THE SOCIAL READJUSTMENT RATING SCALE*†

Thomas H. Holmes and Richard H. Rahe‡

IN PREVIOUS studies [1] it has been established that a cluster of social events requiring change in ongoing life adjustment is significantly associated with the time of illness onset. Similarly, the relationship of what has been called 'life stress,' 'emotional stress,' 'object loss,' etc. and illness onset has been demonstrated by other investigations [2–13]. It has been adduced from these studies that this clustering of social or life events achieves etiologic significance as a necessary but not sufficient cause of illness and accounts in part for the time of onset of disease.

Methodologically, the interview or questionnaire technique used in these studies has yielded only the *number* and *types* of events making up the cluster. Some estimate of the magnitude of these events is now required to bring greater precision to this area of research and to provide a quantitative basis for new epidemiological studies of diseases. This report defines a method which achieves this requisite.

METHOD

A sample of convenience composed of 394 subjects completed the paper and pencil test (Table 1). (See Table 2 for characteristics of the sample.) The items were the 43 life events empirically derived from clinical experience. The following written instructions were given to each subject who completed the Social Readjustment Rating Questionnaire (SRRQ).

(A) Social readjustment includes the amount and duration of change in one's accustomed pattern of life resulting from various life events. As defined, social readjustment measures the intensity and length of time necessary to accommodate to a life event, *regardless of the desirability of this event.*

(B) You are asked to rate a series of life events as to their relative degrees of necessary readjustment. In scoring, *use all of your experience* in arriving at your answer. This means personal experience where it applies as well as what you have learned to be the case for others. Some persons accommodate to change more readily than others; some persons adjust with particular ease or difficulty to only certain events. Therefore, strive to give your opinion of the average degree of readjustment necessary for each event rather than the extreme.

(C) The mechanics of rating are these: Event 1, Marriage, has been given an arbitrary value of 500. As you complete each of the remaining events think to yourself, "Is this event indicative of more or less readjustment than marriage?" "Would the readjustment take longer or shorter to accomplish?" If you decide the readjustment is more intense and protracted, then choose a *proportionately larger* number and place it in the blank directly opposite the event in the column marked "VALUES." If you decide the event represents less and shorter readjustment than marriage then indicate how much less by placing a *proportionately smaller* number in the opposite blank. (If an event requires intense readjustment over a short time span, it may approximate in value an event requiring less intense readjustment over a long period of time.) If the event is equal in social readjustment to marriage, record the number 500 opposite the event.

The order in which the items were presented is shown in Table 1.

TABLE 1. Social Readjustment Rating Questionnaire

Events	Values
1. Marriage	500
2. Troubles with the boss	—
3. Detention in jail or other institution	—
4. Death of spouse	—
5. Major change in sleeping habits (a lot more or a lot less sleep, or change in part of day when asleep)	—
6. Death of a close family member	—
7. Major change in eating habits (a lot more or a lot less food intake, or very different meal hours or surroundings)	—
8. Foreclosure on a mortgage or loan	—
9. Revision of personal habits (dress, manners, associations, etc.)	—
10. Death of a close friend	—
11. Minor violations of the law (e.g. traffic tickets, jay walking, disturbing the peace, etc)	—
12. Outstanding personal achievement	—
13. Pregnancy	—
14. Major change in the health or behavior of a family member	—
15. Sexual difficulties	—
16. In-law troubles	—
17. Major change in number of family get-togethers (e.g. a lot more or a lot less than usual)	—
18. Major change in financial state (e.g. a lot worse off or a lot better off than usual)	—
19. Gaining a new family member (e.g. through birth, adoption, oldster moving in etc.)	—
20. Change in residence	—
21. Son or daughter leaving home (e.g. marriage, attending college, etc.)	—
22. Marital separation from mate	—
23. Major change in church activities (e.g. a lot more or a lot less than usual)	—
24. Marital reconciliation with mate	—
25. Being fired from work	—
26. Divorce	—
27. Changing to a different line of work	—
28. Major change in the number of arguments with spouse (e.g. either a lot more or a lot less than usual regarding childrearing, personal habits, etc.)	—
29. Major change in responsibilities at work (e.g. promotion, demotion, lateral transfer)	—
30. Wife beginning or ceasing work outside the home	—
31. Major change in working hours or conditions	—
32. Major change in usual type and/or amount of recreation	—
33. Taking on a mortgage greater than $10,000 (e.g. purchasing a home, business, etc.)	—
34. Taking on a mortgage or loan less than $10,000 (e.g. purchasing a car, TV, freezer, etc.)	—
35. Major personal injury or illness	—
36. Major business readjustment (e.g. merger, reorganization, bankruptcy, etc.)	—
37. Major change in social activities (e.g. clubs, dancing, movies, visiting, etc.)	—
38. Major change in living conditions (e.g. building a new home, remodeling, deterioration of home or neighborhood)	—
39. Retirement from work	
40. Vacation	
41. Christmas	—
42. Changing to a new school	—
43. Beginning or ceasing formal schooling	—

TABLE 2. PEARSON'S COEFFICIENT OF CORRELATION BETWEEN DISCRETE GROUPS IN THE SAMPLE

Group	No. in group		Group	No. in group	Coefficient of correlation
Male	179	vs.	Female	215	0·965
Single	171	vs.	Married	223	0·960
Age < 30	206	vs.	Age 30–60	137	0·958
Age < 30	206	vs.	Age > 60	51	0·923
Age 30–60	137	vs.	Age > 60	51	0·965
1st Generation	19	vs.	2nd Generation	69	0·908
1st Generation	19	vs.	3rd Generation	306	0·929
2nd Generation	69	vs.	3rd Generation	306	0·975
< College	182	vs.	4 Years of College	212	0·967
Lower class	71	vs.	Middle class	323	0·928
White	363	vs.	Negro	19	0·820
White	363	vs.	Oriental	12	0·940
Protestant	241	vs.	Catholic	42	0·913
Protestant	241	vs.	Jewish	19	0·971
Protestant	241	vs.	Other religion	45	0·948
Protestant	241	vs.	No religious preference	47	0·926

RESULTS

The Social Readjustment Rating Scale (SRRS) is shown in Table 3. This table contains the magnitude of the life events which is derived when the mean score, divided by 10, of each item for the entire sample is calculated and arranged in rank order. That consensus is high concerning the relative order and magnitude of the means of items is demonstrated by the high coefficients of correlation (Pearson's r) between the discrete groups contained in the sample. Table 2 reveals that all the coefficients of correlation are above 0·90 with the exception of that between white and Negro which was 0·82. Kendall's coefficient of concordance (W) for the 394 individuals was 0·477, significant at $p = <0·0005$.

DISCUSSION

Placed in historical perspective, this research evolved from the chrysalis of Psychobiology generated by Adolph Meyer [14]. His invention of the 'life chart,' a device for organizing the medical data as a dynamic biography, provided a unique method for demonstrating his schema of the relationship of biological, psychological, and sociological phenomena to the processes of health and disease in man. The importance of many of the life events used in this research was emphasized by Meyer: ". . . changes of habitat, of school entrance, graduations or changes or failures; the various jobs, the dates of possibly important births and deaths in the family, and other fundamentally important environmental influences." [14].

More recently, in Harold G. Wolff's laboratory,* the concepts of Pavlov, Freud, Cannon and Skinner were incorporated in the Meyerian schema. The research resulting from this synthesis adduced powerful evidence that 'stressful' life events, by evoking psychophysiologic reactions, played an important causative role in the natural history of many diseases [15–19]. Again, many of the life events denoted 'stressful' were those enumerated by Meyers and in Table 1 of this report.

Beginning in this laboratory in 1949, the life chart device has been used systematically in over 5000 patients to study the quality and quantity of life events empirically observed to cluster at the time of disease onset. Inspection of Table 1 reveals that each item derived from this experience is unique. There are 2 categories of items:

* Harold G. Wolff, M.D. (1898–1962) was Anne Parrish Titzell, Professor of Medicine (Neurology), Cornell University Medical College and the New York Hospital.

Table 3. Social readjustment rating scale

Rank	Life event	Mean value
1	Death of spouse	100
2	Divorce	73
3	Marital separation	65
4	Jail term	63
5	Death of close family member	63
6	Personal injury or illness	53
7	Marriage	50
8	Fired at work	47
9	Marital reconciliation	45
10	Retirement	45
11	Change in health of family member	44
12	Pregnancy	40
13	Sex difficulties	39
14	Gain of new family member	39
15	Business readjustment	39
16	Change in financial state	38
17	Death of close friend	37
18	Change to different line of work	36
19	Change in number of arguments with spouse	35
20	Mortgage over $10,000	31
21	Foreclosure of mortgage or loan	30
22	Change in responsibilities at work	29
23	Son or daughter leaving home	29
24	Trouble with in-laws	29
25	Outstanding personal achievement	28
26	Wife begin or stop work	26
27	Begin or end school	26
28	Change in living conditions	25
29	Revision of personal habits	24
30	Trouble with boss	23
31	Change in work hours or conditions	20
32	Change in residence	20
33	Change in schools	20
34	Change in recreation	19
35	Change in church activities	19
36	Change in social activities	18
37	Mortgage or loan less than $10,000	17
38	Change in sleeping habits	16
39	Change in number of family get-togethers	15
40	Change in eating habits	15
41	Vacation	13
42	Christmas	12
43	Minor violations of the law	11

those indicative of the life style of the individual, and those indicative of occurrences involving the individual. Evolving mostly from ordinary, but some from extraordinary, social and interpersonal transactions, these events pertain to major areas of dynamic significance in the social structure of the American way of life. These include family constellation, marriage, occupation, economics, residence, group and peer relationships, education, religion, recreation and health.

During the developmental phase of this research the interview technique was used to assess the meaning of the events for the individual. As expected, the psychological significance and emotions varied widely with the patient. Also it will be noted that

only some of the events are negative or 'stressful' in the conventional sense, i.e. are socially undesirable. Many are socially desirable and consonant with the American values of achievement, success, materialism, practicality, efficiency, future orientation, conformism and self-reliance.

There was identified, however, one theme common to all these life events. The occurrence of each usually evoked or was associated with some adaptive or coping behavior on the part of the involved individual. Thus, each item has been constructed to contain life events whose advent is either indicative of or requires a significant change in the ongoing life pattern of the individual. The emphasis is on change from the existing steady state and not on psychological meaning, emotion, or social desirability.

The method for assigning a magnitude to the items was developed for use in Psychophysics—the study of the psychological perception of the quality, quantity, magnitude, intensity of physical phenomena. This subjective assessment of the observer plotted against the physical dimension being perceived (length of objects, intensity of sound, brightness of light, number of objects, etc.) provides a reliable delineation of man's ability to quantify certain of his experiences [20]. In this research, the assumption was made that participants in the contemporary American way of life could utilize this innate psychological capacity for making quantitative judgments about psychosocial phenomena as well as psychophysical phenomena [21, 22]. The data generated by this investigation appear to justify the assumption. Although some of the discrete subgroups do assign a different order and magnitude to the items, it is the degree of similarity between the populations within the sample that is impressive. The high degree of consensus also suggests a universal agreement between groups and among individuals about the significance of the life events under study that transcends differences in age, sex, marital status, education, social class, generation American, religion and race.

The method used in this research, when applied to psychophysical phenomena, generates a ratio scale. A discussion of whether or not the magnitudes assigned to the items in Table 3 actually constitute a ratio scale is beyond the intent of this report [21, 22]. However, this issue will be dealt with in a subsequent report [23].

REFERENCES

1. RAHE R. H., MEYER M., SMITH M., KJAER G. and HOLMES T. H. Social stress and illness onset. *J. Psychosom. Res.* **8**, 35 (1964).
2. GRAHAM D. T. and STEVENSON I. Disease as response to life stress. In *The Psychological Basis of Medical Practice* (H. I. LIEF, V. F. LIEF, and N. R. LIEF, Eds.) Harper & Row, New York (1963).
3. GREENE W. A., JR., Psychological factors and reticulo–endothelial disease—I. Preliminary observations on a group of males with lymphomas and leukemias. *Psychosom. Med.* **16**, 220 (1954).
4. GREENE W. A., JR., YOUNG L. E. and SWISHER S. N. Psychological factors and reticulo–endothelial disease—II. Observations on a group of women with lymphomas and leukemias. *Psychosom. Med.* **18**, 284 (1956).
5. GREENE W. A., JR. and MILLER G. Psychological factors and reticulo–endothelial disease—IV. Observations on a group of children and adolescents with leukemia: an interpretation of disease development in terms of the mother–child unit. *Psychosom. Med.* **20**, 124 (1958).
6. WEISS E., DLIN B., ROLLIN H. R., FISCHER H. K. and BEPLER C. R. Emotional factors in coronary occlusion. *A.M.A. Archs. Internal Med.* **99**, 628 (1957).
7. FISCHER H. K., DLIN B., WINTERS W., HAGNER S. and WEISS E. Time patterns and emotional factors related to the onset of coronary occlusion. [Abstract] *Psychosom. Med.* **24**, 516 (1962).

8. KISSEN D. M. Specific psychological factors in pulmonary tuberculosis. *Hlth Bull. Edinburgh* **14,** 44 (1956).
9. KISSEN D. M. Some psychosocial aspects of pulmonary tuberculosis. *Int. J. Soc. Psychiat.* **3,** 252 (1958).
10. HAWKINS N. G., DAVIES R. and HOLMES T. H. Evidence of psychosocial factors in the development of pulmonary tuberculosis. *Am. Rev. Tuberc. Pulmon. Dis.* **75,** 5 (1957).
11. SMITH M. Psychogenic factors in skin disease, Medical Thesis, University of Washington, Seattle (1962).
12. RAHE R. H. and HOLMES T. H. Social, psychologic and psychophysiologic aspects of inguinal hernia. *J. Psychosom. Res.* **8,** 487 (1965).
13. KJAER G. Some psychosomatic aspects of pregnancy with particular reference to nausea and vomiting, Medical Thesis, University of Washington, Seattle (1959).
14. LIEF A. (Ed.) *The Commonsense Psychiatry of Dr. Adolf Meyer,* McGraw-Hill, New York (1948).
15. WOLFF H. G., WOLF S. and HARE C. C. (Eds.) *Life Stress and Bodily Disease,* Res. Publs. Ass. Res. Nerv. Ment. Dis. Vol. 29. Williams & Wilkins, Baltimore (1950).
16. HOLMES T. H., GOODELL H., WOLF S. and WOLFF H. G. *The Nose. An Experimental Study of Reactions Within the Nose in Human Subjects During Varying Life Experiences,* Charles C. Thomas, Springfield, Illinois (1950).
17. WOLF S. *The Stomach,* Oxford University Press, New York (1965).
18. WOLF S., CARDON P. V., SHEPARD E. M., and WOLFF H. G. *Life Stress and Essential Hypertension,* Williams & Wilkins, Baltimore (1955).
19. GRACE W. J., WOLF S. and WOLFF H. G. *The Human Colon,* Paul B. Hoeber, New York (1951).
20. STEVENS S. S. and GALANTER E. H. Ratio scales and category scales for a dozen perceptual continua. *J. Exp. Psychol.* **54,** 377 (1957).
21. SELLIN T. and WOLFGANG M. E. *The Measurement of Delinquency,* John Wiley, New York (1964).
22. STEVENS S. S. A metric for the social consensus. *Science* **151,** 530 (1966).
23. MASUDA M. and HOLMES T. H. This issue, p. 219.