

Examining the strategies used by school principals to cope with stress in an Istanbul context

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Abstract

The Turkish educational system has been constantly changing over time. New systems are frequently introduced and when the results prove to be unsuccessful, a reversion of the former system emerges. Moreover, in order to identify ways and strategies to do this, it is also important to see the situation clearly and to decide the structure of support systems for principals. Survey design is used in this study. The population consists of principals of schools in the city of Istanbul in the academic year 2017–2018. The sample group consists of 161 principals from various public and private schools located on the European side of the city. Data were interpreted by % (percentage), t-test, one-way analysis of variance and the Scheffe test. The results indicate that the coping strategies, most commonly preferred by principals, are spending time with loved ones, building an optimistic perspective, and avoiding circumstances causing stress in order of importance.

Keywords: Coping strategies, public and private schools, school principal, stress.

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1. Introduction

The notion of stress, which individuals experience at least once throughout their work life, and even occasionally fail to identify, has become prevalent due to the pace of modern life. Stress-causing events in life lead to reluctance to take action in both work and private life, dissuading people from dedicating themselves to their objectives and making them feel disinterested and indifferent (Cakir, 2009). Stress refers to the physiological and psychological reactions of an individual to excessive and usually unwanted stimuli and external threats (Magnuson, 1990). Management is included in the category of high-risk professions due to the abundance of sources of stress. In terms of research conducted on various professions, prison officers, police officers, teachers, academics, ambulance drivers, nurses, physicians, firefighters, dentists, mineworkers, soldiers, actors and journalists were found out to have the most stressful jobs (Hargreaves, 1999). Stress is an unavoidable phenomenon, not only in daily life, but also in work environments. Therefore, effective management requires controlling stress to a reasonable level, and encouraging employees to use stress in a positive way for the benefit of the organisation they work for. In fact, stress is an indispensable part of life (Akat, Budak & Budak, 2002). However, it is important for school principals to be familiar with stress and aware of its advantages as well as its disadvantages, and to endeavour to use stress as a means of achieving higher levels of efficiency. An effective and successful institution relies on healthy principals. A healthy principal is the keystone of an organisation (Quick, Frey & Cooper, 2007).

Principals have the biggest responsibility when it comes to stress management in schools, which constitute one of the most dynamic organisations in our social lives. School principals are expected to adopt a strong stance with regard to stress as far as possible and to use it in a constructive manner. They are expected to avoid believing that every stressful event will have a negative consequence, and remember that there are times when stress can pave the way for innovation and change. They should choose and implement the most suitable form of stress management strategy for problems that will emerge. It is the responsibility of principals to ensure the most efficient use of all human and material resources in the school, and ensure the existence of the school in line with its objectives (Taymaz, 2001).

Today, school principals perform their duties in educational environments in which numerous variables are influential in the process. Principals experience a loss of performance usually when stress-causing factors are not taken into account. When an educational institution fails to achieve its goals, or principals fail to put their ideas into practice, this is a big cause of stress (Ozdog, Aydin, Unsal, Saydam & Akcakoyun, 2009).

Coping with stress is crucial for dealing with stress, protecting psychological and physical health, and ensuring a successful life. Stress management means changing a stressful situation or altering reactions to such a situation, with the aim of coping with such stress and improving the quality of life. In terms of coping with stress, it is important to be aware of the existence of stress, and becoming capable of using it to increase energy and motivation. The aim is to control the level of stress in such a way that it is neither too low nor too high (Schafer, 1987). People have tried myriad methods to cope with stress. Such methods include breathing exercises, proper nutrition, sports, hobbies, meditation, biofeedback, psychological support, participation in social events, praying and so on (Tutar, 2011). In his well-recognised study, Richard Lazarus (1979) offered a different approach to the issue of coping with stress, stating that one's reaction to a stressful situation will vary depending on his general attitude. Lazarus based this comment on his observation of elderly patients transferred to old people's homes. Patients who remained silent in the face of events were usually observed to be more quickly affected and depressed, as compared to those who displayed an aggressive attitude in response to the same events. Some of them developed a number of positive opinions about their new residence in order to allow themselves to adapt more easily to their new environment (as cited in Artan, 1986)

According to the result of a study entitled 'The Effect of Job Stress on School Principals at Primary Schools' by Ok (2006), it has been found out that principals working in public schools are more

intensely affected by organisational sources of stress as compared to principals working in private schools principals working in private schools make more use of coping strategies; principals between the ages of 20 and 30 are more intensely affected by organisational sources of stress related to their job and work environment, as compared to principals between the ages of 31 and 40; and, coping strategies are more commonly used by the age group 20–30 as compared to principals in the age groups 41–50 and 50+. Kayum (2002) conducted a study entitled ‘Sources of Stress for Principals of Primary Schools’ involving 54 principals and 75 vice-principals in charge of 98 primary schools in the academic year 2000–2001. According to this study, principals perceive stress mostly in terms of ‘organisational structure’ and ‘organisational purposes’. The research conducted by Borg, Riding and Falzon (1991) aimed at revealing the relationships between job stress and job satisfaction of 150 principals in charge of primary and secondary schools. The research findings reveal that 20% of the principals consider their job to be too stressful. There are four stress factors which have an effect on school principals: 1. Lack of support and decisional conflict 2. Lack of resources 3. Work load 4. Excessive responsibilities. Crowwel (1991) studied the intensity of the sources of job stress, the perceived sources of stress and coping techniques used by school principals (as cited in Pehlivan, 1995). According to the result of the research, the source of stress with the highest frequency was found out to be ‘the control and coordination of many people’ and the most intense source of stress was found out to be ‘excessively high third party expectations towards principals’. A humorous approach was observed to be mostly used by principals when coping with stress.

In parallel with the changing world, education systems may also often be subject to change. Everyone, including teachers and principals, admit that frequently, educational institutions cannot meet expectations. The discourse on educational systems often points to the fact that such a system has come to a deadlock and needs to be changed. Even different ministers of education of the same government address the failure of the current education system in responding to needs, and note that the system must be entirely changed. Moreover, there have always been complaints in the business world as to the failure of educational institutions when it comes to preparing mid-skilled labourers for work in factories, and the unavailability of an eligible workforce. Change is a process which relies on a particular system. However, it is hard to argue that the change in the Turkish education system is well managed. The process has frequently been interrupted, as in the case of the former grading and credit System; and finally, a 4+4+4 education system has been introduced. The examination procedure for university or high school admission has been constantly changed. New systems are introduced from time to time which are then abandoned when the results prove to be unsatisfactory, with a reversion to the former system. Thus, for school principals who are exposed to so many changes and obliged to manage the process, it is extremely significant to develop strategies in order to cope with the resulting stress although there have been no scientific or systematic attempts designed by the Ministry of Education to cope with the situation. In order to clarify the situation, to underline the main points, and to give an idea about the situation, this study is important. On this basis, the subject of the research has been determined as the examination of the strategies used by school principals to cope with stress.

2. Methodology

2.1. Research model and research questions

A survey design is used in this study. Survey research designs are quantitative research procedures in which investigators administer a survey to a sample or to the entire population, to describe the attitudes, opinions, behaviours or characteristics of that population (Creswell, 2012). The coping strategies of principals in charge of schools, which are affiliated to the Ministry of Education and based in districts on the European side of the city of Istanbul, are described in terms of their respective conditions. Quantitative data were collected in this research with the aim of finding answers to the following questions:

What are the coping strategies used by school principals in the city of Istanbul to deal with stress?

Do the levels of school principals' usage of coping strategies to deal with stress differ according to demographic variables?

2.2. Population and sample group

The research population consists of principals who were in charge of schools in the European side of the city of Istanbul in the academic year 2017–2018. The sample group consists of 161 principals selected by convenience sampling. 78 principals are female and 83 are male. Convenience sampling involves including easily accessible sample elements in the research. Convenience sampling is preferred as a practical and economic method (Monetle, Sullivan & De Jong, 1990).

2.3. Instruments

Survey forms were distributed to the sample of school principals between the dates 23/11/2017–27/04/2018. 165 surveys were distributed in total, 161 of which were correctly filled out and evaluated. A survey is used in the research as the data collection tool. The survey form developed by Yildirim (2008) was employed in the research. The survey form consists of two parts: The first part includes personal information about the school principals. This part includes multiple-choice questions to identify the demographic features of the principals, such as gender, graduation status, graduation field and professional seniority. The second part contains Likert-type questions consisting of 12 statements regarding coping strategies. The statements are rated on a five-point rating scale in the form of '1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always'.

The Cronbach's Alpha coefficient calculated for the overall survey is $\alpha = 0.931$, while Cronbach's Alpha coefficient calculated for the coping strategies scale is $\alpha = 0.931$. This serves as evidence of the reliability of the survey (Buyukozturk, 2010; Kalayci, 2009; Ozdamar, 1999). However, the overall Cronbach Alpha coefficient calculated for this research is 0.784.

Table 1. Descriptive statistics regarding coping strategies (n = 161)

| Statements | | Level of Participation | | | | | Stand. Dev. | |
|--|----------|------------------------|--------|-----------|-------|--------|-------------|------|
| | | Never | Rarely | Sometimes | Often | Always | | |
| 1. When I am stressed, I create an environment to cope with my stress. | <i>f</i> | 4 | 14 | 50 | 67 | 26 | 3.60 | .94 |
| | % | 2.5 | 8.7 | 31.1 | 41.6 | 16.1 | | |
| 2. I avoid circumstances that remind me of things causing stress. | <i>f</i> | 5 | 10 | 34 | 89 | 23 | 3.71 | .89 |
| | % | 3.1 | 6.2 | 21.1 | 55.3 | 14.3 | | |
| 3. I have positive dialogue with myself to cope with stress (try to see the good side of things) | <i>f</i> | 2 | 14 | 39 | 75 | 31 | 3.73 | .91 |
| | % | 1.2 | 8.7 | 24.2 | 46.6 | 19.3 | | |
| 4. I spend time with my loved ones when I am stressed. | <i>f</i> | 2 | 7 | 43 | 72 | 37 | 3.83 | .87 |
| | % | 1.2 | 4.3 | 26.7 | 44.7 | 23.0 | | |
| 5. I do physical exercise when I am stressed. | <i>f</i> | 23 | 44 | 52 | 32 | 10 | 2.76 | 1.11 |
| | % | 14.3 | 27.3 | 32.3 | 19.9 | 6.2 | | |
| 6. I pray when I am stressed. | <i>f</i> | 52 | 33 | 53 | 13 | 10 | 2.35 | 1.19 |
| | % | 32.3 | 20.5 | 32.9 | 8.1 | 6.2 | | |

| | | | | | | | | |
|--|----------|------|------|------|------|------|------|------|
| | % | 32.3 | 20.5 | 32.9 | 8.1 | 6.2 | | |
| 7. I plan my work beforehand in order to better use my time when I am stressed. | <i>f</i> | 9 | 22 | 53 | 57 | 20 | 3.35 | 1.04 |
| | % | 5.6 | 13.7 | 32.9 | 35.4 | 12.4 | | |
| 8. I get professional help in order to cope with my stress. | <i>f</i> | 59 | 50 | 34 | 14 | 4 | 2.09 | 1.07 |
| | % | 36.6 | 31.1 | 21.1 | 8.7 | 2.5 | | |
| 9. In order to cope with my stress, I have conversations with my loved ones on the circumstance causing stress. | <i>f</i> | 4 | 17 | 52 | 60 | 28 | 3.56 | .97 |
| | % | 2.5 | 10.6 | 32.3 | 37.3 | 17.4 | | |
| 10. I use various relaxing methods to cope with my stress (meditation, yoga, muscle relaxation, deep breath exercises. etc.) | <i>f</i> | 35 | 30 | 51 | 31 | 14 | 2.74 | 1.24 |
| | % | 21.7 | 18.6 | 31.7 | 19.3 | 8.7 | | |
| 11. I keep busy with my hobbies when I am stressed. | <i>f</i> | 4 | 15 | 55 | 63 | 24 | 3.54 | .94 |
| | % | 2.5 | 9.3 | 34.2 | 39.1 | 14.9 | | |
| 12. In order to cope with my stress, I face the person causing the stress. | <i>f</i> | 10 | 30 | 61 | 40 | 20 | 3.18 | 1.07 |
| | % | 6.2 | 18.6 | 37.9 | 24.8 | 12.4 | | |

As can be seen in Table 1, the least common coping strategies used by school principals are to 'get professional help' and 'use relaxation methods'.

Table 2. Results of analysis on the coping strategies of principals by gender

| Groups | <i>N</i> | \bar{x} | SD | S_{hx} | <i>t</i> | <i>t</i> Test <i>Df</i> | <i>p</i> |
|--------|----------|-----------|------|----------|----------|----------------------------|----------|
| Female | 78 | 2.76 | 0.81 | 0.10 | | | |
| Male | 83 | 2.44 | 0.75 | 0.06 | 2.76 | 160 | 0.006 |

As can be seen in Table 2, the difference between the means of the groups was found to be statistically significant as a result of the unpaired *t*-test performed to identify if there is a significant difference between the coping strategies used by the participants of the study 'by gender of the participant' ($t = 2.76$; $p < 0.05$). In other words, when female and male principals are compared, female principals are seen to be more commonly use coping strategies.

Table 3. Results of analysis on the coping strategies of principals by age

| Groups | <i>N</i> | \bar{x} | SD | Variances square | Sum of squares | ANOVA | | Results | |
|--------------|----------|-----------|------|------------------|----------------|-----------|-----------------|----------|----------|
| | | | | | | <i>df</i> | Mean of squares | <i>F</i> | <i>p</i> |
| 25–30 | 17 | 2.39 | 0.89 | Betw. Gr. | 9.21 | 1 | 2.30 | | |
| 31–36 | 30 | 1.92 | 0.95 | In-Gr. | 174.60 | 160 | 0.89 | | |
| 37–42 | 64 | 1.91 | 0.97 | | | | | | |
| 43–48 | 20 | 2.40 | 1.00 | | | | | 2.57 | 0.039 |
| 49 and above | 30 | 1.86 | 0.85 | | | | | | |
| Total | 161 | 2.03 | 0.96 | | | | | | |

As can be seen in Table 3, the one-way analysis of variance (ANOVA) conducted to find out whether the coping strategies tend to vary by age, revealed that the difference between average age scores is

statistically significant ($p < 0.05$). Accordingly, it can be seen that coping strategies are most commonly used by the age group 43–48 years, and least commonly used by the age group 49 and above.

Table 4. Results of analysis on the coping strategies of principals by educational status

| Groups | N | \bar{x} | SD | Variance square | Sum of squares | ANOVA | | Results | |
|--------------------|-----|-----------|------|-----------------|----------------|-------|-----------------|---------|-------|
| | | | | | | df | Mean of squares | F | p |
| Master's Degree | 60 | 2.78 | 1.12 | Betw. Gr. | 11.39 | 1 | 5.69 | | |
| Bachelor's Degree | 99 | 2.29 | 1.00 | In-Gr. | 195.08 | 160 | .99 | | |
| Associate's degree | 2 | 1.80 | 0.92 | | | | | 5.75 | 0.004 |
| Total | 161 | 2.03 | 0.96 | | | | | | |

As can be seen in Table 4, the one-way ANOVA conducted to find out whether the coping strategies used by principals tend to vary by age, revealed that the difference between educational status scores is statistically significant ($p < 0.05$). According to this finding, it can be seen that the coping strategies are most commonly used by the principals with Master's degrees, and least commonly used by principals with Associate's degrees.

Table 5. Results of analysis on the coping strategies of principals by title

| Groups | N | \bar{x} | SD | $S_{h,x}$ | t | t Test df | p |
|----------------|-----|-----------|------|-----------|------|-----------|-------|
| Principal | 20 | 2.51 | 0.93 | 0.10 | | | |
| Vice Principal | 141 | 2.22 | 0.93 | 0.08 | 2.17 | 161 | 0.031 |

As can be seen in Table 5, the difference between the means of the groups was found to be statistically significant as a result of the unpaired *t*-test performed to identify if there is a significant difference between the average coping strategies used by the principals in the sample group 'by title in the institution' ($t = 2.17$; $p < 0.05$). In other words, principals more commonly referred to coping strategies as compared to vice-principals.

Table 6. Results of analysis on the coping strategies of principals by years of seniority

| Groups | N | \bar{x} | SD | Variance square | Sum of squares | ANOVA | | Results | |
|--------------|-----|-----------|------|-----------------|----------------|-------|-----------------|---------|-------|
| | | | | | | df | Mean of squares | F | p |
| 1–5 Years | 69 | 2.50 | 0.92 | Betw. Gr. | 11.62 | 1 | 2,90 | | |
| 6–10 Years | 36 | 2.63 | 0.83 | In-Gr. | 138.37 | 160 | .71 | | |
| 11–15 Years | 28 | 2.29 | 0.87 | | | | | 4.09 | 0.003 |
| 16–20 | 11 | 2.21 | 0.57 | | | | | | |
| 21 and above | 17 | 1.81 | 0.50 | | | | | | |
| Total | 161 | 2.03 | 0.96 | | | | | | |

As can be seen in Table 6, the one-way ANOVA conducted to find out whether the coping strategies used by principals tend to vary by years of seniority reveal that the difference in terms of years of seniority is statistically significant ($p < 0.05$). Accordingly, it can be seen that coping strategies are most commonly used by principals with 6 to 20 years of seniority, and least commonly by the principals with 21 years of seniority and above.

Table 7. Results of analysis on the coping strategies of principals by length of service in the current place of duty

| Groups | N | \bar{x} | SD | Variances square | Sum of squares | ANOVA | Results | F | P |
|-------------|-----|-----------|------|------------------|----------------|-------|-----------------|------|-------|
| | | | | | | df | Mean of squares | | |
| 0-1 | 44 | 2.56 | 0.92 | Betw. Gr. | 6.37 | 1 | 2.12 | | |
| 2-3 | 87 | 2.67 | 0.90 | In-Gr. | 152.9 | 160 | 0.78 | | |
| 4-5 | 26 | 2.11 | 0.81 | | | | | 2.72 | 0.045 |
| 6 and above | 43 | 2.58 | 0.82 | | | | | | |
| Total | 161 | 2.03 | 0.96 | | | | | | |

As can be seen in Table 7, the one-way ANOVA conducted to find out whether the coping strategies used by principals tend to show a significant difference in terms of length of service in the current place of duty revealed that the difference between the means of the groups is statistically significant ($p < 0.05$). Accordingly, it can be seen that coping strategies are most commonly used by principals with 4-5 years of service, and least commonly used by principals with 2-3 years of service.

Table 8. Results of analysis on the coping strategies of principals by number of students in the school

| Groups | N | \bar{x} | SD | Variances square | Sum of squares | ANOVA | Results | F | p |
|-----------------|-----|-----------|------|------------------|----------------|-------|-----------------|------|-------|
| | | | | | | df | Mean of squares | | |
| 1-500 | 52 | 2.40 | 0.91 | Betw. Gr. | 9.39 | 2 | 2.35 | | |
| 501-1000 | 61 | 2.34 | 0.89 | In-Gr. | 152.1 | 159 | 0.78 | | |
| 1,001-2,000 | 57 | 2.08 | 0.89 | | | | | 3.01 | 0.019 |
| 2,001-4,000 | 28 | 2.75 | 0.79 | | | | | | |
| 4,001 and above | 2 | 3.00 | 0.00 | | | | | | |
| Total | 161 | 2.03 | 0.96 | | | | | | |

As can be seen in Table 8, the one-way ANOVA conducted to find out whether the coping strategies used by principals tend to vary in terms of the number of students in the institution, revealed that the difference between average scores is statistically significant ($p < 0.05$). Accordingly, it was found out that coping strategies are most commonly used by principals in charge of institutions with 4,001 students or above, and least commonly used by the principals in charge of institutions with 1,001 to 2,000 students.

Table 9. Results of analysis on the coping strategies of principals by type of school

| Groups | N | \bar{x} | SD | $S_{n,x}$ | T test | | |
|----------------|-----|-----------|------|-----------|--------|-----|-------|
| | | | | | t | df | p |
| Public School | 20 | 2.17 | 0.59 | 0.05 | | | |
| Private School | 141 | 2.88 | 0.81 | 0.13 | -6.25 | 160 | 0.000 |

As can be seen in Table 9, the difference between the means of the groups was found to be statistically significant as a result of the unpaired *t*-test performed to identify if there is a significant difference between the average coping strategies used by principals in the sample 'by type of school' ($t = -6.25$; $p < 0.05$). In other words, a comparison between principals in charge of private schools and principals in charge of public schools reveals that the principals in charge of private schools more commonly use coping strategies.

Table 10. Results of analysis on the coping strategies of principals by department

| Groups | N | \bar{x} | SD | Variances square | Sum of squares | ANOVA | Results | F | p |
|----------------|-----|-----------|------|------------------|----------------|-------|-----------------|------|-------|
| | | | | | | df | Mean of squares | | |
| Elementary | 44 | 2.15 | 0.68 | Betw. Gr. | 5.39 | 1 | 1.79 | 3.75 | 0.012 |
| Social Studies | 56 | 2.54 | 0.72 | In-Gr. | 93.76 | 159 | 0.47 | | |
| Science | 36 | 2.23 | 0.60 | Total | 99.15 | 160 | | | |
| Studies | | | | | | | | | |
| Other | 25 | 2.24 | 0.75 | | | | | | |
| Total | 161 | 2.31 | 0.70 | | | | | | |

As can be seen in Table 10, the one-way ANOVA conducted to find out whether the coping strategies used by principals tend to vary by department reveal that the difference between department scores is statistically significant ($p < 0.05$). It is observed that the principals who use coping strategies most frequently are the group of school principals of schools which specialise in the social studies branch, and those who use the same strategies least frequently are the group of school principals in schools specialising in being elementary teachers.

3. Conclusion

The results obtained from the study examining the strategies used by school principals to cope with stress on the basis of different variables. It reveals that the principals most commonly refer to the strategies ‘spending time with loved ones, building an optimistic perspective, avoiding circumstances causing stress’, respectively, in order of importance. The principals report that they often create a suitable environment as a way of coping with stress, engaging in entertaining activities, such as attending the theatre, cinema, going on trips and having a barbecue. In addition, the principals avoid circumstances that remind them of things that cause stress, attempt to develop an optimistic perspective and spend time with loved ones. On the basis of the answers provided, it is observed that the participants rarely engage in sporting activities and they are not much interested in praying when they feel stressed. It is observed that they often create a schedule beforehand as a coping strategy in order to use their time wisely. The participants reported that they preferred seeking help from persons they trust rather than referring to professionals, in order to allow them to cope with stress. The participants who do not use various relaxation methods, such as meditation, yoga, muscle relaxation and deep breathing exercises, often engage in their own hobbies. As a coping strategy, on the other hand, they choose to try occasionally or rarely to deal with people causing stress.

The study performed by Yildirim (2008) examined sources of stress and coping strategies on the part of form teachers, and revealed that the disinterested attitude on the part of parents is the most common cause of stress for teachers, that teachers most commonly prefer spending time with loved ones, and build positive dialogues with people around them in order to cope with stress. The study performed by Ozturk (2006) on sources of stress and coping strategies for physical education teachers examined the opinions of such teachers on the coping strategies they use. It was observed that the most important strategy is practicing sports, followed by praying, sharing feelings with other people and deciding to wait rather than taking action. The study undertaken by Bryan and Salvador (1988), on the other hand, revealed that the principals most commonly referred to social support as a coping strategy. In terms of the research performed by Alemdar (2002), it was found out that all the participants in the study reported that having conversations with a trusted person is most important, and being with family members and friends is the second most important strategy in terms of coping with stress. Using various relaxation techniques remained as the least commonly used coping strategy. As evidenced by the findings above, spending time with loved ones and talking to a trusted person is the most commonly preferred strategy although the strategies used to cope with stress may vary depending on the group under consideration.

According to the results obtained from the comparative analyses performed, an examination of the coping strategies used by school principals in terms of the gender variable, revealed a significant difference in the case of female employees. The results are in agreement with the studies performed by Gulbeyaz (2006) and Yilmaz (2007). On the other hand, no significant difference has been found in the research conducted by Bryan and Salvador (1988), Oztop (2000), and Sunmaz (2001) with regard to the gender variable. The study performed by Uzman (1990) with female employees revealed that there is no difference between female and male employees in terms of coping strategies. The female instructors were observed to have a higher score only in terms of the factor 'temporarily ignoring the cause of stress' among the sub-dimensions. Upon a literature review of the studies regarding the subject, a significant difference was found in some of the studies with regard to the gender variable, while no significant difference was observed in others. It can be stated that this situation varies depending on the structure of the sample.

In terms of the one-way ANOVA conducted to find out whether the coping strategies used by principals tend to show a significant difference by age, it was observed that coping strategies were most commonly used by principals in the age group 43–48, and least commonly used by principals aged 49 and above. This can be explained by the possibility that principals aged 49 and above may have internalised stress as they have been exposed to a great deal of stress over years of principalship.

The answers given by the principals reveal a significant difference in terms of the educational status variable. Similarly, the studies performed by Sunmaz (2001) and Yilmazturk (2013) found no significant difference in the coping strategies of principals in terms of this variable. According to the mean scores, it can be seen that coping strategies are most commonly used by principals with a Master's degree and least commonly used by principals with an Associate's degree. Although it is hard to make a proper comparison due to the low number of principals with an Associate's degree in the population and consequently in the sample, this can be explained by the fact that principals with a Master's degree may have a greater awareness on their feelings, and therefore prefer to employ more strategies to manage their feelings.

The analysis with regard to using coping strategies by title yielded results in favour of principals as compared to vice-principals. The reason for this result can be explained by the fact that principals are exposed to much more stress, and therefore are more likely to prefer to use coping strategies.

According to the results of the analysis on the coping strategies in terms of seniority, it can be stated that principals with a seniority of 6 to 10 years tend to feel more job stress and use coping strategies more often as compared to other principals. With regard to the study undertaken by Tekin (2009), the coping strategies of the principals surveyed were found to be significant in terms of the seniority of their position. Furthermore, Ekinci (2006), Yilmaz (2007) and Kara and Koc (2009) concluded that seniority has an effect on stress. Accordingly, those principals with a seniority of less than 20 years were observed to be more stressed. The study performed by Gulbeyaz (2006) revealed that principals with a seniority of 8 to 11 years have a higher level of stress. The studies by Bryan and Salvador (1988), Oztop (2000) and Nehir (2003) on the other hand, found no significant difference in terms of seniority.

The results of the analysis performed in terms of the coping strategies of principals by length of service in the current place of duty indicate that those principals with 2 to 3 years of service in the current school are exposed to more stress since they tend to have an intense work schedule, and thus tend to use coping strategies more often.

According to the results of the analysis performed in terms of the number of students in the school, coping strategies were most commonly referred to by those principals who are in charge of schools with the highest number of students, and least commonly by those principals in charge of the schools with 1,001 to 2,000 students. Given that the principals in charge of the schools with 4,001 students and above undertake much more work, and are more likely to be exposed to situations that exhaust them compared than those in smaller schools, it is possible to say that this is a cause of stress. This can

be explained by the fact that this group of principals are likely to encounter more problems due to the high number of students, parents, teachers and staff. The principals in charge of the schools with 4,001 students and above are very concerned about the possibility of deterioration of the school climate. This is due to the fact that problems that emerge in overcrowded schools are more likely to impact the school climate as compared to schools with fewer students. It can be said that it is much harder to ensure discipline, coordination and order in overcrowded schools. For this reason, the principals in charge of schools with 4,001 students and above are more likely to make use of coping strategies.

The results of the analysis performed on the use of coping strategies by type of school may be based upon the assumption that the principals in charge of private schools are more likely to be under performance pressure as compared to the principals in charge of public schools. Additionally, the principals and vice-principals in charge of private schools usually feel stress more intensely and make use of various ways to reduce stress as they do not have job security.

According to the results of the analysis performed on the coping strategies of principals by department coping strategies were more commonly referred to by principals in charge of schools specialising in social studies as compared to principals of schools specialising as elementary teachers. This result is found to be statistically significant. The study undertaken by Alemdar (2002) found a statistically significant difference in the coping strategies of principals lecturing in culture class in terms of the department variable. This can be explained by the fact that teachers in the social sciences branch are more sociable and familiar with using coping strategies. On the other hand, the study performed by Tekin (2009) revealed that the department variable has no effect on the coping strategies of principals. This research has certain limitations although it has yielded results which are of a quality that will contribute to the field. The research was carried out using a self-assessment survey. Studies that will be performed taking account of the disadvantages of self-assessment scales and using more objective assessment tools would yield more objective results.

4. Recommendations

4.1. Recommendations for practitioners

- In order to cope with, or to manage stress, the definition of stress, its potential causes and effects, and steps to be taken to cope with stress should be clearly described. The principals could be informed about stress and its management through the use of bulletins published by the Ministry of Education.
- Supportive systems could be organised for helping principals to cope with stress. This could include the setting up of recreation centres or rehabilitation centres.
- Practical and high-quality in-service training should be periodically provided on raising the self-awareness of principals, emotional management, crisis management and ways of coping with stress.
- Legal measures could be introduced in respect of the sources of stress for principals such as injustice, accountability in decision making, competition in the field, lack of communication, low salaries, etc.

4.2. Recommendations for researchers

- In order to ensure higher objectivity, it could be suggested that the study be undertaken again by using a number of alternative qualitative techniques, such as focus group interviews, one-to-one interviews and/or observations.
- The study could also be extended to a cross-cultural context by performing a comparative study involving different countries.

- The effect of the stress management strategies used by the principals on the satisfaction of teachers, students and parents could be examined.
- The effect of the stress management strategies used by principals on success of teachers and students could be examined.

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