

RELATIONSHIP BETWEEN OCCUPATIONAL STRESS AND COPING STRATEGIES AMONG PHYSICAL EDUCATION TEACHERS

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ABSTRACT: The study aimed to examine the relationship between occupational stress and coping strategies adapted by physical education teachers. The sample consisted of 288 physical education teacher respondents working in secondary schools of Dakshina Kannada District of Karnataka State. The respondents were responded to the Occupational Stress Index (Shrivastava and Singh, 1984) and Coping checklist by Rao et al.(1984). This Occupational Stress Index and Coping checklist are used with some modifications. The data were analyzed with the help of SPSS 17.0. Results revealed that five coping strategies out of 8 were best predicted occupational stress of the teachers. They are spiritual related coping, unproductive coping mechanism, unhealthy coping habits, social support coping, and physical activity related coping. Other coping strategies like problem solving coping strategy, healthy cognitive coping and high risk coping were less predicted.

Key Words: Occupational stress; Physical education teachers

INTRODUCTION

Stress is becoming a global phenomenon affecting all categories of workers. The people can face any one or all the three types of stress such as physical stress, mental stress and emotional stress. Mental stress arises from normal day to day events like change of job, minor illness, and performance targets to be achieved or even a casual visit by the higher officer to the house unexpectedly. Different people have different tolerance levels of stress with regard to both intensity and duration. Optimum stress leads to high performance and high level of motivation with consequential job satisfaction. Stress above the optimum level leads to adverse consequences both physically and emotionally.

REVIEW OF LITERATURE

There were number of studies conducted on the occupational stress and coping patterns among teachers wherein only few studies on physical education teachers. The study by Tam and Mong (2005) indicated job stress means people experience psychological state which is incongruence and misfit between worker's perceptions of the demands on them and their ability to cope with those demand [1]. Konukman, Agbuga and Erdogan (2010) found stress to be associated with role conflict [2]. The study revealed that teaching and coaching are two different occupational roles, each having specific stress and burnout problems.

Al- Mohannadi and Susan Capel (2006) conducted a study on physical education teachers in Qatar [3]. The results showed that there were different causes of stress for different groups of teachers which could be related to different backgrounds and experiences and different roles and responsibilities in society as a result of different cultural and social

expectations and environmental factors. Verma (1997) investigated the job stress and job satisfaction of physical education teachers working in govt., private and public schools of U.T. Chandigarh [4]. He found significant difference between physical education teachers working in govt. and public schools in their job stress and job satisfaction. Physical education teachers working in govt. and private schools were also found to be significantly different in their job stress and job satisfaction. Capel (1997) questioned student physical education teachers following first and second teaching practices on their levels and sources of anxiety [5]. Evaluation apprehension emerged as the stressor in both practices, although it declined in the second teaching practice. It was suggested that stress can be reduced by exposure and positive experiences of observation feedback.

Sharma (2000) conducted a comparative study on 110 male college physical education teachers of Himachal Pradesh, Punjab and Union Territory Chandigarh in job stress, job satisfaction and adjustment variables [6]. The study revealed that physical education teachers of Himachal Pradesh state experienced more job stress than their counterparts in Punjab state and Union Territory Chandigarh. However, no significant difference was observed in their academic & general environment, professional relationship and personal life adjustments. But socio-psycho-physical and financial adjustment of physical education teachers working in Punjab and Chandigarh were found better than teachers working in the colleges of Himachal Pradesh. Teachers of physical education working in Punjab and Chandigarh were found overall better adjusted than the teachers working in the state Himachal Pradesh. Rathod (2006) study on job-stress of physical education teachers indicated inclination towards 'moderate job stress' [7]. The graduate only teachers, teachers working in local bodies schools, teachers working in girls only schools have expressed more job stress. The older aged physical education teachers have expressed more job stress. The teachers with lesser experience and highly experienced have expressed greater job stress.

Pal (2001) in his study attempted to examine the job stress, job satisfaction and adjustment among 140 Physical Education teachers (79 male and 61 female) [8]. Analysis of variance statistical procedure was used to compare the three categories of Physical Education teachers i.e. working in government, private and public schools. The study concluded that there was a significant difference among physical education teachers working in different types of schools in their job stress, job satisfaction and a number of adjustment variables. No significant difference was observed between male and female physical education teachers working in government and private schools whereas, this difference was significant in teachers working in public schools in four of the adjustment variables namely socio-psycho, professional, personal life and overall adjustment variables. He also found significant positive relationship of job stress with job satisfaction and three of adjustment variables. Similarly, significant positive relationship of job satisfaction was also observed with four of the adjustment variables.

Feigin, Talmor and Erlich (2005) examined the relationship between inclusion and burnout in physical education teaching [9]. Data collected from a sample of elementary school physical education teachers from all the six districts of Israel revealed that the school grounds and sports facilities were not adjusted for students with special needs; it took too much time for these students to be diagnosed and receive special treatment, there were difficulties in assessing these students, maintaining their safety, using special teaching methods to include them in classes and reporting to their parents. Results of the regression analysis did not support the hypothesis that teachers' personal resources and workload were related to burnout, they did, however, support the hypotheses that the number of special education students in class was positively related to burnout; the amount of help the teacher received in

treating such students was negatively related to burnout; the more the teachers felt that the structural and the social dimensions at the workplace were incongruent with their work, the more they were burned out.

Teaching in physical education is an exciting and challenging profession that combines classroom skills with emphasis on excellence in sports. The physical education teachers while playing a number of diverse as well as specialized roles as teachers, officials, organizers and administrators easily become prone to job stress. Job stress among physical education teachers working in schools has received the attention of researchers during the last few years. The stress in school teaching has not been a new topic all over the world including India. The results of the study would help to find out the degree/level of occupational stress among the physical education teachers working in various types of schools in Dakshina Kannada district of Karnataka State. The results would also help to understand the factors responsible for occupational stress among physical education teachers. The study might be useful in identifying the levels of stress of the teachers as related to the three variables. This would help them to understand various dimensions of adjustment and find out ways and means to be well adjusted persons. The study would help the administrators to create a congenial atmosphere in the institutions which would benefit both the sides.

The main objective of the study is to study the find out the relationship between occupational stress and coping strategies among physical education teachers working in secondary schools of Dakshina Kannada district of Karnataka State.

METHODS AND MATERIAL

Sample

The sample of the study comprised of 288 secondary teachers drawn from government, aided and private schools in the Dakshina Kannada district. All 288 physical education teachers of secondary schools of Dakshina Kannada district have been responded.

Tools employed

Occupational Stress Index:

Occupational Stress Index (OSI) by Shrivastava and Singh (1984) was the base to administer to assess the level of stress among the physical education teachers [10]. Basically the scale consists of 46 items, each related on the five points scale. As the scale is general in nature so the researchers have been modified the index in relating to the physical education. Two different patterns of scoring have adopted for two types of items. For true items, strongly disagree -1, disagree - 2, undecided – 3, agree – 3, strongly agree – 5 and false keyed items, the reverse components of the job life, which cause stress in one way or others, such as role overload, role ambiguity, role conflict, group and political pressure, responsibility for persons, under participation, powerlessness, poor peer relations, intrinsic improvement, low status, strenuous working conditions, and un-profitability.

Coping checklist:

Coping checklist (CCL), by Rao et al. (1984) was administered to assess the coping strategies among the three groups [11]. The questionnaire was given to each participant who was asked to fill it up & to return the same in 5 days. They were also briefed about the purpose of the study and their informed consent was obtained. Rao and others developed the coping checklist within the transactional perspective for the use with an urban Indian population. The

transactional model used referred to the individual's "Cognitive and behaviors efforts to manage the internal and external demands of the person – environment transaction that is appraising as taxing, or exceeding the person's resources. Coping behaviours selected for this tool was required to serve one of the following three functions: (a) to change a stressful (b) to control the meaning of the situation (c) to control emotional distress in relation to stress. Therefore problem – focused, emotions-focused and appraisal – focused coping behaviors were included in this instrument.

The CCL comprised of 70 items and the responses were scored in binary fashion-Yes/No, indicative of the presence or absence of a particular behaviour. The total number of positively responded to items were summed up to represent the size of the coping repertoire. This procedure assesses in terms of the tendency for use in certain stressful situations. The response categories were modified to include frequency of coping behaviours, rated on a five – point scale. The scale ranged from „never“ (1) to „almost“ (5). The response categories were as follows: Never – if the method of coping was never used at all. Seldom –if the method was used 25 percent of the time. Sometimes –if the method was used 50 percent of the time. Often – if the method was 75 percent of the time. Always- if the method was 100 percent of the time. The various dimensions are: healthy cognitive mechanisms, social support coping, spiritual religious coping, physical activity related coping, problem solving coping, unhealthy coping habits, unproductive coping mechanisms & high risk coping

Procedure

The questionnaire was personally administered to the physical education teachers. The researcher has briefed about the purpose of conducting the study. The sufficient time was given for the respondents to carefully read, understand the questions before answering, rather than stereotyped answering.

Scoring and analysis

In the present study chi-square test has been employed to test the significance of the different means of subclasses of occupational stress of physical education teachers.

RESULTS AND DISCUSSION

A. Correlation between stress and coping strategies

Table 1 presents results of correlation coefficients between various components of occupational stress and coping strategies.

Healthy cognitive coping scores correlated significantly and positively with responsibility for persons, under participation, low status , strenuous working conditions and negatively and significantly correlated with role conflict , unreasonable group & political pressure , and unprofitability components of occupational stress index. Rest of the correlation coefficients of components of OSI with healthy cognitive coping scores was not found to be significant.

Social support coping scorers were positively and significantly correlated with responsibility for persons, poor peer relations, intrinsic impoverishment, low status, strenuous working conditions and total occupational stress scores. Social support coping scorers were negatively and significantly correlated with role overload and unprofitability.

Spiritual related coping was significantly and positively related to role conflict, unreasonable group & political pressure, responsibility for persons, under participation,

powerlessness, poor peer relations, low status, strenuous working conditions, unprofitability and total occupational stress scores.

Physical activity related coping was significantly and positively related to role ambiguity, responsibility for persons, low status, and total occupational stress scores.

Problem solving coping strategy scores are significantly and positively related to role overload, intrinsic impoverishment, and unprofitability scores. Further, problem solving coping strategy scores significantly and negatively correlated with unreasonable group & political pressure scores.

Unhealthy coping habits were significantly and positively correlated with Role overload, Role ambiguity, Role conflict, Unreasonable group & political pressure, Under participation, Powerlessness, Low status, unprofitability and total occupational stress scores.

Unproductive coping mechanisms significantly and positively correlated with role overload, role ambiguity, role conflict, unreasonable group & political pressure, under participation, strenuous working conditions, unprofitability and total occupational stress scores.

Lastly, high risk coping scores were positively and significantly related to unreasonable group & political pressure, responsibility for persons, under participation, intrinsic impoverishment, low status and total occupational stress scores.

B. Regression analysis

Table 2 presents results of regression analysis when total occupational stress scores are considered as major dependent variable and coping strategies are independent. Of the 8 subscales of coping checklist (CCL), entered into the equation using stepwise multiple regression analysis, taking total occupational stress scores as dependent, following results were obtained. Out of 8 subscales of CCL, 5 strategies best predicted occupational stress of the teachers. They are spiritual related coping, unproductive coping mechanism, unhealthy coping habits, social support coping, and physical activity related coping. The first and foremost variable to predict the stress was spiritual related coping with the correlation coefficient of .403 with the contribution of 16.3%, followed by unproductive coping mechanism with the correlation coefficient of .497 and contribution of 24.1%. The third variable to enter into the equation was unhealthy coping habits with the correlation coefficient of .518 and the contribution of 26.0, followed by social support coping with the relationship of .528 and contribution of 26.87%. The last and final variable to enter into the equation was physical activity related coping along with other 4 subscales, with the correlation coefficient of .538 and a contribution of 27.7%. Rest of the contribution for the mental health was unaccounted for. Remaining 3 strategies of CCL did not predict the stress of the teachers and did not enter into the equation.

DISCUSSION AND CONCLUSION

Main findings of the present study are:

Out of 8 subscales of CCL, 5 strategies best predicted occupational stress of the teachers. They are spiritual related coping, unproductive coping mechanism, unhealthy coping habits, social support coping, and physical activity related coping.

In the present study, spiritual related coping emerged as a major predictor of stress, indicating that physical education teachers put the responsibility on „eternal powers“ to cope

with the stress, which is quite true in Indian scenario. This was followed by unproductive coping mechanism and unhealthy coping habits, which are not really good coping mechanisms. Lastly Social support coping, and physical activity related coping, where it clearly indicates that the physical education teachers do seek social support, discuss with the near and dear one's and thereby try to reduce the stress. The physical activity related coping is quite natural to the physical education teachers as they are used to it and may frequently put themselves into rigorous exercises to come out of stress.

Stress coping is defined as a behavioral or cognitive response of an individual to uncomfortable or difficult situations. Gaudreau, Nicholls, and Levy (2010) revealed through hierarchical linear modeling that golfers' episodic task-oriented coping and disengagement-oriented coping were associated, respectively, with their better and worst levels of subjective and objective achievement [12]. Distraction-oriented coping was not significantly associated with achievement. These results were obtained after accounting for between-subjects differences in ability level and for within-person variations in perceived stress across both practice and competitive golf rounds.

Cognitive appraisal is particularly relevant in the coping process in competitive sport. The manner in which an athlete interprets a stressful event influences the level of perceived stress intensity and influences the athlete's coping responses. Cognitive appraisal, followed by the use of coping strategies, determines the quality and intensity of perceived stress and influences an athlete's selection of coping strategies [13]. To date, research into the area of cognitive appraisals and coping strategies has not been conducted in the sport of golf. If the coping strategies used by elite amateur and professional golfers can be identified, it may be possible to generate effective stress intervention programs for golfers of all skill levels.

Rathod (2006) suggested that specific efforts are needed to be made to channelize the energies of young physical education teachers by fully engaging them in creative and innovative physical education practices and also specific efforts are required to be physical education teachers more satisfied with jobs [7].

Gaudreau, Nicholls, and Levy (2010) opine that sport psychologists and coaches should refrain from categorizing athletes with labels such as "good copers" or "bad copers" [12]. As reported in their study, a significant portion of variance in coping utilization lies within individuals rather than between individuals. Although individual differences in coping utilization exist, all athletes are at risk for falling below their usual level of achievement on days during which they rely on high disengagement-oriented coping and low task-oriented coping compared with their own average utilization. Therefore, interventions should focus on making athletes more effective in adopting, repeating, and maintaining their reliance on task-oriented coping on a momentary basis. The preference for task-oriented coping and the capacity to prevent disengagement from the goal striving process are promising skills to facilitate objective and subjective achievement.

Singh (2008) conducted a study on occupational stress of physical education teachers in different management of schools in Uttar Pradesh: a comparative study. The results of the study have shown significant occupational stress difference of physical education teachers in different management of school, unaided schools differ from government schools in occupational stress. It has been observed that unaided schools were noticeably affected by success/failure in terms of the job, potential psychological and situational conditions or job factors, which cause job stress than government schools. Occupational stress and burnout are associated with poor health in teachers. Mental and physical health variables (anxiety, depression, irritation, and somatic symptoms).

Table 1. Correlation coefficients between components of occupational stress and coping strategies

Components of Occupational Stress	Coping checklist								
		Healthy cognitive coping	Social support coping	Spiritual related coping	Physical activity related	Problem solving coping	Unhealthy coping habits	Unproductive coping mechanism	High risk coping
Role overload	„r	-.017	-.200	-.002	.080	.119	.358	.331	-.088
	P	.779	.001	.976	.175	.043	.000	.000	.135
Role ambiguity	„r ^{cc}	-.035	-.106	.096	.156	-.073	.334	.290	.046
	P	.550	.072	.103	.008	.214	.000	.000	.441
Role conflict	„r ^{cc}	-.246	-.111	.155	-.010	-.060	.181	.128	-.034
	P	.000	.061	.008	.860	.307	.002	.029	.571
Unreasonable group & political pressure	„r ^{cc}	-.123	-.008	.142	.090	-.135	.254	.265	.169
	P	.037	.892	.016	.128	.022	.000	.000	.004
Responsibility for persons	„r ^{cc}	.135	.298	.123	.125	.089	-.003	.014	.300
	P	.021	.000	.037	.034	.133	.963	.818	.000
Under participation	„r ^{cc}	.133	.033	.298	.082	.059	.278	.248	.214
	P	.024	.582	.000	.167	.322	.000	.000	.000
Powerlessness	„r ^{cc}	-.237	-.075	.178	.097	-.066	.221	.086	.000
	P	.000	.206	.002	.101	.263	.000	.147	.999
Poor peer relations	„r ^{cc}	.047	.272	.193	.027	.053	-.109	-.005	.013
	P	.425	.000	.001	.646	.369	.065	.926	.828
Intrinsic impoverishment	„r ^{cc}	.039	.221	.106	-.091	.174	.022	.059	.245
	P	.512	.000	.074	.125	.003	.712	.320	.000
Low status	„r ^{cc}	.291	.150	.285	.173	.003	.184	.037	.307
	P	.000	.011	.000	.003	.960	.002	.529	.000
Strenuous working conditions	„r ^{cc}	.168	.133	.322	.069	.059	.007	.124	.078
	P	.004	.025	.000	.245	.317	.907	.035	.186
Unprofitability	„r ^{cc}	-.173	-.291	.197	-.043	.187	.297	.309	-.008
	P	.003	.000	.001	.469	.001	.000	.000	.888
Total occupational stress	„r ^{cc}	.041	.129	.403	.145	.078	.314	.314	.242
	P	.490	.028	.000	.014	.187	.000	.000	.000

Table 2. Results of stepwise multiple regression

Sl. No.	Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	Spiritual related coping	.403(a)	.163	.160	15.14516
2	Unproductive coping mechanism	.497(b)	.247	.241	14.39142
3	Unhealthy coping habits	.518(c)	.268	.260	14.21096
4	Social support coping	.528(d)	.278	.268	14.13394
5	Physical activity related coping	.538(e)	.290	.277	14.04924

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