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Teacher Stress, Burnout, and Social Support in Chinese Secondary Education

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Abstract

The primary purpose of this study is to examine the effect of teacher stress on burnout and the use of social support as a coping strategy in Chinese secondary education. Three major findings are generated: (a) teacher stress causes burnout, explaining 25 percent of the variance in burnout; (b) work overload is the most common stressor, followed by role conflict and role ambiguity, respectively. Work overload is the only predictor of emotional exhaustion and depersonalization, but none of the stressors is an effective predictor of reduced accomplishment; (c) family and friend support is the most common source of social support, followed by colleague support and supervisor support, respectively, but supervisor support is the most effective in alleviating stress, emotional exhaustion, and reduced accomplishment, and family and friend support is the most effective in mitigating depersonalization.

Keywords: Teacher Stress; Teacher Burnout; Social Support; Secondary School; China

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Wanted: Men and women with the patience of Job, wisdom of Solomon, and ability to prepare the next generation for productive citizenship under highly adverse and sometimes dangerous conditions. Applicants must be willing to fill gaps left by unfit, absent or working parents, satisfy demands of state politicians and local bureaucrats, impart healthy cultural and moral values—oh, yes— teach the three Rs. Hours: 50-60 a week. Pay: fair (getting better). Rewards: mostly intangible.

—Tifft (1988, p.58)

As a profession of being overworked and underappreciated (Tifft, 1988), pre-college teachers are prone to stress (Pettegrew & Wolf, 1982; Ray & Miller, 1991), vulnerable to burnout (Farber, 1991; Starnaman & Miller, 1992), and susceptible to dark emotions (Ray & Miller, 1991; Winograd, 2005). In the U.S., the number of teachers reporting considerable job stress jumped from 43 percent in 1951 to 78 percent in 1976 (Farber, 1991), and the number might still be on the rise. Due to stress and burnout, about 30 percent of new pre-college teachers leave the profession within five years (Archer, 1999; Boreen, Niday, & Johnson, 2003). The high attrition rate has caused a growing teacher shortage nationwide ever since the early 1980s, which in turn might have aggravated teacher stress and burnout, trapping in a vicious circle (Farber, 1991).

Similarly, Chinese secondary school teachers cannot be exempt from stress and burnout. Secondary school teaching might be the most hardworking profession in China, due to the pressure of increasingly competitive college entrance examination and the tendency to assess teachers' performances with students' exam scores. For example, high school teachers might be evaluated with the percentage of students admitted by universities, particularly first-tier universities, and middle school teachers with the number of students admitted by key high schools. To improve students' grades, Chinese secondary school teachers have to overwork, normally teaching six or even seven days a week, coaching students every morning and evening self-study periods, and teaching over the summer and winter breaks too; as a result, stress and burnout might be unavoidable. But overall the emotional arena in teaching, not to mention the emotion across cultures, has not received adequate attention in instructional communication research. Thus this study is designed to examine the effect of teacher stress on burnout and the use of social support as a coping strategy in Chinese secondary education.

Job Stress

Job stress refers to the job-related nervousness and anxiety, which affect people's emotional and/or physical health (Netemeyer, Maxham, & Pulig, 2005). Two major job stressors have been identified: work overload and role stress (Miller, Zook, & Ellis, 1989; Starnaman & Miller, 1992). Work overload refers to the excessive work-role demands. Role stress assumes the form of role conflict and role ambiguity (Dillon & Tanner, 1995; Miller et al., 1989). Role conflict involves having contradictory role requirements and role ambiguity concerns the uncertainty over role requirements.

Teacher stress has become a growing hazard of the teaching profession (Pettegrew & Wolf, 1982). Teacher stress has been linked to a variety of negative consequences, ranging from physical, psychological, behavioral, to emotional problems, such as fatigue, illness, absenteeism, poor job performances, drug and alcohol abuse, reduced job satisfaction, and burnout (Ray & Miller, 1991). Chinese secondary school teachers, as mentioned above, might suffer considerable stress. Although teachers are highly respected in Chinese culture, due to the enormous job stress

and “notorious” work overload, college students do not want to be secondary or elementary school teachers after graduation, and the recruitment and retention of qualified teachers have always been a serious problem for school administration.

Teacher Burnout

Burnout refers to the physical, mental, and emotional exhaustion resulting from chronic job attrition (Maslach, 1993, 2003). Burnout manifests in three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, 1982). Emotional exhaustion is characterized by feelings of frustration, anger, depression, and dissatisfaction. Depersonalization involves a dehumanized and impersonal view of others and treating them like things rather than people. Reduced personal accomplishment suggests a loss of self-efficacy on the job and the tendency to evaluate oneself negatively (Maslach, 1982, 2003).

Teaching is a profession vulnerable to burnout (Farber, 1991). Typical teacher burnout syndromes include emotional and physical exhaustion, anxiety, and depression, which are often manifested in behavioral reactions such as tardiness, absenteeism, poor job performance, and lack of interest and commitment (Farber, 1991). Overall, teacher burnout is a function of societal, organizational, and individual factors (Farber, 1991), but it can be particularly triggered by two job stressors, work overload and role stress (Dillion & Tanner, 1995). But the relationship between stress and burnout is not established in Chinese classrooms yet; hence, the following research questions are offered:

RQ1: Will teacher stress predict teacher burnout with a Chinese sample?

RQ2: What job stressor (work overload, role conflict, and role ambiguity) is the most effective predictor of teacher burnout?

Social Support

Social support refers to the assistance provided by the social network (Taylor et al., 2004). Social support takes the form of emotional support, informational support, and instrumental support (Miller, 2006). Emotional support focuses on the provision of love, care, and nurturance, informational support involving the tangible physical and material assistance, and instrumental support featuring the provision of facts and advice (Taylor et al., 2004). The most common sources of social support are supervisors, colleagues, and family and friends (Miller, 2006).

Social support has long been identified as an effective coping mechanism for stress and burnout in organizational life (Lin, 2006; Miller, 2006), but the three sources might vary in coping effectiveness (Miller et al., 1989). For example, supervisor support is found to be more effective in ameliorating teacher stress than colleague support (Starnaman & Miller, 1992). Meanwhile, research also suggests cultural differences in seeking social support (Glazer, 2006; Mortenson, 2006; Taylor et al., 2004). East Asians are less likely to seek support than European Americans, so they receive less social support (Glazer, 2006; Taylor et al., 2004). Given the cultural differences in seeking social support, it is still unclear if social support is effective in alleviating Chinese teacher stress and burnout; hence, the following research question is proposed:

RQ3: Will there be a negative relationship between social support and teacher stress and burnout?

Method

Participants

Altogether 133 full-time secondary school English teachers (23 male, 108 female, and 2 unidentified) from mainland China participated in the study. Among them, there were 68 high school teachers, 59 middle school teachers, and 6 unidentified. The age of the participants ranged

from 22 to 41 ($M = 30.74$, $SD = 4.75$) and the tenure of teaching ranged from 6 months to 22 years ($M = 8.88$, $SD = 4.85$). On average, the participants worked 47.78 hours per week ($SD = 10.44$) and taught 3.96 classes per day ($SD = 1.26$). The participants were pursuing the Master's Degree in English part-time.

Instruments

Teacher stress. Teacher stress was measured with the four-item 5-point Likert (1 = strongly agree, 5 = strongly disagree) job stress scale (Netemeyer et al., 2005). The wording of the items was adapted to fit the educational context, such as, "My teaching tends to directly affect my health." The reliability of this study was .82.

Stressors. Workload was measured with three items: one item from a teacher stress scale (Pettegrew & Wolf, 1982), and two items from an organizational role stress scale (Pareek, 1983). Role conflict and role ambiguity were operationalized with the eight confirmed items (Starnaman & Miller, 1992), which was based on Pettegrew and Wolf's (1982) original scale. The reliability of this study was .77 for work overload, .66 for role conflict, and .60 for role ambiguity.

Burnout. Burnout was measured with the 22-item Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). The scale measures three dimensions of burnout: emotional exhaustion, depersonalization, and personal accomplishment. The items were slightly reworded to fit the teaching context, such as "I feel emotionally drained from teaching" and "I feel burned out from teaching." The scale has been used widely across occupations and cultures, and studies report consistent reliability and validity of the scale (Richard & Martinussen, 2005; Schaufeli & Dierendonck, 1993). In this study, the reliability was .84 for emotional exhaustion, .74 for depersonalization, and .77 for accomplishment.

Social support. Social support was measured with the 12-item scale (Miller et al., 1989), which was based on a previous scale (Caplan, Cobbs, French, Van Harrison, & Pinneau, 1980). The 5-point Likert scale measures support from supervisors, co-workers, and family and friends. The reliability of this study was .91 for supervisor support, .91 for colleague support, and .92 for family and friend support.

Procedures

The questionnaire was translated into Chinese and backtranslated into English by different bilingual scholars to ensure equivalence. Participants were recruited via the graduate English classes exclusive to secondary school English teachers. Appreciation was expressed to the participants, but no reward (e.g., extra credit or money) was given for participation. Participants completed the questionnaire in Chinese and participation was confidential and anonymous. The questionnaire took about 8 minutes to complete.

Results

Research Question 1 asks about if teacher stress predicts teacher burnout with a Chinese sample. Regression analysis was used to examine teacher stress as a predictor of burnout. The independent variable was teacher stress, and the dependent variable was teacher burnout. The summary of the linear regression analysis is presented in Table 1. The regression model yielded stress as a regressor variable, $F(1, 117) = 39.86$, $R^2 = .25$, $p < .001$. Teacher stress ($M = 2.85$, $SD = .89$) explained 25 percent of the variance in teacher burnout ($M = 3.07$, $SD = .36$).

Research Question 2 addresses which job stressor is the most effective predictor of teacher burnout with a Chinese sample. Multiple regression analyses were also used to examine the three stressors as predictors of the three dimensions of burnout. The independent variables were work overload, role conflict, and role ambiguity, and the dependent variables were emotional exhaustion, depersonalization, and reduced accomplishment, respectively. The

summaries of the linear multiple regression analyses are presented in Table 1. The regression model for emotional exhaustion yielded work overload as the only regressor variable, $F(1, 122) = 22.25$, $R^2 = .15$, $p < .001$. Similarly, work overload was yielded as the only regressor variable for depersonalization, $F(1, 129) = 5.58$, $R^2 = .04$, $p < .05$, but none of the three stressors were yielded as the regressor variable for reduced accomplishment. Work overload ($M = 2.33$, $SD = .85$) explained 15 percent of the variance in emotional exhaustion ($M = 3.18$, $SD = .68$) and 4 percent of the variance in depersonalization ($M = 3.69$, $SD = .67$), and none of the three stressors could predict reduced accomplishment ($M = 2.40$, $SD = .58$).

Table 1: Multiple Regression Summaries for Teacher Stress Predicting Burnout

Variables	B	SE B	β	t	p
Burnout					
Stress	.20	.03	.50	6.31	<.001
Emotional Exhaustion					
Overload	.32	.07	.39	4.72	<.001
Depersonalization					
Overload	.16	.07	.20	2.36	<.05

In addition, among the three stressors, work overload was found to score the lowest ($M = 2.33$, $SD = .85$), followed by role conflict ($M = 2.49$, $SD = .68$), and role ambiguity ($M = 2.85$, $SD = .47$), respectively. Paired t-tests indicated that the differences between the means were significant. Work overload was a more common stressor than role conflict, $t(132) = -2.67$, $p < .01$, which was more common than role ambiguity among Chinese secondary school teachers, $t(131) = -5.43$, $p < .001$.

Research Question 3 asks about if there is a negative relationship between social support and teacher stress and burnout with a Chinese sample. Pearson correlation indicated that supervisor support was associated negatively with stress ($r = -.19$, $p < .05$), emotional exhaustion ($r = -.24$, $p < .01$), and reduced accomplishment ($r = -.25$, $p < .01$), but its correlation with depersonalization was nonsignificant ($r = -.08$, $p = ns$). Colleague support was correlated negatively with reduced accomplishment ($r = -.17$, $p < .05$), but it had nonsignificant correlations with emotional exhaustion ($r = -.06$, $p = ns$), depersonalization ($r = -.12$, $p = ns$), and stress ($r = -.12$, $p = ns$). Family and friend support was related negatively to emotional exhaustion ($r = -.22$, $p < .05$), depersonalization ($r = -.36$, $p < .01$), and reduced accomplishment ($r = -.23$, $p < .01$), but its relationship with stress ($r = .01$, $p = ns$) was nonsignificant. The means, standard deviations, and correlations among the variables are presented in Table 2.

Among the three sources of social support, family and friend support was found to score the lowest ($M = 2.14$, $SD = .81$), followed by colleague support ($M = 2.49$, $SD = .77$), and supervisor support ($M = 3.35$, $SD = .95$), respectively. Paired t-tests indicated that the differences between the means were significant. Family and friend support was more common than colleague support, $t(132) = 3.82$, $p < .001$, which was more common than supervisor support, $t(131) = 10.96$, $p < .001$.

Multiple regression analyses were also employed to examine the three sources of social support as predictors of teacher stress and burnout. The independent variables were supervisor support, colleague support, and family and friend support, and the dependent variables were stress, emotional exhaustion, depersonalization, and reduced accomplishment, respectively. The

summaries of the linear multiple regression analyses are presented in Table 3. The regression model for stress yielded supervisor support as the only regressor variable, $F(1, 128) = 4.97$, $R^2 = .04$, $p < .05$. Similarly, supervisor support was also yielded as the only regressor variable for emotional exhaustion, $F(1, 122) = 7.17$, $R^2 = .06$, $p < .01$, and for reduced accomplishment, $F(1, 126) = 8.32$, $R^2 = .06$, $p < .01$, but the regression model for depersonalization yielded family and friend support as the only regressor variable, $F(1, 129) = 19.57$, $R^2 = .13$, $p < .01$.

Table 2: Means, Standard Deviations, and Correlations of Social Support, Teacher Stress, and Burnout

Variables	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
1	1							3.35	.95
2	.44**	1						2.47	.77
3	.27**	.24**	1					2.14	.81
4	-.19*	-.12	.01	1				2.87	.88
5	-.24**	-.06	-.22*	.62**	1			3.18	.69
6	-.08	-.12	-.36**	.30**	.61**	1		3.69	.67
7	-.25**	-.17*	-.23**	.16	.35**	.34**	1	2.40	.58

** $p < .01$, * $p < .05$, two-tailed

1 = supervisor support, 2 = colleague support, 3 = family and friend support, 4 = stress, 5 = Emotional Exhaustion, 6 = Depersonalization, and 7 = Reduced Accomplishment

Table 3: Multiple Regression Summaries for Social Support Predicting Teacher Stress and Burnout

Variables	B	SE B	β	<i>t</i>	<i>p</i>
Stress					
Supervisor Support	-.18	.08	-.19	-2.23	<.05
Emotional Exhaustion					
Supervisor Support	-.17	.06	-.24	-2.68	<.01
Depersonalization					
Family & Friend Support	-.30	.07	-.36	-4.42	<.001
Reduced Accomplishment					
Supervisor Support	-.15	.05	-.25	-2.89	<.01

Discussion

The primary purpose of this study is to examine the effect of teacher stress on burnout and the use of social support as a coping strategy in Chinese secondary education. Three major findings are generated: (a) teacher stress causes burnout, explaining 25 percent of the variance in burnout; (b) work overload is the most common stressor, followed by role conflict and role ambiguity, respectively. Work overload is the only predictor of emotional exhaustion and depersonalization, but none of the stressors is an effective predictor of reduced accomplishment; (c) family and friend support is the most common source of social support, followed by colleague support and supervisor support, respectively, but supervisor support is the most effective in alleviating stress, emotional exhaustion, and reduced accomplishment, and family and friend support is the most effective in mitigating depersonalization.

As expected, teacher stress is found to have a strong effect on burnout in Chinese secondary education, explaining 25 percent of the variance in burnout, and overload is the most common stressor of burnout. These findings are consistent with the findings generated in U. S. classrooms (Dillion & Tanner, 1995; Miller et al., 1989; Ray & Miller, 1991; Starnaman & Miller, 1992). As a profession, Chinese secondary school teachers might be stressed out. The average working hours of our participants are almost 48 hours per week and they teach almost four classes per day. Given that our participants are also studying part-time in a Master's program, they might have received a reduced workload, so the actual workload for Chinese secondary school teachers might still be higher. Comparatively, role conflict and ambiguity have a negligible effect on teacher burnout in Chinese secondary education. One plausible explanation might be that Chinese secondary school teachers know their job requirements. Since Chinese education is generally test-oriented, teachers might know that their job is to prepare students for exams and their jobs will be assessed with students' scores.

This study also suggests that social support can relieve teacher stress and burnout in Chinese secondary education. This finding provides support for the soothing effect of social support generated in U. S. classrooms (Ray & Miller, 1991; Starnaman & Miller, 1992). Supervisor support is the least common source of social support among Chinese secondary school teachers, but it turns out to be the most effective in buffering teacher stress, emotional exhaustion, and reduced accomplishment. The main reason might be that, in the large-power distance Chinese culture, subordinates might value more the institutional support from supervisors than the support from colleagues or family. An important implication here is that Chinese supervisors (e.g., school principals) should provide more support to those who are stressed out and burnt out. As the most common source of social support, family and friend support is also very important in helping fight with stress and burnout, and it is especially effective in alleviating depersonalization.

This study has two major limitations. First, since all participants were only English teachers studying part-time in a Master's program, they may not well represent the overall population of Chinese secondary school teachers. Second, the measures used in this study were originally generated in the Western culture, and some of these scales (e.g., the scale measuring stressors) did not have very good reliability in this study. The "imposed etic" might have affected the findings, so the results should be interpreted with caution.

This study offers an interesting area for future research. Although the study suggests that social support can help reduce teacher stress and burnout in Chinese classrooms, it is not a very strong predictor. Social support seems to play a positive but limited role in mitigating teacher stress and burnout since it explains only 4%-13% of the variance in teacher stress and burnout. Thus, researchers need to search for more effective coping strategies for stress and burnout in Chinese classrooms, which could be a highly challenging but worthwhile task.

References

- Archer, J. (1999, March 17). New teachers abandon field at high rate. *Education Week*, p. 20.
- Boreen, J., Niday, D., Johnson, M. K. (2003). *Mentoring across boundaries*. Portland, ME: Stenhouse.
- Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., & Pinneau, S. R. (1980). *Job demands and worker health*. Ann Arbor, MI: Institute for Social Research.
- Dillon, J. F., & Tanner, G. R. (1995). Dimensions of career burnout among educators. *Journalism and Mass Communication Educator*, 50, 4-13.
- Glazer, S. (2006). Social support across cultures. *International Journal of Intercultural Relations*, 30, 605-622.
- Farber, B. A. (1991). *Crisis in education: Stress and burnout in the American teacher*. San Francisco: Jossey-Bass.
- Lin, C. (2006). Culture shock and social support: An investigation of a Chinese student organization on a US campus. *Journal of Intercultural Communication Research*, 35, 117-137.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.
- Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent develop developments in theory and research* (pp. 19-32). Washington, DC: Taylor & Francis.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12, 189-192.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Miller, K. (2006). *Organizational Communication: Approaches and Processes* (4th ed.). Belmont, CA: Thomson Wadsworth.
- Miller, K., Zook, E. G., & Ellis, B. H. (1989). Occupational differences in the influence of communication on stress and burnout in the workplace. *Management Communication Quarterly*, 3, 166-190.
- Mortenson, S. T. (2006). Cultural differences and similarities in seeking social support as a response to academic failure: A comparison of American and Chinese college students. *Communication Education*, 55, 127-146.
- Netemeyer, R. G., Maxham, J. G., & Pullig, C. (2005). Conflicts in the work-family interface: Links to job stress, customer service, employee performance, and customer purchase intent. *Journal of Marketing*, 69, 130-143.
- Pareek, U. (1983). *Role stress scales manual*. Ahmedbad, India: Navin Publications.
- Pettegrew, L. S., & Wolf, G. E. (1982). Validating measures of teacher stress. *American Educational Research Journal*, 19, 373-396.
- Ray, E. B., & Miller, K. I. (1991). The influence of communication structure and social support on job stress and burnout. *Management Communication Quarterly*, 4, 506-527.
- Richardsen, A. M., & Martinussen, M. (2005). Factorial validity and consistency of the MBI-GS across occupational groups in Norway. *International Journal of Stress Management*, 12, 289-297.
- Schaufeli, W. B., & Dierendonck, D. V. (1993). The construct validity of two burnout measures. *Journal of Organizational Behavior*, 14, 631-647.

- Starnaman, S. M., & Miller, K. I. (1992). A test of a causal model of communication and burnout in the teaching profession. *Communication Education, 41*, 40-53.
- Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology, 87*, 354-362.
- Tifft, S. (1988, November 14). Who's teaching our children? *Time, 132*, 58-64.
- Winograd, K. (2005). *Good day, bad day: Teaching as a high-wire act*. Lanham, MD: ScarecrowEducation.