Quality of Life Events and Their Relationship to Strain

by David L. Streiner, Geoffrey R. Norman, Allan H. McFarlane, and Ranjan G. Roy

Abstract

The traditional view of life events is that the crucial factor is the number which occur within a defined time period. This was examined as part of a 2-year, prospective, longitudinal study of 518 people, each of whom was interviewed every 6 months with Holmes and Rahe’s Recent Life Change Questionnaire (RLCQ). The subject was asked if each event was anticipated or unanticipated, desirable or undesirable, and controllable or uncontrollable. Desirable, controlled, or anticipated (“positive”) events did not correlate with strain, as measured by Langner’s scale; whereas undesirable, uncontrolled, and unanticipated (“negative”) events did. Subjects whose RLCQ scores comprised at least 75 percent positive events had significantly lower Langner scores than subjects with equivalent RLCQ totals, but for whom the events were primarily negative ones.

The Social Readjustment Rating Scale (Holmes and Rahe 1967) assigns life change units (LCUs) to various events, both pleasant and unpleasant, that have occurred during the previous 6 months. Holmes and Rahe assumed that any of the 43 life events “is indicative of or requires a significant change in the ongoing life pattern of the individual (p. 217)” and that undue stress (defined as LCUs) predisposes that person to physical or psychological morbidity. According to Holmes (1978, p. 754) “the more change you have, the more likely you are to get sick.” Similarly, Dohrenwend (1973, p. 174) has identified “change rather than undesirability [as] the characteristic of life events that should be measured for the more accurate assessment of their stressfulness.”

A number of recent studies have cast doubt on the validity of this assumption. Chiriboga (1977) administered the Life Events Questionnaire to 189 people and scored each item in seven ways: (1) using Holmes and Rahe’s LCUs; (2) using a series of weights developed by Horowitz; (3) simply summing the number of events as proposed by Langner and Michael (1963); (4–5) counting the number of positive and negative events, based on the subject’s evaluation; and (6–7) using negative and positive preoccupation scores that reflect how much the person is still thinking of the event. His dependent measures were self-perception and satisfaction with life. All scoring systems correlated equally with self-reported health, but all of the other dependent variables showed different patterns of relationships with the various scoring systems. The scoring schemes based on negative life events strongly correlated with indices of problems in life (e.g., psychiatric symptoms, dysphoric affects, ill health, low income, and negative self-concepts) while the positive scoring systems correlated with positive indicators of affect and self-perception.

Gersten and her colleagues studied 1,034 children in midtown Manhattan over a 5-year span, getting measures of the child’s life events and impairment from the mother. Analyses of both the
original (Gersten et al. 1974) and the followup data (Gersten et al. 1977) revealed that scores which reflected the undesirability of change rather than simply change alone showed significantly higher correlations with most types of disturbed behavior in both children and adolescents. [Gersten et al. 1977, p. 230]

Similar results were reported by Mueller, Edwards, and Yarvis (1977), who interviewed 363 randomly selected families in Sacramento. Respondents completed the Holmes and Rahe scale for events occurring within the past 30 days and stated whether each event was a desirable or undesirable experience. The dependent variables were two scales of psychiatric symptomatology—Langner’s (1962) screening scale, and the General Well-Being Schedule from the National Center for Health Statistics (Depuy 1974). Mueller, Edwards, and Yarvis (1977) conclude:

Hence, regardless of how events are weighted, undesirable events (as defined by the respondent) are more highly correlated with psychological status than all events (i.e., both desirable and undesirable). The differences in these correlations are significant at the .05 level in four of the six comparisons. [p. 311]

Unfortunately, many of the studies investigating the relationship between life events and psychiatric or physical morbidity suffer from any one of a number of methodological flaws. For example, retrospective case-control designs, in which one group of sick individuals is compared with another group of well people, may lead to selective recall of past events. As Goldberg and Comstock (1976, p. 147) point out, this procedure raises the possibility that “sick persons recalled or reported an excess of events in looking for explanations of their illnesses.”

Moreover, some of the studies were conducted on samples of convenience, which bore little relationship to the general population, such as servicemen aboard naval ships (Rahe, Gunderson, and Arthur 1970; Rahe, Mahan, and Arthur 1970), alcoholic drivers (Vinokur and Selzer 1975), or university students (Garrity, Marx, and Somes 1978). Thus, patterns of intercorrelations found for these groups may not obtain in more representative samples.

Finally, there is a heavy reliance on subjective measures of illness behavior and symptomatology, often to the exclusion of more objective measures. When, as is often the case, both the independent and dependent variables are self-reports, the magnitude of the correlations tends to be artificially inflated.

The present article describes a study that attempts to assess the relative contribution of positive and negative events on the Holmes and Rahe scale to the prediction of physical morbidity.

Method

This is a prospective study of a cohort of 500 subjects randomly selected from family practices in the Hamilton, Ontario region. Participation in the study is for a 2-year period, and includes home interviews at 6-month intervals, a health diary completed for 3 days every 2 weeks, and documentation by the physician of any contacts over the duration of the study. The interviews provide data on demographic variables, stressful life events, social support system characteristics, cognitive style, subjective strain, and health values. The health diaries yield subjective information about the occurrence of symptoms and their severity, actions taken, and a rating of health. Data on the use of health services are collected continuously at the physicians’ offices by means of forms attached to each chart.

Subjects. Two criteria influenced the selection of the sample. First, to overcome deficiencies noted in previous studies, the sample had to be representative of the general population. Second, documentation of health care utilization over a 2-year period had to be obtainable. To meet these requirements, the sample was drawn from the patient registers of family physicians practicing in the Hamilton, Ontario region.

In order to be included, the practice was required to have a list of all active patients so that a sample could be drawn. From this group of practices, 10 family physicians known to the investigators and geographically distributed in a 15-mile radius of McMaster University were approached and agreed to participate. Of the 10 physicians, 6 were in group practice and the remainder in solo practice; 9 were certified by the Canadian College of Family Physicians.

For each practice, a stratified random sample of 50 patients was drawn, with equal numbers in each age decile between 21 and 60 years, and equally divided between males and females. The demographic characteristics of the sample are presented in table 1. To
Table 1. Demographic characteristics of the sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>52</td>
<td>10.1</td>
</tr>
<tr>
<td>Married</td>
<td>442</td>
<td>85.7</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>10</td>
<td>1.9</td>
</tr>
<tr>
<td>Widowed</td>
<td>12</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>516</td>
<td>100.0</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No postsecondary</td>
<td>228</td>
<td>44.2</td>
</tr>
<tr>
<td>Vocational</td>
<td>94</td>
<td>18.2</td>
</tr>
<tr>
<td>Some college or university</td>
<td>55</td>
<td>10.7</td>
</tr>
<tr>
<td>College or university degree</td>
<td>139</td>
<td>26.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>516</td>
<td>100.0</td>
</tr>
<tr>
<td>Family income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $5,000</td>
<td>10</td>
<td>1.9</td>
</tr>
<tr>
<td>$5,000-$9,999</td>
<td>18</td>
<td>3.5</td>
</tr>
<tr>
<td>$10,000-$14,999</td>
<td>53</td>
<td>10.3</td>
</tr>
<tr>
<td>$15,000-$19,999</td>
<td>88</td>
<td>17.1</td>
</tr>
<tr>
<td>$20,000-$24,999</td>
<td>97</td>
<td>18.8</td>
</tr>
<tr>
<td>$25,000-$29,999</td>
<td>83</td>
<td>16.1</td>
</tr>
<tr>
<td>$30,000+</td>
<td>122</td>
<td>23.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>45</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>516</td>
<td>100.0</td>
</tr>
</tbody>
</table>

achieve a sample size of 500 patients, 700 names were drawn. Of these, 107 could not be located and 79 declined to participate.

Independent Variables. The Recent Life Change Questionnaire (RLCQ) developed by Holmes and Rahe consists of 60 life events divided into five areas: health, work, home and family, personal and social, and financial. Subjects are asked to check off all events that occurred within the last 6 months. A number of modifications were made to the scale in order to tap some of the variables of interest to us. First, in addition to the weights for each item given by Holmes and Rahe, the subject was asked to assign each event a score between zero and 100 as an indication of the amount of adjustment required. Second, the person indicated whether this change was desirable or undesirable. Third, in accord with the Dohrenwends' (1974) suggestion that the degree to which an event is anticipated and controllable influences the way it is perceived by the individual, the subject was asked to rate the events as controlled or uncontrollable, and anticipated or unanticipated. Lastly, probes were also included to allow the respondent to give other events not contained in the original list.

During the 6-monthly interview, the subject also completed Rotter's Locus of Control Scale (Rotter, Seeman, and Liverant 1962), the Multidimensional Health Locus of Control (Wallston, Wallston, and deVillis 1978), and a Social Relationship Scale we developed.

Dependent Variables. Three types of dependent measures are used. Situational strain is measured with Langner's (1962) 22-item questionnaire, which was chosen on the basis of Seiler's (1973) critical review of the scale and his conclusions about its use as a measure of strain. The second measure chosen was a Patient Encounter Form (PEF), which is attached to the subjects' charts in the physicians' offices. Each time a physician sees one of the subjects, he or she indicates on a PEF the nature of the visit (i.e., a routine checkup, a physician-initiated encounter, a patient-initiated visit, or continuing care of a chronic problem), the diagnosis, an estimate of the severity and the psychosocial component of the problems, the estimated number of disability days, and the recommended treatment. Lastly, subjects complete a diary for 3 days out of each 2-week period. It includes a global rating of well-being, any symptoms noted that day, the severity of these symptoms, and any actions taken (e.g., prescription or over-the-counter medication, staying home from work).

Procedure. Home interviews are conducted at 6-month intervals by the Field Survey Unit of McMaster University. All instruments are administered at the initial interview and at 1 year. The interviews at 6 months and 18 months consist only of the RLCQ, Langner's scale, and questions relating to health care utilization outside of family physician encounters. Since the remaining scales are reasonably stable over time, more frequent
administrations were judged unnecessary.

After the first interview, consenting subjects were identified in their physicians’ offices by attaching PEFs to the front of the record or chart. Health professionals in each office were instructed to complete one form per patient encounter (at the home, office, or hospital). Within 2 weeks of entry into the study, subjects were mailed the first health diary, accompanied by a government lottery ticket as an incentive. The diary covers a 3-day period, at the end of which time the subjects return the diary in a self-addressed, stamped envelope. On the fourth day, each subject receives a telephone reminder call. This process is repeated every 2 weeks on days randomly selected, with lottery tickets sent every third mailout.

Results

In a previous article (McFarlane et al. 1979), we presented some preliminary data on the relationship between the RLCQ and Langner scores—our measure of strain. Figure 1 shows the correlations (transformed to z’ scores) between these two measures, with the events classified along the three dichotomies of desirable versus undesirable; controlled versus uncontrolled; and expected versus unexpected. Three scoring systems were used: the total number of events, the sum of the weights given by Holmes and Rahe, and the sum of the subjective weights. As can be seen in the histogram, irrespective of the scoring system, events that are desirable, controlled, or anticipated do not correlate with Langner scores; but undesirable, uncontrolled, and unanticipated events do show significant correlations.

It is possible that the higher correlations for the negative events are due to their being reported more often and given higher weights than the positive events. Table 2 shows the number of events and the average weights broken down by the three categories. It is obvious that subjects report more positive events than negative ones, and that the average adjustment weights are very similar, despite the direction in which the events were rated. Therefore, the higher correlations are not artifacts due to either a greater number of these events or heavier weights assigned to them.

These three dichotomous dimensions yield eight possible ways of categorizing events. Figure 2 gives the correlations of the RLCQ for each category with the Langner score. For the sake of clarity, only the Holmes and Rahe weights are shown; the subjective weights and the number of events yield almost identical correlations.

A number of observations can be made from this figure. On examination of the left side of the tree, one can readily see that desirable events contribute little to the prediction of subjective strain; most of the correlations are not significant. Nevertheless, an interaction is present. With all three scoring systems, events that are desirable and controlled, but unanticipated, show a low but significant correlation with the Langner score.

The right-hand side of the figure reveals the importance of interac-
Table 2. Mean number of events and assigned weights for various categories

<table>
<thead>
<tr>
<th>Scoring systems</th>
<th>Desirable</th>
<th>Undesirable</th>
<th>Controlled</th>
<th>Uncontrolled</th>
<th>Anticipated</th>
<th>Unanticipated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of events</td>
<td>3.59</td>
<td>1.89</td>
<td>2.45</td>
<td>1.93</td>
<td>3.65</td>
<td>2.45</td>
</tr>
<tr>
<td></td>
<td>$t = 10.92^{1}$</td>
<td>$t = 4.11^{1}$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holmes and Rahe weights</td>
<td>19.30</td>
<td>19.86</td>
<td>17.84</td>
<td>21.04</td>
<td>20.25</td>
<td>20.38</td>
</tr>
<tr>
<td></td>
<td>$t = 0.81$</td>
<td></td>
<td>$t = 4.23^{1}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective weights</td>
<td>46.80</td>
<td>30.83</td>
<td>45.98</td>
<td>54.62</td>
<td>47.17</td>
<td>54.35</td>
</tr>
<tr>
<td></td>
<td>$t = 16.03^{1}$</td>
<td></td>
<td>$t = 5.22^{1}$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .001$.

Figure 2. Correlations between dimension subscores of the RLCQ (objective weights) and Langner scores for all subjects

$1^p < .001$.  $2^p < .05$.  $^{2}p < .001$.  $^{1}p < .05$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

$1^p < .001$.  $2^p < .05$.  $^{2}p < .001$.  $^{1}p < .05$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

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Undesirable

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Uncontrolled

Anticipated

Unanticipated

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Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

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1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

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Unanticipated

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1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

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Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

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1.$p < .05$.  2.$p < .001$. 

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Undesirable

Controlled

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1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$. 

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

$-.03$  $.13^{1}$  $.05$  $.05$  $.08$  $.08$  $.29^{2}$  $.28^{2}$

1.$p < .05$.  2.$p < .001$.
tions among the dimensions of life events. In particular, undesirable events over which the subject had total control do not correlate with the measure of strain. Also, in this situation, neither anticipation nor its absence strengthens the correlation. By contrast, those events for which the subject had no control are the most strongly correlated with the strain score, regardless of whether the events were anticipated.

A frequent criticism of analyses relating measures of life change to illness is the possible confounding effect of health-related events. Because such events may be either a cause of life stress or a reaction to it, artificially high correlations may be found. To explore this possibility, a second analysis was performed on a subsample of 244 subjects who reported no health-related events; that is, no events recorded in the health section of the RLCQ. (See figure 3.)

When the correlations for those subjects who reported no health-related events are compared with those derived from the total sample, it is apparent that health-related events do not represent a serious source of contamination. The magnitude of the correlations is similar, and in some instances higher, for this subsample. Thus, health-related events appear to correlate with strain in a manner similar to other stressful events.

To test the hypothesis in yet another way, we selected a group of 259 people who had an LCU score, based on the Holmes and Rahe weights, of at least 100. These subjects were divided into three groups: the positive group, for whom at least 75 percent of the events listed were desirable ones; the negative group, for whom at least 75 percent of the events were undesirable; and a middle group, with a more equal division of desirable and undesirable events. As can be seen in table 3, the positive and negative groups' total scores on the RLCQ did not differ. Therefore, if strain depended solely on the number of LCUs, irrespective of the nature of the events con-

Figure 3. Correlations between dimension subscores of the RLCQ (objective weights) and Langner scores for subjects with no health-related changes.

Desirable

Undesirable

Controlled

Uncontrolled

Anticipated

Unanticipated

Anticipated

Unanticipated

Anticipated

Unanticipated

Anticipated

Unanticipated

.00

.10

.07

.00

.09

.10

.36

.32

\(^{1}\text{p} < .001.\)
Contributing to the total score, then these two extreme groups should not differ on the Langner. As the right-hand column in Table 3 shows, however, there is a significant difference. Langner (1962) used a cutting point of 4 to indicate the presence of impairment. The positive group is below this index, while the negative group, whose mean score is twice as high, is above it. The same analysis using the subjective weights yielded virtually identical findings.

One difficulty with relying on the Langner scale as the dependent variable is that it is a self-report measure, completed at the same time as the RLCQ. Thus, any response bias that the subject brings to one test will be brought to the other, possibly inflating their correlation. For the concept of life stress to have any utility, it must predict future events, ideally measured in a more objective manner.

One variable that meets these criteria is the diary, which is completed for 3 consecutive days every 2 weeks. Table 4 summarizes the findings for the positive and negative groups, based on the diaries completed in the 6 months between the first and second inter-

Table 3. Mean total LCU and Langner scores for the positive and negative groups

<table>
<thead>
<tr>
<th></th>
<th>Total LCU</th>
<th>Langner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>(n = 97)</td>
<td>(n = 31)</td>
</tr>
<tr>
<td>Mean</td>
<td>192.4</td>
<td>187.8</td>
</tr>
<tr>
<td>SD</td>
<td>68.5</td>
<td>86.5</td>
</tr>
<tr>
<td>t</td>
<td>0.27 (NS)</td>
<td></td>
</tr>
</tbody>
</table>

views. Of the seven measures, five show significant differences in the predicted direction. People whose total scores on the RLCQ are composed primarily of negative events (1) have a higher percentage of days with reported symptoms; (2) have twice as many days where their symptoms were sufficient to cause both a change in their level of activity and (3) in their use of medication; and (4) report more severe symptoms.

Two variables were not significantly different—a subjective index of general feeling state, and the percentage of days off work. It is possible that the problem with the first of these indices is that everybody is using a different anchor point. A person in very good health will report "No change" if his or her health remains constant; but so will a person whose health is poor and does not change. Consequently, this measure may not be sensitive to chronic differences in the sense of physical well-being. The second nonsignificant index—days off work—seems to reflect the very low incidence of lost working days. On the average, workers took only 2 sick days within this 6-month period, so that differences would be hard to detect.

**Discussion**

The original conception of life-event changes was that any change is a stressor which demands an

Table 4. Scores on diary variables for the positive and negative groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Positive Group (n = 47)</th>
<th>Negative group (n = 63)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average health evaluation</td>
<td>51.21</td>
<td>49.03</td>
<td>.82</td>
<td>NS</td>
</tr>
<tr>
<td>Percent of days with symptoms</td>
<td>35.28</td>
<td>51.33</td>
<td>2.83</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Percent of days with activity change</td>
<td>6.02</td>
<td>11.14</td>
<td>2.72</td>
<td>&lt;.02</td>
</tr>
<tr>
<td>Percent of days with action</td>
<td>23.45</td>
<td>35.56</td>
<td>2.52</td>
<td>&lt;.02</td>
</tr>
<tr>
<td>Percent of days off work</td>
<td>2.38</td>
<td>2.84</td>
<td>.45</td>
<td>NS</td>
</tr>
<tr>
<td>Average severity of symptoms</td>
<td>13.18</td>
<td>26.70</td>
<td>3.38</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Average severity on symptom days</td>
<td>32.54</td>
<td>43.99</td>
<td>3.00</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>
adaptive response by the individual. However, a person is capable of only so much stress at any given point, so that too much change will result in some negative sequelae, such as illness or psychiatric distress. The results of our study cast serious doubt on the validity of this belief. These data indicate that a person's perception of the nature of the change determines to a major degree whether the adaptation will lead to strain.

The subjective weights assigned by our subjects to the events, indicate that they felt that desirable events, if anything, required more adaptation than undesirable ones. Further, there were significantly more desirable, anticipated, and controlled events than the converse. However, based on correlations with the Langner scale, only negatively perceived events resulted in strain and physical symptomatology.

A final caveat, though, is necessary. Life events appear to affect physical status, but the effects may be small. While the positive and negative groups differed with respect to Langner scores, physical symptoms, and actions taken in response to those symptoms, there was no extra time lost from work for the negative group. Thus, the change in physical status due to an accumulation of negative events appears to cause discomfort, but not a major disruption in the person's life.

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### Announcement

The People’s Republic of China, Medical Exchange Team, June 26–July 18, 1981. Professional Exchange Travel, Ltd., has been invited to escort to the People’s Republic of China a Medical Exchange Team of 25 mental health professionals (psychiatrists, psychologists, social workers, etc.). The Team will exchange scientific information with the Chinese medical and psychiatric community concerning recent advances in mental health. Particular attention will be given to schizophrenia and psychosis. Meetings in China will be coordinated with the Chinese Medical Association, the Chinese Neuro-Psychiatric Association, the Ministry of Public Health, and various teaching hospitals, psychiatric facilities, and educational centers, as well as the China International Travel Service. Cities to be visited are Peking, Shanghai, Hangchow, Changsha, Kweilin, and Kwangchow. The Team will spend 18 days in China.

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