OCCUPATIONAL STRESS, SELF-EFFICACY, OPTIMISM AND HEALTH PROBLEMS: A STUDY OF HIGH SCHOOL TEACHERS IN TAIWAN

Hua-Huei Chiou
Department of Child Care and Education, Hungkuang University

ABSTRACT

This study attempts to investigate the relationship among high school teachers’ occupational stress, self-efficacy, optimism and health problems. Participants in this study were 220 high school teachers. The survey method was used. Four questionnaires were used to form our research instruments in self-efficacy, optimism, work stress and health status scales. The results indicated that the most stressful element was recruiting new students. Changes taking place within education were the other source of occupational stress. General high school teachers face more changes taking place within the education system, but they have a lower level of recruitment-related stress. The results also show that male teachers have greater self-efficacy and optimism than female teachers. Occupational stress has an influence on health. Personal optimistic perception is a mediating influence on teachers’ health. The study suggests that teachers’ cognition must be adjusted to promote optimism in dealing with stress and that cognition is influential in modifying health problems.

Keywords: occupational stress, high school teacher, self-efficacy, optimism, health problems

Introduction

Teaching is high-stress work. Various studies in different countries have previously drawn this conclusion (Kyriacou, 2001; Zurlo, Pes, & Cooper, 2007). With regard to the teachers in Taiwan, significant potential sources of stress are associated with low birth rate and education reform.

Economic development has increased people’s income in the past thirty years. However, the crude birth rate (CBR) has dropped dramatically and continues to decrease. The CBR was 23.0‰
in 1981, 15.7‰ in 1991 and 11.7‰ in 2001. In 2009, the CBR was only 8.3‰. The birth rate in Taiwan is now almost the lowest in the world. When the number of children declines, parental expectations tend to be higher. According to our survey, 83% of parents in Taiwan expect their children to obtain a college education (Chang & Lin, 2003). Parents attach great importance to a high school education and all expect their children to have excellent grades because high school grades affect performance in the National Joint Entrance Examination. Parental expectations may be a potential stressor for high school teachers.

The serious problem of low birth rate also means that most teachers face pressure to recruit students. Lack of student enrollment drops a school’s revenue, often resulting in financial difficulties for the school. Moreover, a decline in the number of students causes the problem of teacher surpluses. With a surplus of teachers, layoffs have been common in private schools. In public schools, surplus teachers are reassigned to other schools. The problem of job uncertainty causes teachers a high level of stress.

In the broad context of socioeconomic changes, educational reform in Taiwan has been under way for the past 20 years. Educational reforms include many different aspects. For example, multiple versions of textbooks are published under an open policy. This means that teachers and students have to read different versions of textbooks to thoroughly prepare for better examination performance. On the other hand, curriculum outlines formulated by the Ministry of Education serve as the guidelines for teacher course design and student learning. However, the adjustment of curriculum outlines remain an on-going process today. Teachers, parents, communities, and politicians argue over curriculum content. Constantly changing educational policies also triggers stress for teachers (Kelchtermans, 2005).

External factors such as policy or socioeconomic status may affect teachers’ work, but teachers have no way to change these factors. Kyriacou (2001) explored this important issue of why some teachers are able to successfully negotiate periods of career reappraisal and remain positively committed to their work. In the present study, we investigated whether teachers’ self-efficacy and optimism influences occupational stress and health.

**Literature review**

1. **Teaching stress and health**

For many people in modern society, stress is so commonplace that it has become part of the way of life. Although small doses of stress can help people show higher motivation or make
more of an effort in performing tasks, when stress is constant, it becomes detrimental to people’s health. Occupational stress often lasts a long time and can gradually affect health. Past studies have shown that some illnesses, such as coronary heart disease, physical pain, stomach ulcers and skin problems, are significantly associated with stress. Both longitudinal follow-up studies and cross-sectional research indicates that stress directly causes cardiovascular disease (Toppinen-Tanner, Ahola, Koskinen, & Väänänen, 2009). Serious stress is also related to an increased risk of musculoskeletal pain, even after controlling several potentially complex variables (Honkonen et al., 2006). Furthermore, long-term, high-level stress may cause suppressed immune defense, which may then increase the initiation and progression of some types of tumors (Reiche, Nunes, & Morimoto, 2004). Perceived stress affects the level of the stress hormone cortisol in our bodies. Although cortisol plays a necessary role in dealing with threats, long-term and irregular cortisol secretion has been considered one of the important factors in the stress-illness connection.

Stress not only affects physical comfort and well-being, but also negatively influences mental health. There is evidence from research studies that chronic stressors are related to depression, cognitive ability decline and anxiety. Anxiety and depression are common problems in employees (Authur, 2005; Jurado, Gurpegui, Moreno, Fernández, Juan, & Gálvez, 2005). Depression is a critical differentiating factor between those who can continue to work and those who cannot. One study examined the relationship between job stress and symptoms of depression. Within a population free of high depression scores as its baseline, job stress was found to increase the risk of developing high levels of depression after a follow-up time of more than six years (Clays, De Bacquer, Leynen, Kornitzer, Kittel, & De Backer, 2007). This study shows that job stress is a predictor of depressive syndromes in women. A higher proportion of teachers are female. Therefore, mental health status needs to be taken seriously.

Various studies in different countries have shown that teaching involves a high level of stress (Stoeber & Rennert 2008; Wang, Lan, Li, & Wang, 2002). Too much occupational stress affects workers’ physical and psychological health, quality of life, self-esteem and work performance. In addition, for the organization, it constitutes a severe threat of absenteeism and turnover, poor communication and conflict, reduction in the quality of work and an increase in medical costs (Michie, 2002). Peltzer (Peltzer, Shisana, Zuma, Van Wyk, & Zungu-Dirwayi, 2009) investigated stress-related illnesses of South African educators, the most prevalent of which were hypertension, stomach ulcers and mental distress. In the United Kingdom, British teachers’ work pressures were linked to high levels of mental health problems and anxiety (Travers & Cooper, 1996). Chronic work stress is a major cause of school teachers’ early retirement (Phillips, Sen, & McNamee, 2007).
Understanding teachers’ stress and health status is an important issue because high levels of stress not only hurt teachers but also students. Inappropriate corporal punishment of students has occurred in some schools. Teachers easily get emotionally out of control when they are under pressure for a long time. Furthermore, teachers’ poor mental health is likely to increase inappropriate discipline of students. Sources of teachers’ stress are multi-dimensional and include the behavioral problems of the pupils, relationships with parents, work overload, poor working conditions, and unsatisfactory relationships with colleagues and administrators (Travers & Cooper, 1996). In addition, treating teacher stress not only involves the ability to expose difficulties but also the mediating role of personality factors. Workers cannot change their environment most of the time. Therefore, personal characteristics play a critical role in modifying stressful situations.

2. Self-efficacy, optimism and health

Self-efficacy is defined as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performance” (Bandura, 1986, p. 391). Research evidence indicates a moderate relationship between teacher self-efficacy and occupational stress (Evers, Brouwers, & Tomic 2002). It remains an unsettled question as to how to explain the relationship between teacher self-efficacy and physiological or emotional stress. Although a higher level of self-efficacy is possibly related to a reduced physiological stress response, there are some studies reporting higher cardiovascular reactivity in people with high self-efficacy. Gerin, Litt, Deich, & Pickering (1996) indicate that people with higher self-efficacy make more of an effort than those with a lower degree of self-efficacy when confronted with a task in which control is possible. Thus, individuals with higher self-efficacy correspond to greater increases in physiological reactivity. The relationship between teacher self-efficacy and perceived occupational stress still need to be investigated. Teacher self-efficacy not only affects work performance but also has influence on students’ learning motivation and achievement. For instance, research shows that teachers’ self-efficacy promotes collaborative relationships with colleagues, their professional commitment and the effort invested in teaching (Tschannen-Moran, A. W. Hoy, & W. K. Hoy, 1998).

Optimism is defined as the generalized expectation that good rather than bad things will occur in one’s life (Scheier & Carver, 1992). When optimists confront difficult times, they tend to expect good outcomes. These expectations are viewed as stable features across time. Optimistic expectations generate positive feelings and enable people to make decisions for goal pursuits (Scheier & Carver, 2003). Optimism is considered to be an important determinant of a person’s
physical and psychological well-being. Research findings indicate that positive psychological resources, including optimism, have greater influence on stress hormones than negative emotions (Lai et al., 2005). Some studies also find a significant relationship between optimism and illness. For example, one study indicates that optimism is related to lower levels of distress (Ironson & Hayward, 2008). An individual’s psychological status could affect his or her immune system. Thus, some studies find the protective effects of optimism on certain types of cancer (Carver et al., 2005; de Moor et al., 2006). Personality traits such as optimism may also be a buffer when individuals are suffering from physical or psychological stress.

Opinions are inconsistent among scholars on optimism with regard to gender influence. Some studies indicate that there is no difference in the level of optimism between male and female participants. For example, Puskar and colleagues (1999) use the Optimism Scale-Life Orientation Test-Revised (LOT-R) to measure optimism in western Pennsylvania adolescents and find that females have slightly lower mean scores than do males. However, no significant difference was found. Huan, Yeo, Ang, and Chong (2006) investigated the relationship between optimism and gender on adolescents’ perception, using the Life Orientation Test (LOT). The results indicated that gender was not a significant predictor of stress.

Some other research studies find that males are more optimistic than females. For instance, Hirsch, Conner, and Duberstein (2007) explored optimism and suicide ideation among young adult college students and find that the females were significantly negatively correlated with optimism and positively associated with depression. Felton, Gibson, & Sanbonmatsu (2003) examined gender differences in investment choices and found males to be more optimistic and risk accepting than females. Gender is a point that needs to be further investigated. Moreover, while a large number of optimism studies have been made about students, little is known about the related traits of teachers.

Although most research shows that positive expectations lead to greater goal engagement when facing difficulties and that negative expectations lead to goal disengagement, some other studies provide different perspectives. Segerstrom (2001) indicates that persistent stress-prone characteristics have different short-term and long-term effects on health. In the short term, engagements with stressors are more affected than disengagements, with worse physical and physiological health effects. Optimistic people are more likely to deal with obstacles. They may be more willing to pay for the long-term gain with some short-term pain, including negative immunological consequences. The finding could explain contradictory results with regard to optimism’s association with immune changes under stress and provide a different view of the influence of optimistic characteristics.
Chronic job-related stress has influences on physical and mental health, medical costs and work performance (LaMontagne, Louie, Keegel, Ostry, & Shaw, 2006). There are numerous approaches for the prevention of stress. Primarily, prevention is concerned with adjusting attitude or cognition of work stress and may thereby reduce the negative influence on individuals. Self-efficacy and optimism are associated with people’s physical and psychological well-being in stressful situations (P. S. Weber, J. E. Weber, Sleeper, & Schneider, 2004; Scheier & Carver, 2003).

Therefore, the researcher wants to investigate the following questions:
(1) What are the high school teachers’ occupational stress, self-efficacy, optimism and health problems?
(2) What are the differences in occupational stress, self-efficacy, optimism, and health problems based on high school teachers’ demographic backgrounds?
(3) What are the relationships between teachers’ occupational stress, self-efficacy, optimism and health problems?
(4) How do teachers’ occupational stress, self-efficacy and optimism affect their health problems?

Method

1. Population and sample

Researchers contacted five general high school directors, and four of them agreed to send out research questionnaires. All of the general and vocational high school teachers work in the middle of Taiwan. Participants gave informed consent before filling out the questionnaire. Overall, 250 questionnaires were submitted and a total of 220 responses were received, with an 88% response rate. Finally, we achieved 213 valid questionnaires, after getting rid of incomplete questionnaires, which had more than three blanks or inaccurate items. Sixty-six percent of the teachers are females, and seventy-five percent of the samples are married. Forty-nine percent of the teachers work in general high schools and others are in vocational high schools. The mean of teachers’ teaching years of experience is 14.27, with a standard deviation of 8.98.

2. Instruments

Four instruments were applied in this study. Research instruments developed by Noe and Wilk (1993), Schweizer and Koch (2001), Travers and Cooper (1996) and Wu (2009) were used
to form our research instruments in self-efficacy, optimism, work stress and health status scales. All instruments were all on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

The validity and reliability of scales were analyzed by factor analysis and internal consistency. The revised version was pre-tested with 50 teachers. Using references to past research (Field, 2009), the standards for removing items are as follows: (1) SD < 1; (2) factor analysis loading value < 0.3; and (3) similar high loadings on more than two factors.

Items of self-efficacy questionnaire focus on capacity and confidence on learn new skills, and face difficult challenges. According to previous standards, three items on the self-efficacy scale were discarded because item-total correlation coefficients were lower than 0.3, and the scale was modified into a 10-item questionnaire. An example of the questions is “I feel confident that my skills and abilities equal or exceed those of my colleagues.” The internal consistency of the final scale in this study was 0.906. The higher score of questionnaire means higher level of self-efficacy.

The original “Sources or Pressure in Teaching Scale” consists of ten dimensions of teaching pressure sources. This study selected three dimensions, including pupil/teacher interactions, changes taking place within education and ambiguity of the teacher’s role, and it added three questions about pressure to recruit new students. For example, questions “dealing with recruitment of new students” or “the constant changes taking place within the profession” were included. The resultant scale consists of 23 items and four dimensions, after discarding two items through a principal factor analysis. Analysis results were observed that all items correlated at least 0.3 with at least one other item, suggesting reasonable factorability. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.76, above the commonly recommended value of 0.6. The Bartlett’s test of sphericity was significant. Reliability values (Cronbach’s alpha coefficient) of the revised version are as follows: pupil/teacher interaction = 0.899, changes taking place within education = 0.933, ambiguity of the teacher’s role = 0.936, pressure to recruit new students = 0.829 and the internal consistency of overall scale = 0.953. The higher scores of this questionnaire indicated greater pressure.

The optimism scale consists of 10 items for evaluating self-perceived components of optimistic characteristics, such as confidence to find a solution to the problem. For instance, “For each problem I will find a solution” or “No task is too difficult for me.” The internal consistency of this scale was 0.955. Higher points mean that teachers are more optimistic.

The health status scale consists of 10 items for assessing the participants’ emotional exhaustion and physical problems. There are five symptoms for assessing emotional exhaustion at work: (a) lethargy, (b) lassitude, (c) feeling down, (d) languor and (e) exhaustion. Physically
uncomfortable syndromes include (a) headaches, (b) stomach aches, (c) sleep problems, (d) body aches and (e) hypertension. Cronbach’s alpha value was 0.911 on the emotional exhaustion subscale, 0.817 on the physical problem subscale and 0.904 on the overall scale. The factor loading of all items in the optimism and health status scales were qualified with previous standards. Different from the previous scales, higher scores of the health status scale indicate worse health condition of teachers.

3. Data analysis

The SPSS 12.0 was used for descriptive analysis, Pearson correlation and multiple regression analysis. The results present the descriptions of subjects and the effects of demographic variables on measured variables. They also shed light on the relationships between measured variables and include the findings of regression analyses of the independent (occupational stress, self-efficacy, and optimism) against the dependent variables (health problems).

Results

1. Overall level of stress, self-efficacy, and health problems

Question 1 investigated teachers’ occupational stress, self-efficacy, optimism and health problems. The results showed that the mean of self-efficacy for all participants is 5.17. This shows that teachers are quite confident about their capacities to execute the action required to achieve their work goals. Most teachers feel they are competent at their jobs.

The mean of the optimism questionnaire was 5.01. This was higher than the middle point of 4.0. This indicates that participants are more optimistic. These teachers tend to expect good outcomes when they confront troubles. Optimistic expectations may enable people to believe in their ability to succeed when pursuing goals and to overcome obstacles and challenges. Thus, we found that high school teachers score higher on both the optimism and self-efficacy scales.

In the present study, the higher scores on the stress questionnaire mean that teachers experience greater pressure and have worse health. The result (M = 3.18) showed that teachers’ stress was under the midpoint of the scale. The mean of the health condition questionnaire was even lower (M = 2.88). Results of these two questions show that most high school teachers have an acceptable level of occupational stress and are in acceptable health.

The researcher further analyzed the subfactors of the teacher stress questionnaire and found stress levels rose as they faced the following sequence of issues: pressure to recruit new students,
Occupational Stress, Self-Efficacy, Optimism and Health Problems

Changes taking place within education, ambiguity of the teacher’s role, and pupil/teacher interaction. Comparison of general high school teachers and vocational high school teachers showed the two groups had two significantly different sources of stress. Teachers of general high school face more changes taking place within the education system (F = 5.424, p = 0.021), but they have a lower level of new-student-recruitment requirements (F = 99.42, p = 0.000). The source of stress was different in the two kinds of schools. In the comparison of teachers in public and private schools, no significant difference was found in the previous four subscales.

2. Demographic variables influence

Table 1 shows the demographic details of valid respondents who participated in the research. Ninety-seven percent of the teachers have a bachelor’s degree, 46% have a master’s degree,
2.8% have a college diploma and 2 teachers have a doctoral degree. Fifty-two percent of the teachers work in the vocational high school, and 47.4 percent work in the general high school. Fifty-four percent of the teachers work in the public school, and others work in the private school.

Four questionnaires that had more than three blank or inaccurate items were deleted, and other missing data were replaced by the linear interpolation method. Higher scores in self-efficacy and optimism scales mean a higher level of self-efficacy and optimistic tendency. In contrast, higher scores in work stress on health status scales represent stressful and worse-health conditions. The mean and standard deviation for each item are shown on the following table.

The influences of gender on measured variables were analyzed by the t-test, and significant differences were found in self-efficacy (p = 0.023) and optimism (p = 0.047). Gender has no influence on occupational stress and health problems. This result is partially the same as a past study (Klassen & Chiu, 2010). Klassen & Chiu (2010) sought to examine the relationships among teachers’ years of experience, teachers’ gender, self-efficacy, job stress and job satisfaction. They found that female teachers had greater workload stress, greater classroom stress from student behaviors, and lower classroom management self-efficacy. Present study also showed that male teachers have higher level of self-efficacy.

Another t-test shows that teachers in the general high school have a significantly higher level of optimism than teachers in the vocational high school (p = 0.017). The differences between public and private schools were also analyzed. Teachers in private schools have a stronger sense of self-efficacy (p = 0.006) and optimism (p = 0.011). A possible reason is that self-efficacy is context-specific. Teacher’s perceived efficacy is complex constructs that varies throughout a teacher’s career and interacts with teaching environments, such as school type (Lin & Chao, 2015). Teachers’ perceived self-efficacy is perception of their own ability to bring about desired student outcomes and is a critical factor in the improvement of teaching and student learning (Takahashi, 2011). In private school, teachers have been asked to retain students and may be better able to change their teaching methods in order to accommodate student needs. No difference was found in work stress and health status between teachers in the two kinds of schools. The influences of years of education and marriage status were analyzed by ANOVA. However, there is no significant difference in the results.

3. Correlations between self-efficacy, occupational stress, optimism, and health problems

The correlations between self-efficacy, occupational stress, optimism, and health problems were analyzed and are presented in Table 2. The Pearson coefficient of correlation describes
relationships between self-efficacy and optimism (r = 0.785), stress (r = -.367) and health problems (-0.285). All three of these correlations are significant. The relationships between teachers’ optimism and two measured variables are also significant (r = -0.384, p = 0.000 for stress and r = -0.350, p = 0.000 for health problems). Significant correlations also exist between the scores of teachers’ occupational stress and health problems (r = 0.565, p = 0.000). All of these variables were included in the following multiple regression analysis.

4. Regression model of self-efficacy, occupational stress, optimism, and health problems

The linear regression “enter” method was used to analyze three independent variables and health problems as a dependent variable. Table 3 shows the details of the regression model. The results show the F value is 32.851 and R^2 is 0.349 in this model. Only optimism and stress are significant predictors of health problems. Table 2 indicates a significant correlation between self-efficacy and health problems. As shown in Table 3, which describes the regression model, the influence of self-efficacy declines when other variables are controlled. We can interpret the results as a higher level of stress being related to a worse health condition. However, teachers with a more optimistic attitude seem to have better health.

**Table 2  Correlations of self-efficacy, optimism, occupational stress and health problem**

<table>
<thead>
<tr>
<th></th>
<th>Self-efficacy</th>
<th>Optimism</th>
<th>Stress</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>.785**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>-.367**</td>
<td>-.384**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>-.285**</td>
<td>-.350**</td>
<td>.565**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**p < 0.01

**Table 3  Regression model of self-efficacy, occupational stress and optimism on health problem**

<table>
<thead>
<tr>
<th>variable</th>
<th>B</th>
<th>Beta</th>
<th>p</th>
<th>VIF</th>
<th>R^2</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-efficacy</td>
<td>.101</td>
<td>.080</td>
<td>.413</td>
<td>2.708</td>
<td>0.349</td>
<td>32.851</td>
<td>.000***</td>
</tr>
<tr>
<td>optimism</td>
<td>-.334</td>
<td>-.287</td>
<td>.005</td>
<td>2.837</td>
<td>.</td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>stress</td>
<td>.518</td>
<td>.463</td>
<td>.000</td>
<td>1.206</td>
<td></td>
<td></td>
<td>.</td>
</tr>
</tbody>
</table>

***p < 0.001
Discussion

1. Conclusion

Several major findings in the present study are as follows:

(1) The results indicated that the most stressful element is recruiting new students. Changes taking place within education are the other source of occupational stress. General high school teachers face more changes taking place within the education system, but they have a lower level of recruitment-related stress since they do not have to recruit as many new students.

(2) Male teachers have greater self-efficacy and optimism than female teachers. General high school teachers are more optimistic than vocational high school teachers. Teachers in private schools have a stronger sense of self-efficacy and optimism.

(3) Occupational stress has an influence on health. Personal optimistic perception is a mediating influence on teachers’ health.

2. Discussion and suggestions

The trend toward fewer children certainly increases the difficulty of recruiting new students. Public high school teachers have been relatively unaffected under job indemnification in the past. However, more and more high school teachers are now feeling recruiting-related stress in the same way as private school teachers. The problem of the trend toward fewer children widely affects different kinds of schools. Many parents and students in Taiwan prefer to choose general high school than vocational high school because of school reputation and academic performance. The challenge of recruiting new students is difficult for all staff, especially for private vocational high schools. Individuals cannot change the trend; they can only adjust perception and practice. All school faculties should try to form a consensus on this difficulty so that individual teachers will not feel they are facing the problem alone.

The results show gender differences in optimism. Female teachers are more pessimistic than male teachers. This finding is consistent with the results of Jacobsen, Lee and Marquering’s study (2008) in 18 different countries. They investigated the optimism levels of men and women resulting from individual confidence and found that men are more optimistic than women. Schubert (2006) noted that females experience fear and nervousness more strongly than do males. Meyers-Levey (1986) found that men tend to use simple heuristics in the decision-making process more than women do and are also more prone to accept external information in daily life without detailed analysis. Females, however, often consider all usable clues prior to decision making.
Typically, negative messages are given more weight than positive information. Since 67.87% of high school teachers are female (Department of Statistics, 2010), female characteristics may affect the school atmosphere. We have to encourage female teachers in their abilities so they might have a higher level of enthusiasm for teaching.

The results of the present study confirm that working stress is strongly associated with teachers’ health status. Stress increases the risk of physical and mental illnesses. Both appropriate individual coping strategies and adjusted cognition are needed. The present study also finds that a key factor regarding teacher’s health condition is optimism. Although in most optimism literature, a generalized sense of optimism is typically discussed as a dispositional variable, the current study finds that an optimistic orientation can be manipulated and enhanced with appropriate intervention (Fosnaugh, Geers, & Wellman, 2009). A higher level of optimism can lead to better athletic performance and energetic attitude, which greatly benefit health.

Optimism is not only an inherent personality trait but also a quality that can be enhanced by cognition adjustment. Cervone (2004) indicates that cognitive elements of personality are molded by personal knowledge and estimation. Stress reflects personal cognition about difficulties in the environment. Expectations are estimates of the interaction between one’s self and the environment with regard to particular encounters. If the reward falls short of our expectations, we feel disappointed and under stress. Stress reflects a discrepancy between what should be and what is (Ursin & Eriksen, 2004). The study suggested that teachers’ cognition has to be adjusted to promote optimism in dealing with stress and that cognition is influential in modifying health problems.

Studies have demonstrated that cognition is influential in modifying chronic medical problems. Even in the case of patients with various medical conditions, optimism is a predictor of physical and psychological functioning (Fournier, De Ridder, & Bensing, 2002). This study and previous research suggests that if teachers approach the stressful situations they face in their jobs with an optimistic explanatory style, they will experience reduced levels of stress.

3. Limitations and implications

This study has limitations. First, all participants are teachers from the middle area of Taiwan. Regional differences may influence the way stressful situations are explained. Another potential limitation to the present study is the risk of common method variance. We used self-report measures to collect all information in this study. Although there is potential for internal validity to be reduced because of common method variance, surveys are typically the most practical method of collecting data related to the perceptions of individuals (Kraut, 1996). Future researchers
should use different measures of stress, optimism and health problems to clarify the relationships among stress, optimism, and health. Overall, our results suggest that optimism is an important factor in the occupational stress. Teachers who are less burned out in their jobs may be more likely to take on new curriculum challenging tasks that could help them perform better in their classroom.
Occupational Stress, Self-Efficacy, Optimism and Health Problems

References


of Behavioral Medicine, 24(5), 441-467.

作者簡介
邱華慧，弘光科技大學幼兒保育系，副教授（通訊作者）
Hua-Huei Chiou is an Associate Professor of Department of Child Care and Education, Hungkuang University, Taichung, Taiwan. (Corresponding Author)
高中職教師工作壓力、自我效能、樂觀傾向和健康狀況之研究

邱華慧
弘光科技大學幼兒保育系

摘 要

本研究之目的在於探討高中職教師工作壓力、自我效能、樂觀傾向和健康狀況之間的關係。近年來少子化的現象，造成高中職教師面臨較以往更大的招生壓力，家長和社會對教師的期待也較過去更高，除了外在環境的影響，個人的特質也是影響壓力感受的因素。工作壓力、個人特質與健康狀況間的關係為何？是本研究所欲探究的問題。研究採用卷調查法，參與者是分別任教於中部四所學校的 220 位的高中職專任教師，研究工具包括工作壓力，自我效能、樂觀傾向和健康狀況四種評估問卷。問卷經統計分析，結果發現壓力、效能和性格傾向與健康狀況皆有顯著相關，尤其是樂觀傾向對整體健康影響更為明顯。結果也發現男性教師對個人自我效能與樂觀傾向的評價較女性教師為佳；高中教師的樂觀傾向比高職教師強烈；而私立學校教師的自我效能和樂觀傾向程度比公立學校教師高，最後依據研究結果提出教師面對工作壓力的可行建議。

關鍵字：工作壓力、高中職教師、自我效能、樂觀傾向、健康狀況