

## Assessment of stress coping skills in first BDS students

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### Abstract

**Introduction:** Coping strategies are defined as how a person reacts or responds to a stress. Effective and appropriate coping strategy may minimize the impact of stressful situation on one's well-being. The dental profession is considered to be one of the most stressful health professions. Stress hampers not only academic performance but also has deleterious effect on one's physical and psychological health. So the present study is undertaken with the aim of identifying coping strategies in first year dental students.

**Material and Method:** The sample size was 98 students (90 females and 8 males). Study was carried out using a validated questionnaire. The students had to mark those tactics which they were commonly using as their coping tactics to manage the stressful event.

**Results:** The data was statistically analysed and it was found that all aspects of the coping skills were better developed in these students. More than 60% students were using adaptive coping strategies. Most commonly used skills were positive reinforcement, accepting responsibility and problem solving skills.

**Conclusion:** The first year BDS students were showing very well developed adaptive coping strategies at the start of their carrier course.

**Keywords:** Stress Coping, Dental, Coping Strategies, Stress.

### Introduction

The dental profession is considered to be one of the most stressful health professions.<sup>(1-5)</sup> Stress hampers not only academic performance but also has deleterious effect on one's physical and psychological health.<sup>(6)</sup> A study was carried out in Chennai which concluded that there was increase in cases of depression with increase in stress among dental students. There are many studies carried out on stress levels among dental students which also focused on factors influencing the level of stress such as gender, environmental factors, and demography etc.<sup>(7)</sup> Only few studies are carried out on stress coping skills among dental and medical student.

Coping is a mechanism which we engage in order to manage a stressful or taxing situation. It protects one against stress. How well an individual copes depends on his personality, environment and physical well-being. Coping with the help of unhealthy life style choices such as nutrition, exercise, sleep pattern and health risk behaviors: alcohol, tobacco and drug abuse can be counterproductive and worsen stress.<sup>(6,8)</sup>

After identifying the coping strategies among students, we can plan and intervene to reduce stress to develop an overall positive institutional atmosphere for dental education and student welfare. Keeping this in mind the present study was undertaken to identify the stress coping skills in first year dental students. Also many studies have carried out on stress and perceived sources of stress among dental students but to the best of our knowledge very few studies emphasized upon stress coping skills. By means of present study we can throw

light on this aspect of human behavior and also contribute to the existing literature.

### Aims and Objectives

- To identify the stress coping skill among first year BDS student.
- Any gender difference in relation to dominant coping skills among the student.

### Material and Method

Ethical committee clearance was obtained from the institute. Ninety -eight First year dental students of academic year 2015-16 from Sinhgad Dental College and hospital, Pune were included in the study, out of which 90 were females and 8 were males. The age range was 17-19 yrs. Participation in the study was on voluntary basis. After explaining about the purpose of study a written informed consent was obtained from the volunteers. They have been assured about the confidentiality of their identity.

Study was carried out using a validated questionnaire of "Ways of coping scale by Folkman and Lazarus".<sup>(5)</sup> the questionnaire was given to students after one month of their admission in first year. The students had to mark those tactics which they were commonly using. The responses anticipated from participants were based on their kind of reaction to different stressful circumstances in the dental learning environment, tabulated on a four-point Likert-type scale. Response choices ranged from "1. I have not been doing this at all" to 4: "I've been doing this a lot." The students made their choices according to the coping tactic most

frequently used to manage the stressful events experienced by them in dental school.

The data thus obtained was analyzed using appropriate statistical methods and the result was formulated.

**Results**

The Folkman and Lazarus scale contains eight categories of stress coping skill; as shown in the Table 1

**Table 1: Folkman & Lazarus scale**

| Category no. | Coping skill               | Question no.            |
|--------------|----------------------------|-------------------------|
| Category 1   | Confronting coping         | 1,2,3,4,5,50            |
| Category 2   | distancing                 | 6,7,8,9,10,11           |
| Category 3   | Self-controlling           | 12,13,14,15,16,17,18    |
| Category 4   | Seeking social support     | 19,20,21,23,24          |
| Category 5   | Accepting responsibilities | 25,26,27,28             |
| Category 6   | Escape-avoidance           | 29,30,31,32,33,34,35,36 |
| Category 7   | Problem solving            | 37,38,39,40,41,42       |
| Category 8   | Positive reappraisal       | 43,44,45,46,47,48,49    |

This obtained data was statistically analysed using frequency distribution thus percentage was calculated. As our study population had only eight male students and ninety female students, the gender difference could not be studied.

**Category 1:**

**Table 2: Confronting coping skill**

| Category 1-confronting coping skill |          |                 |           |           |
|-------------------------------------|----------|-----------------|-----------|-----------|
| Q. no.                              | 1- never | 2- occasionally | 3- mostly | 4- always |
| 1                                   | 4.4      | 33.6            | 34.5      | 12.4      |
| 2                                   | 12.4     | 38.1            | 18.6      | 6.2       |
| 3                                   | 16.8     | 35.4            | 23.9      | 8.8       |
| 4                                   | 11.5     | 26.5            | 30.1      | 15        |
| 5                                   | 24.8     | 40.7            | 13.3      | 5.3       |
| 50                                  | 9.2      | 29.6            | 33.2      | 25.5      |

This coping skill tests one’s ability to express him/her.

This table shows that q.1 “I stand on my ground and fight for what I want” this coping skill was mostly used by the students (34.5%) also q.5 “I do something which I think won’t work but at least I am doing something” (33.2) commonly used.

**Category 2: Distancing**

38.9% students used the skill “I try to look on brighter side of the things”. Rest of the situations in the distancing coping skills showing refusal, denial, etc.

were occasionally used by the students. This showed use of positive distancing coping skill by the students.

**Category 3: Self-controlling coping skill**

The students were showing good use of self-controlling coping skill like q15 “I try not to act hastily” (38.1%), q16 “I try to keep my feelings from interfering with other things too much” (37.2%)

**Category 4: Seeking social support**

Students mostly preferred to seek social support from family, friends or from other resource personal, and only occasionally used the skill of q 23 “I accept sympathy and understanding from someone” (34.5%)

**Category 5: Accepting responsibilities**

q27 “I make a promise to myself that I will do better next time” (56.1%) was largely used coping skills by the students displayed their ability to accept responsibilities. Also, most of the students responded that only occasionally they would criticize or blame self for that particular problem (46%)

**Category 6: Escape-avoidance**

q30 “I hope a miracle would happen”(44.9%)was the strategy most of the students followed while 61.2% and 54.1% of the students reported that they never used the skill like “I try to make myself feel better by eating, drinking, smoking etc.” and “I take it out on other people” respectively

**Category 7: Problem solving**

**Table 3: Problem solving**

| Category 7 | 1- never | 2- occasional | 3- mostly | 4- always |
|------------|----------|---------------|-----------|-----------|
| 37         | 4.1      | 22.4          | 39.8      | 27.6      |
| 38         | 3.1      | 24.5          | 43.9      | 22.4      |
| 39         | 1        | 14.3          | 38.8      | 41.8      |
| 40         | 4.1      | 18.4          | 50        | 25.5      |
| 41         | 8.2      | 26.6          | 30.6      | 22.4      |
| 42         | 3.1      | 25.5          | 48        | 19.4      |

Here majority of the students had opted for ‘mostly’ and ‘always’ option from likert scale. This showed their problem solving attitude. The questions were like “I just concentrate on what I have to do next” & “I make plan of action and follow it.”

**Category 8: Positive reappraisal**

“I get inspired to do something creative “(50%), “I rediscover what is important in life” (44.9%) are some of the positive reappraisal techniques used by the students

Overall it was noted that all the coping skills were better developed in these students. Most commonly used skills were positive reinforcement, accepting responsibility and problem solving skills.

## Discussion

Coping strategies are defined as how a person reacts or responds to a stress. Effective and appropriate coping strategy may minimize the impact of stressful situation on one's well-being. Coping strategies refer to specific efforts, both behavioral and psychological, that people employ to master, reduce, tolerate, or minimize stress due to undesired events. 'Active coping' means taking action or exerting efforts to remove or circumvent the stressor, while 'Acceptance' means accepting the stressful event, 'Planning' consists of thinking about how to confront the stressor, 'Positive' reframing means making best of the situation by growing from it and 'Denial' is an attempt to reject the reality of stressful event and 'Behavioral disengagement' means giving up or withdrawing efforts to attain goal.<sup>(9)</sup>

Many studies stated that regardless of gender and year, dental education is most stressful profession and the stress goes on increasing from first year to internship.<sup>(5,7,8,10)</sup> Wegman investigated the body posture of students and found that these students assumed unnatural body posture, there was an increase in physical stress that adversely affected work performance.<sup>(11)</sup>

A comparative study of professional student stress showed that dental students had greater levels of stress than medical students owing to additional technique excellence required in dentistry.<sup>(12)</sup> A study done by A K Paul reported that high emotional intelligence (EI) students reported a greater degree of reflection and appraisal, social and interpersonal skills and organization and time management skills while low EI students were more likely to engage in health damaging lifestyle or behavior.<sup>(13)</sup> We did not study about the EI of the students but the coping strategies adopted by the students are adaptive and positive type. Zayed H Al-Sowygh studied academic distress, perceived stress and coping strategies among dental students in Saudi Arabia and found that active coping, planning, religion and acceptance were the commonly used strategies for coping, we come across that positive reframing and problem solving as measure coping strategies.<sup>(14)</sup> These strategies are known to reduce stress protect medical students against depression and promote well-being. Accepting the reality of stressor is a functional coping mechanism which helps one to adapt to stress when active coping resources are not available.<sup>(6)</sup> Anjali deshpande showed that seeking out friends for conversation and support, joking with friends and using humor, trying to focus on the things which can be controlled and can't be controlled and accepting the things which can't be controlled were the dominant coping strategies adopted by students.<sup>(3)</sup>

The present study highlighted use of coping strategies like problem solving, positive reframing and accepting responsibilities by the first year students. Use of these coping strategies emphasized their adaptive capacities. These coping styles should be strengthened in

order to protect students from the deleterious effects of stress and also from certain maladaptive coping strategies like avoidance or emotional venting. These first year students were new to the course curriculum, came from secure and protected environment and on their academic excellence. This means they were less stressed and showing good coping strategies. They yet to undergo various adjustments with friends, teachers and with the new college environment. They still were not exposed to the vast syllabus and extensive dental training through these coming years, which would gradually increase the stress and hence might hamper the positive coping styles. The college, from which the sample obtained, offers counseling and mentorship to vulnerable students which are identified by teachers and also, if students approaches voluntarily. Many times it may happen that students feel reluctant to seek help of a counselor. So here, we want to propose that, stress management and coping skills training should be offered from the start of curriculum in the form of a subject. This will ensure training of all students. This training will help students to anticipate stress and to deal with it. This will also protect the students from adverse physical and mental effect of stress and so enhance academic performance and ensure academic success.

## Conclusion

From the present study findings we want to conclude that the positive coping skills were better developed in students. More than 60% students used adaptive coping strategies. Intervention program to improve the coping strategies if implemented from the start of the curriculum then the positive coping strategies can be maintained in those showing good results while it can be improved in those who are lacking in it.

## Limitations to the study

As it was a cross sectional design, which investigates the real world at one point in time. Such a design does not examine longitudinal fluctuations in perceived stressors and coping tactics over time. Since the information was collected from single private dental college, the results may not reflect the general trend in other national or regional institution.

## Conflicts of interest

Author has no conflicts of interest to declare.

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