1, 2, and 3. The relationships

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Actual Range</th>
<th>Possible Range</th>
</tr>
</thead>
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<tr>
<td>Ongoing work environment stressor</td>
<td>142</td>
<td>51.72</td>
<td>14.99</td>
<td>13-87</td>
<td>0-128</td>
</tr>
<tr>
<td>Episodic work environment stressor</td>
<td>115</td>
<td>33.02</td>
<td>8.93</td>
<td>9-57</td>
<td>0-88</td>
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<tr>
<td>Coworker support</td>
<td>165</td>
<td>40.33</td>
<td>5.50</td>
<td>26-57</td>
<td>12-60</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>164</td>
<td>24.69</td>
<td>7.72</td>
<td>12-43</td>
<td>12-60</td>
</tr>
<tr>
<td>Anxiety</td>
<td>153</td>
<td>36.22</td>
<td>12.97</td>
<td>20-74</td>
<td>20-80</td>
</tr>
<tr>
<td>Depression</td>
<td>157</td>
<td>11.43</td>
<td>10.32</td>
<td>0-52</td>
<td>0-60</td>
</tr>
</tbody>
</table>

**Table 2**

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<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>0.661***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>-0.021</td>
<td>0.107</td>
<td>-0.171</td>
<td>-0.131</td>
<td>1</td>
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</tr>
<tr>
<td>4</td>
<td>-0.184**</td>
<td>-0.221**</td>
<td>-0.113</td>
<td>-0.131</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.362***</td>
<td>0.347***</td>
<td>-0.153</td>
<td>-0.062</td>
<td>0.831***</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.385***</td>
<td>0.334***</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note. **p < .05. ***p < .001.
among study variables were statistically significant, with small to modest correlations. Questionnaire responses to ongoing and episodic stressors may indicate that secondary school teachers in this study were experiencing stress in the work environment. Four predictors—ongoing stressor, episodic stressor, coworker support, and supervisor support—explained 28% (adjusted 25%) of the variability in anxiety and 27% (adjusted 24%) of the variability in depression (Table 3). Only ongoing work environment stressor and coworker support made significant independent contributions to anxiety and depression. Higher levels of ongoing stressors were associated with higher levels of anxiety and depression, whereas higher levels of coworker support were related to lower levels of anxiety and depression. In sum, ongoing work environment stressors and coworker support had a main effect on anxiety and depression, respectively, after other study variables were controlled, whereas episodic stressors and supervisor support had no independent effect on anxiety or depression.

Separate multiple regression analyses were performed for anxiety and depression (Table 4). Although the researchers found a significant main effect of ongoing stressors and coworker support on anxiety and depression, no statistically significant interaction effect among any work environment stressors or coworker or supervisor support on anxiety or depression was found; these results indicate no moderating effect for coworker or supervisor support. In other words, social support from coworkers or supervisors did not moderate the relationship between work environment stressors and anxiety or depression.

### DISCUSSION

The Neuman Systems Model clarified the negative effects of actual or potential episodic and ongoing stressors in the teachers’ work environment (Neuman, 1995, 1996). A primary finding of this study was that ongoing stressors are a significant predictor of anxiety. As the ongoing stressors increased in the teachers’ work environment, so did anxiety. The lines of resistance were not activated to protect the teachers from psychological stress. The episodic stressors did not contribute significantly to either regression model; episodic stressors did not produce a negative effect because anxiety only increased when ongoing work stress increased. Work environment stress was not moderated by the social support variable in the flexible line of defense, resulting in psychological stress or anxiety.

The overall results of this study support the findings of the National Institute for Occupational Safety and Health (NIOSH) that ongoing (chronic) factors in the work environment can influence workers’ psychological health (Sauter et al., 1999). Coworker support was the only variable that significantly contributed to the variance in anxiety. Teachers with lower coworker support had higher anxiety. The actual variance in anxiety explained by ongoing stressors and coworker support was modest.

The researchers also found that ongoing stressors in the work environment were related to depression among the secondary school teachers, whereas episodic stressors did not contribute significantly to teachers’ depressive symptoms. Overall, the variance in depression explained by ongoing and episodic stressors and by coworker and supervisor support was modest. The results suggest that

### Table 3

<table>
<thead>
<tr>
<th>Model 1: Anxiety</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.284</td>
<td>0.253</td>
<td>38.513</td>
<td>9.691</td>
<td>3.974</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Ongoing stressor</td>
<td></td>
<td></td>
<td>0.372</td>
<td>0.104</td>
<td>0.423</td>
<td>3.590</td>
<td>.001</td>
</tr>
<tr>
<td>Episodic stressor</td>
<td></td>
<td></td>
<td>0.163</td>
<td>0.182</td>
<td>0.105</td>
<td>0.896</td>
<td>.373</td>
</tr>
<tr>
<td>Coworker support</td>
<td></td>
<td></td>
<td>-0.650</td>
<td>0.229</td>
<td>-0.011</td>
<td>-2.831</td>
<td>.006</td>
</tr>
<tr>
<td>Supervisor support</td>
<td></td>
<td></td>
<td>-1.860</td>
<td>0.158</td>
<td>-0.265</td>
<td>-0.118</td>
<td>.907</td>
</tr>
</tbody>
</table>

ongoing stressors explained more of the variance in anxiety and depression than did coworker support. The majority of the variability in anxiety and depression was not explained by variables examined within the models, leaving considerable variance unexplained within the models.

The negative impact of work environment stressors was not moderated by either coworker or supervisor support. The regression model revealed no statistically significant main or interactive effect for supervisor support. Coworker and supervisor support did not interact with ongoing or episodic stressors to reduce or ameliorate the negative effects of the work environment stressors.

Another key finding, although modest, was the significant correlations between ongoing and episodic stressors and anxiety and depression. The correlations between ongoing stressors and anxiety and depression were essentially equal. The modest, positive association between chronic occupation-specific stressors and depression was slightly greater than that found in the study by Beehr et al. (2000). Depressive symptoms were related to ongoing and episodic work environment stressors with the same instruments used to measure work stressors in this study (Schonfeld, 1996). The results from this study are supported by research on elementary, middle, and secondary school educators who experienced depression or anxiety when exposed to acute and chronic stressors (Betoret, 2006; Grayson & Alvarez, 2008; Mearns & Cain, 2003).

The researchers used both depression and anxiety

<table>
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<tr>
<th>Table 4</th>
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<tbody>
<tr>
<td><strong>Multiple Regression Analyses of the Moderating Effects of Coworker and Supervisor Support on the Relationship Between Ongoing and Episodic Work Environment Stressors and Anxiety and Depression</strong></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>Adjusted</strong></td>
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<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>Model 1: Anxiety</strong></td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Ongoing stressor (OS)</td>
</tr>
<tr>
<td>Episodic stressor (ES)</td>
</tr>
<tr>
<td>Coworker support (CoS)</td>
</tr>
<tr>
<td>Supervisor support (SuS)</td>
</tr>
<tr>
<td>OS × CoS</td>
</tr>
<tr>
<td>OS × SuS</td>
</tr>
<tr>
<td>ES × CoS</td>
</tr>
<tr>
<td>ES × SuS</td>
</tr>
<tr>
<td><strong>Model 2: Depression</strong></td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Ongoing stressor (OS)</td>
</tr>
<tr>
<td>Episodic stressor (ES)</td>
</tr>
<tr>
<td>Coworker support (CoS)</td>
</tr>
<tr>
<td>Supervisor support (SuS)</td>
</tr>
<tr>
<td>OS × CoS</td>
</tr>
<tr>
<td>OS × SuS</td>
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<tr>
<td>ES × CoS</td>
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<td>ES × SuS</td>
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</table>

Note. *F*(8, 89) = 5.220, p < .001; *F*(8, 87) = 4.560, p < .001.
measures in this study to create a well-rounded picture of teachers’ work environments. One problem arising from this approach is how to conceptually distinguish between anxiety and depression. For example, a study by Zimmerman, McDermut, and Mattia (2000) revealed that greater than half of the incidences of anxiety and depression were comorbid or coexisted in the same individual. Eysenck et al. (2006) proposed that anxiety occurs from fear of an immediate or future threat event, and depression occurs from a loss event. The researchers wished to determine whether depression and anxiety would respond differently to some of the work stressors teachers experience. In attempting to distinguish effects on these outcomes, the CES-D and S-Anxiety measures, which differ in the type and focus of psychological symptoms, were used (Okun, Stein, Bauman, & Silver, 1996).

Evaluation of the frequency distribution for the ongoing stressors provided additional insight into the work conditions encountered by the teachers. The authors found that more than three fourths of the teachers reported they would not feel safe if they walked alone in the neighborhood surrounding their school. The ongoing stressor rated the next highest by the teachers was unfriendly coworkers. Unmotivated and unprepared students emerged as the third and fourth greatest ongoing or chronic stressors, respectively.

The most cited ongoing stressor in the literature was an excessive workload, followed by relationships with coworkers, parents, and supervisors (Liu & Ramsey, 2008; Rieg et al., 2007). In this study, workload may not have been the teachers’ most important stressor because classroom size averaged only 22 students. Safety in the area surrounding the school was not recognized as a major problem for suburban schools (Gardill, DuPaul, & Kyle, 1996). In this study, teachers in both suburban and urban high schools identified safety in the area surrounding the school as a major stressor.

The most prevalent acute or episodic stressor selected by the teachers was the students’ failure to do class work, followed by student tardiness and students’ failure to complete homework assignments (Pearson & Moomaw, 2005; Sorenson, 2007). The primary episodic stressor reported in this study was failure of students to do class work, a finding that was not consistent with the literature.

The coworker and supervisor support questionnaire revealed positive and negative work-related and non-work-related communication patterns. When communicating with coworkers, greater than two thirds of the respondents discussed personal-life matters and common non-work-related interests. Negative talk at work frequently centered on how bad things were and on problems encountered when working with administration.

Supervisor and coworker support (i.e., talking about positive and negative work situations) were equivalent. Non-work-related matters (i.e., social topics, common off-job interests, and personal and family information) were reported as seldom or never discussed by teachers with their supervisors. More than two thirds of the teachers reported that negative supervisor communication rarely or never occurred. Supervisor support did not exert any moderating effect on anxiety or depression among the secondary school teachers.

Greater than two thirds of the teachers stated that parents praised them daily to two to four times a week. This finding was in contrast to the idea that teachers experience stress because of parental criticism or lack of support from parents. Greater than two thirds of the teachers reported that administrators praised them two to five times a week.

Cultivating support may provide a way to ventilate feelings or receive sympathy or empathy from a coworker. Coworkers can provide needed feedback on personal or job concerns; even negative talk or negative support can provide an opportunity for an individual to receive sympathy (Beehr et al., 1990).

LIMITATIONS

The study had several limitations. The 23.9% response rate for the study was a concern. Administrators did not approve discussing and implementing the study at a faculty meeting. Only the study’s purpose and significance could be explained, and time was given to complete the questionnaires. However, collecting the packet 1 week after the meeting could have contributed to less interest and the low response rate. The findings are not generalizable because the data were collected at one point using a convenience sample.

CONCLUSION

Ongoing and episodic stressors can adversely influence teachers’ psychological health. Ongoing stressors were significantly and positively associated with anxiety and depression; as ongoing stressors increased, anxiety and depressive symptoms also increased. The relationship between ongoing stressors and depression was statistically significant; as ongoing stressors increased, the level of depression increased. Episodic stressors were significantly and positively associated with anxiety and depression, although not independently as part of the multiple regression models examined.

The three most frequently cited ongoing stressors identified in this study were lack of safety in the surrounding school environment, unfriendly coworkers, and unmotivated students. The failure of students to do class work and complete homework assignments and student tardiness were the three episodic stressors cited most frequently by the secondary school teachers.

The zero-order correlations for the effects of ongoing and episodic stressors on anxiety and depression were similar. Thus, ongoing or chronic stressors may not produce more deleterious effects from anxiety and depression, even though other researchers have posited that chronic stressors have more deleterious effects on psychological reactions (Beehr et al., 2000).

Coworker support was inversely related to anxiety; teachers experiencing less coworker support tended to have higher levels of anxiety. Coworker support was also significantly related to depression; as coworker support decreased, depression increased. Individually, supervisor
support did not explain anxiety or depression, and supervisor and coworker support did not moderate the
influence of either ongoing or episodic stress on anxiety or depression.

This study identified prevalent ongoing (chronic) and episodic (acute) stressors in the work environment of this
sample of teachers. The stressors included lack of safety in the surrounding school environment, unfriendly
coworkers, and unmotivated and unprepared students. The ongoing stressors were more important of the
diverse psychological outcomes among the teachers.

The findings of this study may be of interest to nurses
working in school environments, particularly secondary
schools. The school nurse, with the approval of the principal
or administrator, could develop primary intervention
measures. Monthly programs could be provided for new
and experienced teachers to increase communication
through effective listening, appreciation of coworker
individuality, and discussion of positive feedback tech-
niques. Educational programs could be mandated for all
new teachers to create an awareness of and sensitivity to
the importance of giving and receiving social support.

One of the primary stressors identified in this study
was unfriendly coworkers. Administrators and teachers
should cultivate a positive work environment that supports
other teachers. The school nurse could recommend ment-
oring new teachers using a brown bag lunch program.
During the program, the nurse could facilitate discussion
about work concerns among teachers. The goal of these
discussions would be to empower teachers to develop ef-
ficient social support skills and improve their ability to
cope with ongoing and episodic stressors.

Future studies could incorporate a longitudinal design
and a larger probability sample from multiple school sites
to increase the power and generalizability of the findings.
Negative affectivity could be incorporated as a variable to
observe its effects on the stressor-process in a real
work environment (O’Brien, Terry, & Jimmieson, 2008).
The researchers recommend using direct classroom ob-
seration to measure work environment stressors and
matching observations to teachers’ ESS scores.

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