

Original Research Article

Stress and emotion regulation in resident doctors at a tertiary care hospital of North India

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ABSTRACT

Background: The stress of medical training stems from academic pressure, exhausting work hours and striving for perfectionist standards. The demanding nature also requires involvement with emotionally draining aspects of life (human suffering, death, sexuality and fear). This may impair quality of life of medical students and influence patient care. As a consequence, post graduate medical students can experience an alarming amount of stress-associated anxiety, depression, substance abuse, and even suicide. Chronic stress is also known to influence memory, learning and especially problem-solving abilities which require flexible thinking. The study was carried out to evaluate the relationship of stress to cognitive reappraisal and emotion suppression in post graduate medical students.

Methods: 150 post graduate medical students participated in the study. Emotion Regulation Questionnaire and Professional Life Stress Questionnaire were administered on each participant. Data collected was kept confidential. Results were tabulated and statistically analysed.

Results: Out of 150 participants, 85 (56.67%) experienced stress. 65 (43.33%) participants had stress in the moderate range, 20 (13.33%) participants had stress in the problematic area for whom remedial action was required. 52% showed high cognitive reappraisal, while 54% showed emotional suppression.

Conclusions: The correlation between stress, cognitive reappraisal and between stress, emotion suppression showed weak strengths.

Keywords: Cognitive reappraisal, Emotional suppression, Post graduate medical student, Stress

INTRODUCTION

Medicine is an emotionally demanding discipline. Therefore, a career in medical education can invariably be stressful. Stressors among medical students include taxing timetables, high pressure academics and compulsive standards of practice. This engagement requires dealing with human agony and fatality.¹ Cumulative stress pollutes the quality of life of the medical student and inadvertently ruins the doctor-patient relationship. The outcome for the caregiver is a host of

psychiatric disorders namely depression, substance use disorders with an impediment in decision making skills.¹ Stressful patient care arouses vivid emotions in doctors which tests their emotion regulation strategies. Cognitive reappraisal is when an individual change the way he perceives an emotion arousing event, in order to transform its emotional consequence. Reappraisal occurs in the beginning and it changes the emotional responses before they have been produced.² Thus, it needs few cognitive aids to enforce. The social conduct thus developed is centred on the interactive partner as suitable,

engaging and emotionally forthcoming.^{3,4} Suppression on the other hand involves decreasing the current emotion-expressive behaviour.⁵ It becomes active late in the emotion-generative process. It alters the behavioural phase of the emotional response but does not stop the experience of negative emotion. The negative experience may amass and remain unsolved.

Due to its late activating component, the individual must cope with his emotional responses recurrently. These recurrent attempts deplete cognitive resources and decrease favourable functioning.⁴ As a result, an inconsistency develops between what the individual feels and how it is portrayed to others.

It causes hindrance in forming honest, stable relationships, and leads to isolation.^{6,7} Research has proved that stress has an integral role in negatively influencing health care professionals. It leads to increased depression, decreased job satisfaction, disrupted personal relationships, psychological distress, and even suicide.⁸⁻¹³ There is distortion of attention, concentration, decision-making skills, poor patient care and can also lead to burnout.¹⁴⁻²⁰ Cognitive reappraisal and emotion suppression have not been studied as effectively in the Indian medical context on doctors undergoing post graduate training. India being a populace nation has an added burden on health care facilities leading to more pressure on the junior doctors who are expected to be on duty irrespective of their own health.

Authors hypothesized that:

- A substantial number of the doctors would be stressed
- Lower stress scores would indicate higher cognitive reappraisal scores
- Higher stress scores would indicate higher emotion suppression scores.

METHODS

The objectives of the study were 1) To study the stress levels of the participants, 2) To assess cognitive reappraisal compared to stress, and 3) To assess emotion suppression compared to stress. Clearance was obtained from the Hospital Ethics Committee for this cohort study.

Study period and sample size estimation

The study was carried out on 150 post graduate students and senior residents using stratified sampling. The study was carried in 2016 on the resident doctors from postgraduate batches 2013-2015. Sample size estimation was undertaken by taking 50% of the total student intake.

Inclusion criteria

Participants who willingly gave their written consent for the study, were included.

Exclusion criteria

Individuals with known physical/Psychiatric disorders were excluded. The demographics of age, sex, department, year of post-graduation/ senior residency were obtained from each participant.

Emotion Regulation Questionnaire (Annexure 1): A 10-item scale designed to measure respondents' tendency to regulate their emotions in two ways: (1) Cognitive Reappraisal and (2) Expressive Suppression. Respondents answer each item on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). In this, the total number of items for cognitive reappraisal are 6 and expressive suppression are 4. Scores for both the items for each subject were calculated by dividing the score on each item by the number of items on cognitive reappraisal and expressive suppression.

Professional Life Stress Questionnaire (Annexure 2) (22): A 22-item self-administered scale to measure stress levels among working professionals. The scores categorize stress levels into ranges of: Non-problematic (up to 15), Moderate range (16-30), Problematic (31-45) and Major problem (45-60).

Information collected from the participants was kept confidential.

Statistical analysis

The Pearson product-moment correlation coefficient is a statistical measurement of the correlation (linear association) between two sets of values. If the value of r is close to +1, this indicates a strong positive correlation, and if r is close to -1, this indicates a strong negative correlation. Calculations were performed using Microsoft Excel. Data was tabulated and statistically analysed.

RESULTS

Out of 150 participants, there were 80 males and 70 females. 45 were first year postgraduate students, 45 were second year postgraduate students, 50 were third year postgraduate students, 7 were senior residents and 3 did not specify (Table 1).

The age range of the participants was 24 to 40 years. 85 (56.67%) participants experienced stress. 65 (43.33%) participants had stress in the moderate range, 20 (13.33%) participants had stress in the problematic area for whom remedial action was required. But none of them had a major stress problem.

The cognitive reappraisal scores for the participants were categorized into high (>4.60) and low (<4.60) using the scoring (Table 2). Similarly, the emotion suppression scores have been tabulated as high (>3.64) and low (<3.64) in table 3 using the scoring. The correlation between stress and cognitive reappraisal was -0.216. The

correlation between stress and emotion suppression was +0.101. Both showed weak strengths.

Table 1: Year wise distribution of the professional life stress scores.

Residency Year	No. of Participants	No Stress(N)	Moderate(N)	Problematic(N)
1	45	18	21	6
2	45	16	20	9
3	50	25	20	5
Unspecified	3	1	2	0
Senior Residents	7	5	2	0

Table 2: Cognitive reappraisal scores (values more than 4.60 denote high cognitive reappraisal, values less than 4.60 denote low cognitive reappraisal).

Participants (N=150)	Cognitive Reappraisal
78 (52%)	>4.60
72 (48%)	<4.60

Table 3: Emotion suppression scores (values more than 3.64 denote high emotion suppression, values less than 3.64 denote low emotion suppression).

Participants (N=150)	Emotion Suppression
81 (54%)	>3.64
69 (46%)	<3.64

DISCUSSION

Among all the various population groups studied type II the primary objective of the study was to see the level of stress in participants. 56.67% of the subjects experienced stress in this study. 43.33% had stress in the moderate range, while 13.33% had stress in the problematic area for whom intervention was required.

Higher stress scores were reported from doctors specializing in all the clinical specialties. There were few subjects from the basic sciences, as majority do not prefer to specialize in them due to lesser employment avenues. However, there was less stress in the specialties with fixed working hours i.e. pre and para clinical subjects.

As shown in Table 1, 50% of the third years did not have any problems with stress. Studies have pointed out that older adults are attentive to the management of their emotions, modulate them better and are more efficient than younger adults.²³ The former use reappraisal more often. The latter use emotion suppression more frequently. Thus, reporting lower stress levels and having a positive response to both major and minor life consequences. Maturity related to cognition, helps mediate between stress and emotion. A similar study on undergraduate medical students found that stress

decreased with completion of every academic year.²⁴ Table 4 shows various studies on stress.

The secondary objective of our study was to find whether lower stress scores indicated higher cognitive reappraisal. The study found a weak negative correlation (-0.216) between cognitive reappraisal and stress. When medical students used cognitive reappraisal of a stressful situation, they justified bad behavior by focusing on the positive competencies of a doctor.

It reduced the emotional intensity of the situation by focusing on external factors that could be influencing the bad behavior. This is more common in a culture where clinical skills are more important than interpersonal skills.²⁵ This finding is similar to our study and could be the explanation of our marginally higher cognitive reappraisal scores. Another longitudinal study by confirmed that medical students who coped better had a positive personality and reported less physical illness.²⁶

There was a positive relation between emotion suppression and stress (+0.101), but the strength was low. This was our tertiary objective. The current study did however find that males had higher emotion suppression scores than females. 45 (30%) participants were found to have higher emotion suppression scores than cognitive reappraisal scores, out which 30 (66%) were males and 15 (33%) females.

These participants fell in the three categories found in the professional life stress scale; no stress, moderate, and problematic area.

Hence, the third hypothesis, higher emotion suppression would lead to higher stress scores also provided a weak relationship. in their study, found suppression was used by the medical students as emotions interfered with potency in executing a task.²⁵ Emotions deplete cognitive resources aimed for task completion, affecting the performance of the student negatively.^{27,28} With the aim of successful task completion, suppression helps in short term intense emotion regulation. In medical culture, it is a practical short-term survival strategy, but the long-term effects for the wider health care system are potentially

dangerous. Multiple studies show increase in empathy.²⁹⁻³² depersonalization, burnout rate and decrease in

Table 4: Showing various studies on stress.

Author	Population	Results
Pagnin and Queiroz ⁴²	193 medical students, mean age 21.4 years	Sleep disturbances and Burnout
Domantay ⁴³	527 medical students, 78.9% of the participants between 19 to 24 years.	Depression, stress, burnout and a lower quality of life
Paro et al, ⁴⁴	1350 medical students, mean age of 22.7 years	Women had higher emotional exhaustion, the men had higher depersonalization rates
Van Vendeloo et al ⁴⁵	105 orthopaedic residents	18% of participants had poor quality of life, 47% were dissatisfied with their personal and professional life
Jamali et al, ⁴⁶	1086 medical students	Low quality of life scores
Bhandari ⁴⁷	130 undergraduate students, 50% were aged between 20 and 29 years.	Stress score was negatively correlated with quality of life
Meyer et al ⁴⁸	302 medical students, mean age of 25.3 years	High stress scores
Present Study	150 graduate students	56.67% of the subjects experienced stress

Reported that medical culture demands the hierarchical structure which refuses lower members in the hierarchy to dispute the behaviour of the person higher in authority. Several studies have stated that during professional uncertainty, students avoid the situation directly preferring subtle ways to express their dissonance even when their personal values clashed with their seniors. Also reported participants feeling moral distress due to these reasons.^{33,34}

In various exacting professions such as military, police and judiciary, suppression is a common yet maladaptive emotion regulation strategy.³⁵⁻³⁷ Which emotions are allowed and which are suppressed comes more from the expectations and requirements of the profession. Raw emotions in learners, especially tears, are often seen as lack of professionalism.³⁸ Judgmental negative emotions are not allowed by the formal curriculum, but they are prevalent in the informal curricula which makes the learner resolve that emotions are dangerous and best avoided.³⁹

The present study showed lower emotion suppression rates in females. This can be justified due to larger production of oxytocin during stress in women.^{40,41} In his various studies concluded that women exhibited affiliative behaviour, due to oxytocin, when dealing with stressful situations of a moderate intensity. Oxytocin could be responsible for the sex specific responses in emotion regulating behaviour.

To the best of our ability authors could not find studies on emotion regulation on medicos in the Indian scenario. Hence, comparison was not possible.

CONCLUSION

This study draws attention to the stress and emotion regulation strategies of the resident doctors. The stress levels of the resident doctors were high. Lower stress scores were prevalent in only a few subjects. The correlation strength between stress and cognitive reappraisal as well as between stress and expressive suppression was low.

The data collection was done from the participants in a tension free environment, in the absence of their faculty. This was a strength of the study as it allowed the participants to be as frank as possible. Even after taking necessary precautions, some participants were not as forthcoming as expected. They gave ambiguous responses, which was a limitation of the study. To the best of our knowledge no controversies arose from the study.

Future directions

Medical profession is highly stressful. This was proved by the results of the study. The junior doctors require regular intervention and support to help them achieve optimal physical and mental health, as otherwise it may adversely affect patient outcome.

They need to be offered mental health interventions, to increase emotion regulation and decrease stress. Re-evaluation should be done after psychotherapy to find the efficacy of these interventions so as to help them lead a better quality of life.

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REFERENCES

1. Ray P, Joseph D. Stress in medical students. *JK Sci.* 2010;12(4):163-4.
2. John OP, Gross JJ. Healthy and Unhealthy Emotion Regulation: Personality Processes, Individual differences, and Life Span Development. *J Pers.* 2004 Dec;72(6):1301-34.
3. Lazarus RS, Alfert E. Short-circuiting of threat by experimentally altering cognitive appraisal. *J Abnorm Soc Psychol.* 1964 Aug;69(2):195-205.
4. Gross JJ, Levenson RW. Emotional suppression: Physiology, self report, and expressive behavior. *J Pers Soc Psychol.* 1993Jun;64(6):970-86.
5. Sheldon KM, Ryan RM, Rawsthorne LJ, Ilardi B. Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. *J Pers Soc Psychol.* 1997;73(6):1380-93.
6. Higgins ET. Self-discrepancy: A theory relating self and affect. *Psychol Rev.* 1987;94(3):319-40.
7. Rogers CR. Client-centred therapy: Its current practice, implications, and theory. Boston: Houghton Mifflin;1959.
8. Tyssen R, Vaglum P, Gronvold NT, Ekeberg O. Suicidal ideation among medical students and young physicians: A nationwide and prospective study of prevalence and predictors. *J Affect Disord.* 2001 Apr 1;64(1):69-79.
9. Blegen MA. Nurses' job satisfaction: A meta-analysis of related variables. *Nurs Res.* 1993;42(1):36-41.
10. Flanagan NA, Flanagan TJ. An analysis of the relationship between job satisfaction and job stress in correctional nurses. *Res Nurs Health.* 2002; 25(4):282-94.
11. Gallegos K, Bettinardi-Angres K, Talbott G. The effect of physician impairment on the family. *Md Med J.* 1990Nov; 39(11):1007-11.
12. Jain V, Lall R, McLaughlin D, Johnson W. Effects of locus of control, occupational stress, and psychological distress on job satisfaction among nurses. *Psychol Rep.* 1996;78(3):1256-8.
13. Richings JC, Khara GS, McDowell. Suicide in young doctors. *Br J Psychiatry.* 1986;149:475-8.
14. Smith A. Stress and information processing. Oxford (England): Oxford University Press ;1990.
15. Askenasy J, Lewin I. The impact of missile warfare on self-reported sleep quality. *Sleep.* 1996Jan;19(1):47-51.
16. Klein G. The effect of acute stressors on decision making. Mahwah (NJ): Erlbaum ;1996.
17. Lehner P, Seyed-Solorforough M, O'Connor M, Sak S, Mullin T. Cognitive biases and time stress in team decision making. *IEEE Trans Syst Man Cybern B Cybern.* 1997;27(5):698-703.
18. Pastore FR, Gambert SR, Plutchik A, Plutchik R. Empathy training for medical students. New York Medical College;1995.
19. Spickard A, Gabbe S, Christensen J. Mid-career burnout in generalist and specialist physicians. *JAMA.* 2002;288(12):1447-50.
20. Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med.* 2002; 136(5):358-67.
21. Gross JJ, John OP. Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *J Pers Soc Psychol.* 2003;85(2):348-62.
22. Fontana D. Managing stress. The British Psychological Society. Routledge Ltd. Leicester. England ;1989.
23. Lawton MP, Kleban MH, Rajagopal D, Dean J. Dimensions of affective experience in three age groups. *Psychol Aging.* 1992;7(2):171-84.
24. Abdulghani HM, AlKanhal AA, Mahmoud ES, Ponnampereuma GG, Alfaris EA. Stress and Its Effects on Medical Students: A Cross-sectional Study at a College of Medicine in Saudi Arabia. *J Health Popul Nutr.* 2011;29(5):516-22.
25. Doulougeri K, Panagopoulou E, Montgomery A. (How) do medical students regulate their emotions? *BMC Med Educ.* 2016;16(1):312.
26. Hojat M, Gonnella JS, Erdmann JB, Vogel WH. Medical students' cognitive appraisal of stressful life events as related to personality, physical wellbeing, and academic performance: a longitudinal study. *Pers Individ Dif.* 2003;35(1):219-35.
27. Ellis HC, Ashbrook PW. Affect, cognition and social behaviour. Toronto: Hogrefe;1988.
28. Meinhardt J, Pekrun R. Attentional resource allocation to emotional events: an ERP study. *Cognit Emot.* 2003Jan;17(3):477-500.
29. Dyrbye LN, Thomas MR, Huntington JL, Lawson KL, Novotny PJ, Sloan JA, et al. Personal life events and medical student burnout: a multicenter study. *Acad Med.* 2006; 81(4):374-84.
30. Hojat M, Mangione S, Nasca TJ, Rattner S, Erdmann JB, Gonnella JS, et al. An empirical study of decline in empathy in medical school. *Med Educ.* 2004;38(9):934-41.
31. Thomas MR, Dyrbye LN, Huntington JL, Lawson KL, Novotny PJ, Sloan JA, et al. How do distress and wellbeing relate to medical student empathy? A multicenter study. *J Gen Intern Med.* 2007; 22(2):177-83.
32. Neumann M, Edelhäuser F, Tauschel D, Fischer MR, Wirtz M, Woopen C, et al. 2011. Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Acad Med.* 2011 Aug 1;86(8):996-1009.
33. Rees CE, Monrouxe LV, McDonald LA. Narrative, emotion and action: analysing "most memorable"

- professionalism dilemmas. *Med Educ.* 2013;47(1):80-96.
34. Wiggleton C, Petrusa E, Loomis K, Tarpley J, Tarpley M, O’Gorman ML, et al. Medical students’ experiences of moral distress: development of a web based survey. *Acad Med.* 2010;85(1):111-7.
 35. Tull MT, Barrett HM, McMillan ES, Roemer L. A preliminary investigation of the relationship between emotion regulation difficulties and posttraumatic stress symptoms. *Behav Ther.* 2007;38(3):303-13.
 36. Van Gelderen BR, Bakker AB, Konijn EA, Demerouti E. Daily suppression of discrete emotions during the work of police service workers and criminal investigation officers. *Anxiety Stress Coping.* 2011;24(5):515-37.
 37. Maroney TA. Emotional regulation and judicial behavior. *Cal L Rev.* 2011;99(6):1485-555.
 38. Sung AD, Collins ME, Smith AK, Sanders AM, Quinn MA, Block SD, et al. Crying: experiences and attitudes of third year medical students and interns. *Teach Learn Med.* 2009; 21(3):180-7.
 39. Shapiro J. *The Inner World of Medical Students: Listening to Their Voices in Poetry.* New York (NY): Radcliffe Medical Press; 2009.
 40. Taylor SE. Tend and befriend: biobehavioral bases of affiliation under stress. *Curr Dir Psychol Sci.* 2006;15(6):273-7.
 41. Taylor SE, Klein LC, Lewis BP, Gruenewald TL, Gurung RAR, Updegraff JA. Biobehavioral responses to stress in females: tend and befriend, not fight or flight. *Psychol. Rev.* 2000 Jun; 107(3):411-29.
 42. Pagnin D, de Queiroz V. Influence burnout and sleep difficulties on the quality of life among medical students. *Springerplus.* 2015Dec;4(1):676.
 43. Domantay JAA. Health-related quality of life of future physicians at a medical school in the Philippines: a cross-sectional study. *SAGE Open.* 2014;4(3).
 44. Paro HBMS, Silveira PSP, Perotta, B, Gannam S, Enns SC. Empathy among medical students: is there a relation with quality of life and burnout? *PLoS One.* 2014; 9(4):e94133.
 45. Van Vendeloo SN, Brand PLP, Verheyen CCPM. Burnout and quality of life among orthopaedic trainees in a modern educational programme: importance of the learning climate. *Bone JtJ.* 2014; 96-B(8):1133-8.
 46. Jamali A, Tofangchiha S, Jamali R, Nedjat S, Jan D, Narimani A, et al. Medical students' health-related quality of life: roles of social and behavioural factors. *Med Educ.* 2013;47(10):1001-12.
 47. Bhandari P. Stress and health related quality of life of Nepalese students studying in South Korea: a cross sectional study. *Health Qual Life Outcomes.* 2012;10(1):26.
 48. Meyer C, Guimarães AC, Machado Z, Parcias SR. Quality of life and occupational stress among medical students. *Rev Bras Educ Med.* 2012;36(4):489-98.

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Annexure 1

Questionnaire: 1

Instructions

We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

1-----2-----3-----4-----5-----6-----7

**strongly
disagree**

neutral

**strongly
agree**

Items

1. ____ When I want to feel more *positive* emotion (such as joy or amusement), I *change what I'm thinking about*.
2. ____ I keep my emotions to myself.
3. ____ When I want to feel less *negative* emotion (such as sadness or anger), I *change what I'm thinking about*.
4. ____ When I am feeling *positive* emotions, I am careful not to express them.
5. ____ When I'm faced with a stressful situation, I make myself *think about it* in a way that helps me stay calm.
6. ____ I control my emotions by *not expressing them*.
7. ____ When I want to feel more *positive* emotion, I *change the way I'm thinking* about the situation.
8. ____ I control my emotions by *changing the way I think* about the situation I'm in.
9. ____ When I am feeling *negative* emotions, I make sure not to express them.
10. ____ When I want to feel less *negative* emotion, I *change the way I'm thinking* about the situation.

Annexure 2

PROFESSIONAL LIFE STRESS SCALE

(Please tick as appropriate)

- Two people who know you well are discussing you.

Which of the following statements would they be most likely to use?

- (a) X is very together. Nothing much seems to bother him/her.
- (b) X is great, but you have to be careful what you say to him/her at times.
- (c) Something always seems to be going wrong with X's life.
- (d) I find X very moody and unpredictable.
- (e) The less I see of X the better!

2. Are any of the following common features of your life:

- * Feeling you can seldom do anything right YES/NO
- * Feelings of being hounded or trapped or cornered YES/NO
- * Indigestion YES/NO
- * Poor appetite YES/NO
- * Difficulty in getting to sleep at night YES/NO
- * Dizzy spells or palpitations YES/NO
- * Sweating without exertion or high air temperature YES/NO
- * Panic feelings when in crowds or in confined spaces YES/NO
- * Tiredness and lack of energy YES/NO
- * Feelings of hopelessness (what's the use of anything?) YES/NO
- * Faintness or nausea sensations without any physical cause YES/NO
- * Extreme irritation over small things YES/NO
- * Inability to unwind in the evenings YES/NO
- * Waking regularly at night or early in the mornings YES/NO
- * Difficulty in making decisions YES/NO
- * Inability to stop thinking about problems or the day's events YES/NO
- * Tearfulness YES/NO
- * Convictions that you just cannot cope YES/NO
- * Lack of enthusiasm even for cherished interests YES/NO

- * Reluctance to meet new people and attempt new experiences YES/NO
- * Inability to say 'no' when asked to do something YES/NO
- * Having more responsibility than you can handle. YES/NO
- 3. Are you more or less optimistic than you used to be (or about the same)? MORE/LESS/SAME
- 4. Do you enjoy watching sport? YES/NO
- 5. Can you get up late at weekends if you want to without feeling guilty? YES/NO
- 6. Within reasonable professional and personal limits, can you speak your mind to
a) your boss? b) your colleagues? c) members of your family? (Circle all that apply) A/B/C
- 7. Who usually seems to be responsible for making the important decisions
in your life: a) yourself? b) someone else? A/B
- 8. When criticised by superiors at work, are you usually:
a) mildly upset? b) moderately upset? c) very upset? A/B/C
- 9. Do you finish the working day feeling satisfied with what you have achieved:
a) often? b) sometimes? c) only occasionally? A/B/C
- 10. Do you feel most of the time, that you have unsettled conflicts with colleagues? YES/NO
- 11. Does the amount of work you have to do exceed the amount of time available:
a) mostly? b) sometimes? c) hardly ever? A/B/C
- 12. Have you a clear picture of what is expected of you professionally:
a) mostly? b) sometimes? c) hardly ever? A/B/C
- 13. Would you say that generally you have enough time to spend on yourself? YES/NO
- 14. If you want to discuss your problems with someone, can you usually
find a sympathetic ear? YES/NO
- 15. Are you reasonably on course towards achieving your major objectives in life? YES/NO
- 16. Are you bored at work: a) often? b) sometimes? c) very rarely? A/B/C
- 17. Do you look forward to going into work:
a) most days? b) some days? c) hardly ever? A/B/C
- 18. Do you feel adequately valued for your abilities and commitment at work? YES/NO
- 19. Do you feel adequately rewarded (in terms of status and promotion) for your
abilities and commitment at work? YES/NO
- 20. Do you feel your superiors: a) actively hinder you in your work? A/B

b) actively help you in your work.

21. If ten years ago you had been able to see yourself professionally as you are now, would you have seen yourself as: a) exceeding your expectations? A/B/C

b) fulfilling your expectations? c) falling short of your expectations?

22. If you had to rate how much you like yourself on a scale from 5 (most like) to 1 (least like), what would your rating be? ()

KEY FOR PROFESSIONAL LIFE STRESS SCALE

1 a) 0, b) 1, c) 2, d) 3, e) 4

2. Score 1. for each yes response

3. Score 0 for more optimistic, 1 for about the same, 2 for less optimistic

4. Score 0 for yes, 1 for no.

5. Score 0 for yes, 1 for no.

6. Score 0 for each circled, 1 for each left uncircled.

7. Score 0 for yourself, 1 for someone else.

8. Score 2 for very upset, 1 for moderately upset, 0 mildly upset.

9. Score 0 for often, 1 for sometimes, 2 for only occasionally

10. Score 0 for no, 1 for yes.

11. Score 2 for mostly, 1 for sometimes, 0 for only hardly ever.

12. Score 0 for mostly, 1 for sometimes, 2 for hardly.

13. Score 0 for yes, 1 for no.

14. Score 0 for yes 1 for no.

15. Score 0 for yes, 1 for no.

16. Score 2 for often, 1 for sometimes, 0 for very rarely.

17. Score 0 for most days, 1 for some days, 2 for hardly ever.

18. Score 0 for yes, 1 for no.

19. Score 0 for yes, 1 for no

20. Score 1 for a), 0 for b).

21. Score 0 for exceeding your expectations, 1 for fulfilling your expectations, 2 for falling short of your expectations.

22. Score 0 for 5, 1 for 4 and so on down to 4 for 1.
- 6) Write your score in here.
- 7) Compare your score to the rating scale below:
 - 0 - 15 Stress is not a problem in your life
 - 16 - 30 This is a moderate range of stress for a busy professional person. It is nevertheless well worth looking at how it can reasonably be reduced.
 - 31 - 45 Stress is clearly a problem, and the need for remedial action is apparent. The longer you work under this level of stress, the harder it often is to do something about it. There is a strong case for looking carefully at your professional life.
 - 46 - 60 At these levels, stress is a major problem, and something must be done.

Please note scores on stress scales must be interpreted cautiously. There are so many variables which lie outside the scope of these scales, but which influence the way in which we perceive and handle our stress, that two people with the same scores may experience themselves as under quite different levels of strain. Nevertheless, taken as no more than a guide, these scales can give us some useful information.