# The Relation between Contextual and Reported Threat due to Life Events: A Controlled Study

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Summary: Following the method of Brown and Harris 30 Kenyan patients suffering from depression and 40 community non-psychiatrically-disturbed controls were studied for contextual and reported threat due to short-term and long-term life events. It was found that the patients did not over-rate threat due to events (in 'search for the meaning') nor did the controls under-rate the threat of life events. Some theoretical issues on the 'contextual threat' of life events are raised.

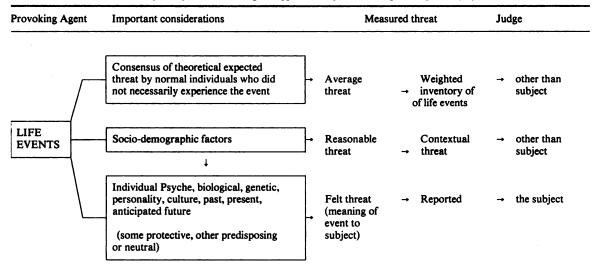
To date there are two methodological approaches to the study of the threat or stress posed by life events and its relation to the onset of psychiatric illness. Weighted life inventories have been in use for some time (Holmes and Rahe, 1967; Paykel et al, 1971, 1976; Tennant and Andrews, 1976). Although they have been shown to have high intercorrelations in Americans (white, black and Mexican), Japanese, Danes, Swedes, French, Belgians and English (Masuda and Holmes, 1967a; Komaroff et al, 1968; Rahe, 1969; Harmon et al, 1970; Rahe et al, 1971; Paykel et al, 1976) doubts have been cast on their test-retest reliability (Mendels and Weinstein, 1972) and interrater reliability (Masuda and Holmes, 1967b). Weighted life inventories do not take into account interrelation of life events, i.e. life events leading to other life events and therefore spurious additive weighting may give false high scores (Brown and Harris, 1978). Depressed subjects may emphasize certain events in a search for meaning which normal subjects may disregard (Brown and Harris, 1978).

Brown and Harris' method attempts to overcome the shortcomings of the weighted life events inventories by determining the contextual threat using an interview technique which systematically and flexibly probes for life events, their timing in relation to each other and the onset of illness, their independence from the illness and the socio-demographic context in which they occur. The contextual threat is rated on a 4-point scale using above information by independent raters who have no prior knowledge of the mental state of the subject. However this method does not take into account some important variables that interact with stress to produce illness (Fig 1). Further, some theoretical questions remain unresolved in connection

with contextual threat. If there is high degree of agreement between the raters, as was the case with Brown and Harris' work, is this a reflection of the raters' collective training or their shared cultural background and attitudes as to what is stressful in a given situation or the 'universality' of understandable threat? Tennant et al (1979) have shown that the method for measuring contextual threat can be reliable even with inexperienced raters but they based their observations on only three raters. There is as yet no report of a study to test the validity of the contextual threat using Brown and Harris' method. These theoretical considerations have practical significance for a relatively isolated researcher working in an environment in which people may have diverse beliefs, attitudes, coping mechanisms and philosophy of life which can be expected to have a significant bearing on the meaning attached to a life event regardless of similar socio-demographic variables. Indeed it may be a more difficult task to assess the significance of these variables than the actual assessment of the contextual threat as described by Brown and Harris.

A subsidiary of the Brown and Harris methodological approach is that it is possible, using the same interviewing technique to rate the threat as reported by the subject. If it could be shown that there was no difference between reported and contextual threat then 'search for meaning' (if it really exists) would be an insignificant artifact. Brown and Harris have shown in their London study that there was no significant difference between reported and contextual threat but they did show, that in the agreement of cases, the subject's own rating with the contextual rating was 98 per cent for normals and 84 per cent for

The various aspects of the methodological approaches of determining threat posed by life events.



Fig—The various aspects of the methodological approaches of determining threat posed by life events.

patients, which suggested that the effort for meaning had some effect. Reported threat is much easier to rate, requires less personnel and more importantly is a product of the event, the environment and intrinsic variables of the subject. The various aspects of methodological approaches to determining threat posed by life events are summarized in the Figure.

This study is an attempt to find out whether there is a difference between reported threat and contextual threat in a Kenyan setting and to consider the implications for a researcher with limited resources.

### Method

The sample consisted of 15 consecutive first ever referrals to the out-patient clinic and 15 consecutive first ever admissions with depression uncomplicated by physical or other psychotic illness. All the 30 patients (21 females and 9 males) were on chemotherapy for depression and under the care of the professorial team in Mathari Hospital and Kenyatta National Hospital, Nairobi. Informed consent to participate in the research was granted by all the patients.

The control group was selected by randomly approaching people in and around Nairobi in their homes, with the help of a social worker. The controls were matched for sex, age, occupation (for children and housewives the occupation of the father/husband was the one considered) and race (only black Kenyans). They were also controlled for residential area in or around Nairobi and also for the part of the country they were brought up in, and whether it was urban or rural. For example, if a male patient was 20 years of

age, was a teacher living in a particular residential area in Nairobi, belonged to a particular tribe and was born and brought up in a specified rural district in Kenya, then an effort was made to find a control subject for all those variables. For each household visited, and after introduction, enquiry was made for a person meeting the desired criteria. When the researcher was satisfied, then informed consent to participate in the research was obtained; only one person refused consent. A modified Present State Examination (PSE) (Wing et al, 1974), taking into account cultural variation in the presentation of depression was administered. A fourth year medical student, fluent in both English and Swahili, acted as an interpreter—both for the patient and community group-if the subject could not express himself adequately in English. Forty subjects (28 female and 12 male) were included in the control group and none of them were depressed.

All the subjects included in the study were interviewed for socio-demographic information using a structured interview. They were then given the Brown and Harris' (1978) life events interview. The subjects freely and readily gave all the information asked of them during the interview which lasted up to three hours. The interviews with the patients were tape-recorded but those with the control group were not, for practical reasons, but extensive notes were made. In the course of the interview the subjects were asked to describe how they felt about the events and the threat they felt about them (reported threat). The reported threat was rated on a 4-point scale (marked, moderate, some, little or none) as described by Brown

and Harris. Threats whose effect lasted only the day they occurred were called short term threats, and those whose effect lasted for at least a week were called long term threats.

Professor George Brown and Tirril Harris (of Bedford College, University of London), not knowing whether the subject was a patient or not, and not knowing the reported threat, and using only the reported events and the socio-demographic context in which they occurred rated the contextual threat posed by the events on the same 4-point scale. They also decided independently whether the threat was long term or short term. They were briefed on some cultural aspects.

## Results

These are summarized in Tables I and II. The emphasis was on comparison between contextual and reported threat (long term and short term) of the various degrees of severity rather than a comparison of the subjects and the controls—hence row percentages rather than column percentages are required. There was a striking degree of agreement between contextual (objective) and reported (subjective) threat at the various levels of severity. This was true for long term and short term threat in both the patient and control group, each taken separately and only contextual and reported threat compared. Although some events may have obtained different rating on the

Table I

Threat pattern in the patient group (n=30). (Row percentage in brackets)

Severity of threat	Long term		Short term		
	Contextual	Reported	Contextual	Reported	Total
Marked	21	22	26	27	96
	(21.9)	(22.9)	(27.1)	(28.1)	(100)
Moderate	21	17	22	22	82
	(25.6)	(20.7)	(26.8)	(26.8)	(99.9)
Some	24	20	20	21	85
	(28.2)	(23.5)	(23.5)	(24.7)	(99.9)
None	38	45	36	34	153
	(24.8)	(29.4)	(23.5)	(22.2)	(99.9)
Total	104	104	104	104	416
	(25.0)	(25.0)	(25.0)	(25.0)	(100)

Table II

Threat pattern in the community group (n = 40). (Row percentage in brackets)

Severity of threat	Long term		Short term		
	Contextual	Reported	Contextual	Reported	Total
Marked	4 (21.2)	4 (21.2)	5 (27.8)	5 (27.8)	18 (100)
Moderate	2	2	14	14	32
	(6.3)	(6.3)	(43.8)	(43.8)	(100.2)
Some	15	13	18	12	58
	(25.9)	(22.4)	(31.0)	(20.6)	(100)
None	35	37	19	25	116
	(30.2)	(31.9)	(16.4)	(21.6)	(100.1)
Total	56	56	56	56	224
	(25.0)	(25.0)	(25.0)	(25.0)	(100)

contextual and reported threat, short term or long term, the overall rating was strikingly in agreement.

# **Discussion**

The observations made here are limited by small numbers and also by the fact that the researchers were inexperienced in life events research. The observation that there was no significant difference in the reported and contextual short term and long term threat both by patients and controls agrees with the findings of Brown and Harris in London. The inference is that the depressed group did not significantly attach more meaning to life events in search for the meaning of their illness, and the non-depressed subjects were largely in agreement with the team of raters. The 'search for meaning' in the depressed patients was not apparent in this study, unlike Brown and Harris who did show that in the agreement of cases the subject's own rating with the contextual rating was 98 per cent for normals and 84 per cent for patients, which suggested that effort for meaning had some effect although not to a significant degree.

The question was then raised as to whether there is any practical advantage in using the more objective, reliable and more cumbersome contextual threat rather than the more subjective, but perhaps more valid, reported threat in assessing the threat posed by life events. Brown (1974) has argued cogently for objective rating of life events and threat posed by the event(s). Brown's objective method is scientifically appealing and his argument convincing. However, his objective method does not, and cannot be expected to take into account the total or all of the most relevant context of each individual studied. It is not the scientific advantage of the more reliable objective method over the more subjective method that is in question: it is its validity. Threat to an individual is highly dependant on multiple factors which are difficult to control for at the same time. Some can be articulated by the individual or perceived by others but some cannot be articulated or perceived by others, and still some are at subconscious level. Unless all these relevant factors can be identified and controlled for the validity of contextual threat based on this scientifically objective method will remain questionable. The fact that some individuals do overreact to life stress is undisputed but it is also known, at least by clinicians, that a careful discussion of the stress with the patient tends to bring the perceived threat into proportion. Whether or not the subject discusses his stress with anybody is irrelevant to our thesis: what matters is what the individual believes, whatever obvious reasons to the contrary is posed by the threat and the meaning he attaches to it. This is what impinges on his individuality and determines the response and the degree of that response, regardless of the objective assessment of the threat by others. On the other hand it can be argued that the individual has no privileged knowledge of his context or that his account is invariably true. It can also be argued that neither can objective scientists have privileged knowledge of the total context of the individual, both conscious and sub-conscious, and neither can their observations be always correct. If the subject's account of the threat posed by an event does not seem to agree with an objective account, and yet the subject becomes depressed following that threat, it may be that the objective account has missed something.

While weighted inventories of life events have some obvious shortcomings the contextual threat approach overlooks many important intrinsic factors about the subject. It requires the rater to be reasonably conversant with the values and norms of the sociocultural setting to which the subject belongs. (The independent raters in this study had to be informed of some of the more important fundamental cultural factors to take into account). An alternative is to perfect the scoring of reported threat using the interviewing technique developed by Brown and Harris. This would be easier for the relatively isolated researcher who, if he happened to be working in an environment with cultural variation, would have added variables to control for if he were to use the contextual threat approach. More importantly it is a measure of the individual's perceived threat which is the product of the interaction of the event, the external and internal variables, his past and present and anticipated future. In a way all these variables are controlled for at the same time. This study has confirmed the findings of Brown and Harris that there is no significant difference between contextual and reported threat due to life events despite the fact that the two studies were done in culturally different settings. These negative findings in both of the two culturally different centres do not suggest that the subjective method is better than the objective method but rather that the subjective method does not give significantly different results as compared with the objective method. However, we attach more relevance and clinical validity to the reported threat rather than the contextual threat but this may be merely a reflection of our training and clinical approach.

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#### References

- Brown, G. W. (1974) Meaning, measurement and stress of life events. In *Stressful Life Events: Their Nature and Effects* (eds. B. S. Dohrenwend and B. P. Bohrenwend), pp 217-243. New York: John Wiley.
- & HARRIS, T. (1978) Social Origins of Depression. A Study of Psychiatric Disorder in Women. London: Tayistock.
- HARMON, D. K., MASUDA, M. & HOLMES, T. H. (1970) The social readjustment rating scale; a cross-cultural study of Western Europeans and Americans. *Journal* of *Psychosomatic Research*, 14, 391-400.
- HOLMES, T. H. & RAHE, R. H. (1967) The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213-18.
- Komaroff, A. L., Masuda, M. & Holmes, T. H. (1968) The social readjustment rating scale: a comparative study of Negro, Mexican and white Americans. Journal of Psychosomatic Research, 12, 121-8.
- MASUDA, M. & HOLMES, T. H. (1967a) The social readjustment rating: a cross-cultural study of Japanese and Americans. *Journal of Psychosomatic Research*, 11, 227-37.

- --- (1967b) Magnitude estimations of social readjustment. *Journal of Psychosomatic Research*, 11, 219-25.
- MENDELS, J. & WEINSTEIN, N. (1972) The schedule of recent experience: A reliability study. *Psychosomatic Medicine*, **34**, 527-31.
- PAYKEL, E. S., PRUSOFF, B. A. & UHLENHUTH, E. H. (1971) Scaling of life events. Archives of General Psychiatry, 25, 340-7.
- McGuiness, B. & Gomez, J. (1976) An Anglo-American comparison of the scaling of life events. British Journal of Medical Psychology, 49, 237-47.
- RAHE, R. H. (1969) Multi-cultural correlations of life change scaling; American, Japan, Denmark and Sweden. Journal of Psychosomatic Research, 13, 191-5.
- LUNDBERG, U., BENNETT, L. & THEORELL, T. (1971) The social readjustment rating scale; a comparative study of Swedes and Americans. Journal of Psychosomatic Research, 15, 241-9.
- TENNANT, C. & ANDREWS, G. (1976) A scale to measure the stress of life events. Australian and New Zealand Journal of Psychiatry, 10, 27-32.
- —— SMITH, A., BEBBINGTON, P. & HURRY, J. (1979) The contextual threat of life events; the concept and its reliability. Psychological Medicine, 9, 525-8.
- WING, J. K., COOPER, J. E. & SARTORIUS, N. (1974) The Description and Classification of Psychiatric Symptoms; An Instruction Manual for the PSE and Catego System. London: Cambridge University Press.

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