

The Mediatory Role of Coping in the Relation of Teacher Perceived Stress and Teacher-Student Relationships

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Abstract—The purpose of this research was to test a model for the mediating effect of coping mechanism in relationship between teacher perceived stress and teacher-student relationship. The sample consisted of 200 high school teachers in Isfahan who were selected by random sampling method. Of this sample 66 percent were female and average age was 38 years. The instruments which used in this study were Coping Questionnaire (WCQ), perceived stress questionnaire and Student-Teacher Relationship Scale. Fitness of the proposed model was examined through structural equation modeling (SEM), using SPSS-22 and AMOS-22 software packages. The indirect effects were tested using the bootstrap procedure Findings indicated that the proposed model fit the data properly and the results confirmed all research hypotheses. According to these results application of coping strategies from teachers can lead to improve the quality of teacher-student relationship.

Keywords—Coping, teacher perceived stress, teacher-student relationship.

I. INTRODUCTION

TEACHING, like most human service professions, can be a stressful occupation. Sources of stress can be internal or external to the person, with emotional, physiological, and behavioral problems resulting when pressures are perceived to be greater than the ability to cope (Dunham 1982,). External stressors can be job or life events, either of which can lead to dissatisfaction and burnout (Justice et al. 1981). Stressors in teaching include organizational constraints, lack of administrative support, student apathy or misconduct, negative colleague attitudes, lack of parental co-operation, few opportunities to advance occupationally, and excessive workload (Seidman & Zeiger, 2013).

In dealing with demanding workload, concerned parents, and supervisors, the level of stress builds up in teachers. However, the biggest element of stress in teachers comes from the students themselves. Teachers have to care for not only each student's academic achievements, but also their social and emotional aspects of development. Not only that, teachers have to control the students as a group, maintaining positive learning environment for the whole classroom .

All the demands and expectations sometimes may be overwhelming on teachers, and the resulted stress is almost

inevitable, which then may result in negative outcomes, such as retention, and turnover. Stein and Cutler (2002) defined stress as, a total response to one's environmental demands and pressures. Furthermore, they explained that stress is an inescapable element in one's life. Teachers with stress tend to feel a lesser sense of accomplishment, and lower self-esteem, which in turn, may create poor classroom environment. For example, when a student misbehaves in classroom, teachers with low self-esteem may blame themselves, which results in lower confidence to control students (Chon, 2012). This could revolve back into more students misbehaving, creating a poor classroom. Regardless of occupation, everyone has his/her own strategies to cope with stress. Teachers, of course, have their own methods to manage stress. Some of the strategies are done individually, such as exercise, devoting to religion, blaming oneself, and sleeping. Some are also done with colleagues, or friends. These activities involve talking to others and giving each other support; improving one's relationship with others; going to meetings; and asking professionals for help. Finally, there must be social support from the school, parents, the district school board, and the community.

Teacher-student relationships are significant for children's development and readiness in the early years of school. This particular relationship is dynamic and reciprocal and information is continuously exchanged between student and teacher through interactions. Although academic support is important, positive relationships with teachers include students' perceptions of their teachers as available not only for purely academic issues, but also for more social and emotional problems. According to Baker (1999), many studies of teacher-student relationships are built on attachment theory (Bowlby, 1982). Through social interaction, children are able to build schema, internal working models, and further shape their behaviors. These social representations are applied to the school setting where students utilize social knowledge and skills to be ready to learn and develop relationships (Howes & Hamilton, 1992;).Unfortunately, the hierarchy of power, legalities, and the uneven nature of responsibilities between the teacher and the students can interfere with building a proper 'working relationship' (Riley, 2009).

There is substantial research supporting the importance of teacher-student relationships in predicting school-related outcomes and consistent evidence that positive teacher-student

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relationships are associated with desirable outcomes (Pianta & Stuhlman, 2004). Close relationships with teachers predict student's healthy socio-emotional development (Pianta, 1999) as well as adjustment to (Ladd, Birch, & Buhs, 1999), and success in, school (Hamre & Pianta, 2006). Negative teacher-student relationships are linked consistently to a variety of adverse student outcomes: behavioral problems (Pianta, Steinberg, & Rollins, 1995), dislike for and avoidance of school (Birch & Ladd, 1997), adjustment problems (Pianta, Nimetz, & Bennett, 1997), and less developed concept knowledge (Pianta et al., 1995). Dependent relationships of children on teachers have been linked to student outcomes of poor academic performance, negative attitudes toward school, less positive engagement with the school environment (Birch & Ladd, 1997), and undesirable classroom behaviors (Pianta & Nimetz, 1991).

In order to scrutinize the relationship between teacher perceived stress and teacher-student relationships, there is a need to study each variable separately, and extensively. This research approach is essential for studying this particular relationship because it will give provide a detailed understanding of each domain. Research that studies the interactions between the two domains in detail is very scarce. In contrast, one domain such as teacher stress leading to burnout phenomenon that has been extensively investigated for at least a few decades (See Schaufeli, Leiter, & Maslach, 2008, for review). As teacher-student relationships significantly influence various domains, studies observing the formation of such relationships and the qualities required to build the elements of strong, positive, nurturing relationships are of great importance for intervention.

In association with stress, coping has been an important component to measure as it can mitigate a person's distress in a stressful event (Lazarus & Folkman, 1984). The transactional model of stress and emotion, TMSE, (Lazarus & Folkman, 1984) has been offered as a framework for evaluating the coping process when a stressful event arises. Stressful experiences are considered person-environment transactions, and these transactions depend on the impact of the external stressor. This process is mediated by both the appraisal of the stressor and the social and cultural resources at one's disposal (Trouillet, Gana, Lourel, & Fort, 2009).

In the past, many researchers have examined the effect of psychological factors (e.g., social competence or social efficacy) as coping mechanisms and analyzed its role as a mediator (Chon, 2012). Large body of research on teacher-student relationships and coping (e.g., social competence) suggest that teacher-student relationship patterns are associated with social, emotional, and school-related adjustment and functioning (Baker, 1999;). Furthermore, students with emotional and behavioral problems have a likelihood of experiencing poor teacher-student relationships (Murray & Greenberg, 2001;). So, the purpose of this research was to test a model for the effect of the mediatory role of coping on perceived stress and teacher-student relationship (see figure 1).

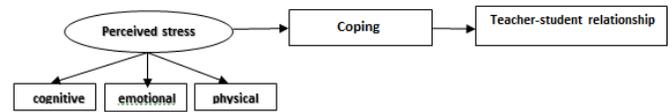


Fig. 1 Hypothetical pattern of relationship between research variables

II. METHOD

In this correlation study, data collection method was cross-sectional. The study is one-group, one-stage and multi-variables. 200 teachers from public and private schools in Isfahan, Iran were selected through random sampling method. Fitness of the proposed model was examined through structural equation modeling (SEM), using SPSS-22 and AMOS-22 software packages. The indirect effects were tested using bootstrapping method.

In this study perceived stress was assessed with questionnaire for identification of stress level from Henning & Keller (1996) that specify four dimension of reaction on stress include cognitive dimension, emotional dimension, physical dimension and social dimension. Every dimension is measured by 6 questions and respondents answer on a 1-5 response scale (1=always, 2=often, 3=some times, 4=rarely, 5=never). The Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1988) measures the style of coping strategies of teachers in eight dimensions across a total of 66 items. The instruction given at the beginning of the questionnaire ask the teacher to think about the most 24 stressful events experienced in the past week and respond on a 4-point Likert-type (0 = "does not apply or used" to 3 = "used a great deal"). Student-Teacher Relationship Scale (STRS; Pianta, 1992) is a 15-item, teacher-reported measure of Closeness and Conflict between child and teacher. The conceptual foundation for items is attachment theory and the Attachment Q-Set (Waters & Deane, 1985). Using a 5-point Likert-type (1 = "definitely does not apply" to 5 = "definitely applies"), teachers are asked to rate how applicable each statement is to their current relationship with a particular child.

III. RESULTS

Descriptive Statistics

Means, standard deviations, and correlations between research variables are reported in Table 1.

TABLE I
MEANS, STANDARD DEVIATIONS AND CORRELATIONS BETWEEN RESEARCH VARIABLES

Variables	M	SD	1	2	3
1. stress	8.084	2.184	—		
2. coping	7.20	6.43	-0.24*	—	
3. teacher-student relationship	6.168	1.333	-0.35*	0.64*	—
* $p < 0.0001$					

Structural Model

Structural modeling results suggested that the hypothesized model fit the observed data adequately, $X^2=7.358$; $df=7$; $p>0.05$; $X^2/df=1.051$, $GFI=.99$; $CFI=1$; $TLI=1$; $NFI=.99$; $RMSEA=.01$.

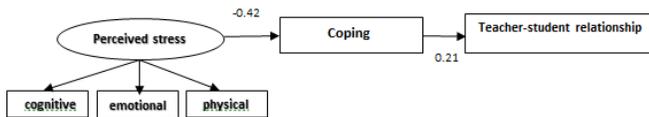


Fig. 2 Structural Model with Standardized Coefficients (All Paths are Statistically Significant, $p<.001$)

Mediating effect

To determine the significance of the mediating effect, bootstrapping procedure was used. Bootstrapping procedure (using 5000 re-samples) was used to determine the 95% bias-corrected confidence intervals around this effect. A confidence interval that did not span zero indicated a statistically significant effect. Table 2 indicates the results for bootstrapping analysis.

TABLE II
RESULTS FOR BOOTSTRAPPING ANALYSIS WITH ONE MEDIATOR:
EFFECT ON TEACHER-STUDENT RELATIONSHIP

Mediator	data	boot	bias	95% Confidence interval
Coping	-3.6503	-2.738	.0018	-3.007_ -2.6335
* $p<0.0001$				

As shown in Table 2 the confidence interval, with one mediator (coping) did not span zero which indicates statistically significant mediating effect.

IV. DISCUSSION

This study found a great statistically significant correlations between stress, coping and teacher-student relationship. These relationships, which had received support from previous studies, were examined with data from educational setting in Iran. In fact, this study sought to investigate the process by which the factor of job stress is linked with teacher-student relationship, by including coping mechanism as a potential mediator. This study contributes to the growing body of literature (e.g., Chon, 2012, Seidman & Zager, 2013).

This study was based on the researcher's recognition of the significance of teacher-student relationships in educational settings and the lack of empirical support for the teacher's perspectives on that relationship. Spilt et al. (2011) emphasized the importance to study teacher-student relationships from how they influence the professional and individual lives of teachers. This study contributes important empirical observations to studies on the area of teacher-student relationships research. It is important that teachers and administrators become more aware of the adverse physical and psychological responses to stress in teaching in order to prevent or limit their occurrence, since they can interfere with job performance, weaken the school organization, and are deleterious to individual teachers. Nervous and depressed school teachers are less likely to be effective in the classroom than teachers who cope more successfully with stress. This

ineffectiveness in coping can further increase stress and illness (Bieliauskas 1982). Successful coping, on the other hand, can lead to a decrease in the physiological activation associated with stressors and lessen the chance of becoming ill (Chon, 2012). It was found that teacher perceived stress affects the quality of the teacher-student relationship negatively. It can be inferred that teacher perceived stress further impacts not only teachers but also the psychological well-being of students. It is not surprising when teachers' emotions are linked to their relationship with their students, emotional experiences, and coping strategies (Chang & Davis, 2009), therefore, finding ways to decrease the psychological burden on teachers may improve their relationships with students. Also results indicated that coping is a significant mediator in this relationship. When a teacher has a difficulty with a student's disruptive behavior in the classroom due to a conflict in the teacher-student relationship (e.g., disobedience), the teacher will initially acknowledge the event as stressful, then, he/she will figure out ways to cope with the situation. The teacher may try to talk to the student directly to resolve the issue, or may seek support from colleagues or professionals (e.g., school psychologists or school counselors). If the teacher decides that the situation is unchangeable or is in beyond his/her competencies to change, then, she/he may choose emotion-focused coping strategies such as exercising, reading, or socializing with others to release the stress. In any ways, coping would play a role of mediating factors between stressors and outcomes (Lazarus, 1966).

No one coping strategy probably is sufficient; rather, a multi-pronged approach seems to be called for. The key is for teachers to be able to handle the inevitable job-related stress in a positive, active manner. Without gaining a sense of control over their jobs, school teachers seem doomed to a devastating plethora of physical, psychological, and social problems, which will only worsen their teaching situations (creating a 'vicious circle').

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