

Negative Life Events Scale for Students (NLESS)

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Rationale is presented for the derivation of a new measure of stressful life events for use with students [Negative Life Events Scale for Students (NLESS)]. Ten stressful life events questionnaires were reviewed, and the more than 600 items mentioned in these scales were culled based on the following criteria: (a) only long-term and unpleasant events were retained, (b) duplicates were eliminated, and (c) items measuring the same event domain were combined to form one item. The NLESS provides the following measures of negative life event stress: (a) normative scoring, (b) subjective scoring, (c) recent versus distal events, and (d) total number of events experienced.

Despite early criticism (e.g., Brown, 1974, 1989; Gorman, 1993) of the checklist approach to the measurement of stressful life events [which was ushered into the research literature by the seminal investigations of Holmes and Rahe (1967)], such checklists have been

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found to provide a measurement of life stress comparable to that afforded by more extensive interview assessments (e.g., Lewinsohn, Rohde, & Gau, 2003; Wagner, Abela, & Brozina, 2006). Because of such findings, along with the fact that a checklist approach provides an ease of administration and a potential for use with large numbers of participants, questionnaire measures of life stress have continued to provide an avenue for an extensive array of empirical findings [see Brown & Harris, (1989) and Figuereroa-Fankhanel (2014) for reviews).

The present paper reports on a review of 10 life events questionnaires (i.e., Clements & Turbin, 1996; Cochrane & Robertson, 1973; Crandall, Preisler, & Aussprung, 1992; Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978; Hobson, Kamen, Szostek, Nethercut, Tiedmann, & Wojnarowicz, 1998; Holmes & Rahe, 1967; Hurst, Jenkins, & Rose, 1978; Linden, 1984; McCubbin, Patterson, & Wilson, 1980; and Sarason, Johnson, & Siegel, 1978). Presented here is a rationale for the derivation of a new measure of life events for use with students—the Negative Life Events Scale for Students (NLESS).

Method

The number of events listed in the 10 life events questionnaires reviewed ranged from 36 (Clements & Turpin, 1996; Linden, 1984) to 102 (Dorenwend et al., 1978). In total, 623 life events were listed in the 10 questionnaires reviewed. Following is a description of the methods used to pare down the number of items to be included in the NLESS.

Materials and Procedure

Derivation of the Final NLESS Item Pool. All 10 of the questionnaires reviewed included both temporary events (e.g., getting a low grade on a test, change in eating habits) as well as more long-term events (e.g., serious illness to a family member, chronic family financial strain). Since the goal of the NLESS was the measurement of life events (as opposed to daily hassles), only more long-term events were retained for the final item pool,

Most of the 10 questionnaires reviewed included both pleasant events (e.g., vacation, new dating relationship) and unpleasant events (e.g., death of a family member, break-up with boyfriend / girlfriend) when determining the degree of adjustment needed in response to each life event. The intended purpose of the NLESS was to assess the impact of negative life events in a person's life. As a result, all pleasant events were eliminated from the final item pool.

Using these criteria, a total of 117 items comprised a pool of potential NLESS items. From this pool of 117 items, all items typically not appropriate to student experiences were eliminated (e.g., child leaving home, retirement). Also, all duplicates were eliminated from the final item pool. Furthermore, similar items were combined to form one item. For example, items addressing mental illness in the family (e.g., "family member attempts suicide," "family member seeking psychological consultation," and "family member starts drinking heavily") were measured with the following single NLESS item: "Having a parent or sibling who is struggling with an addiction or some other psychological / emotional problem."

These adjustments resulted in a final pool of 28 items. These 28 items were given to five psychologist judges (three women, two men). These five judges were asked to determine if any of the 28 items were of such minor significance that they should not be included in an

assessment of negative life events for students. Two items were mentioned by all five judges (i.e., “student having experienced minor financial problems” and “student having experienced a minor law violation (i.e., speeding ticket, disorderly conduct”), and one item was listed by four of the five psychologists (i.e., “death of the student’s pet”). These three items were eliminated from the final pool of 25 NLESS items. In addition, these judges were asked for suggested wording changes that would help to make the life event items less ambiguous. These suggestions were incorporated into the final version of the NLESS.

Normative Scoring. In some of the 10 life event questionnaires reviewed, scoring was derived from normative ratings of each life event. For example, Holmes and Rahe (1967) had 394 respondents provide an estimate of the amount of effort they felt it would take a person to adjust to each of 43 events that might occur in a person’s life. From these estimates, Holmes and Rahe derived a mean score for each life event, and this score was then used as the normative measure of social readjustment associated with each life event. These mean values ranged from “death of spouse” (a score of 100) to “minor violation of the law” (a score of 11).

The final pool of 25 NLESS items were given to 259 undergraduates (173 women, 86 men). These students were asked to rate the stressfulness of each life event. Based on the work of other researchers (e.g., Clements & Turpin, 1996; Holmes & Rahe, 1967; Linden, 1984), the first NLESS item [“Death of a close family member (e.g., mother, father, sister etc.)”] was used as an anchor, and was given a stress rating of 100. Each participant was given the following instructions:

Below are 25 life events that have been found to produce stress in students' lives. In other words, if these events happen in a person's life, then that individual is likely to experience tension / strain / pressure / stress. Please rate each life event on a scale from 1 (very low stress) to 100 (extremely high stress). Please use the following guide for your ratings: 1 = very low stress, 25 = somewhat stressful, 50 = moderately stressful, 75 = relatively high level of stress, and 100 = extremely stressful. Please feel free to use any numbers along the scale from 1 to 100—in other words, if you feel that the level of stress you would feel for a particular event was somewhere between “somewhat stressful” and “moderately stressful,” then you might rate that event a 37. The first item listed (i.e., “Death of a close family member”) has already been assigned a value of 100. This value of 100 was assigned based on previous research. Using this event as a starting point for your ratings, please use the scale below to give each of the life events a rating between 1 and 100. As you assign a score to each life event, please try to think about how much stress you think you would feel if this event happened to you. Thank you.

The mean scores derived from this normative scoring method have been presented in the results section of the present paper. These mean scores can be used individually (to compare the judged stress levels of various life events) or they can be summed (to calculate an overall level of stress experienced by any particular individual).

Subjective Scoring. One concern expressed about the use of normative scoring for the assessment of stress from life events is that individuals may vary greatly in how they are affected by various negative life events (e.g., Dohrenwend et al., 1978; Sarason et al., 1978). For example, even in the responses of the 259 students who provided the normative scoring data

described above, some participants rated divorce of parents as high as 100, whereas others responded with a rating as low as 25. As a result, some researchers have argued for the use of subjective scores to indicate the stress deriving from the experience of negative life events. In this method, participants are typically asked to indicate if a particular negative life event has happened to them, and if it has, to rate the level of stress they have personally experienced as a result of that event.

Three of the 10 studies reviewed for the present research employed this subjective scoring method. For example, Crandall et al. (1992) asked participants to rate each life event that had happened to them on a scale from 1 (not at all stressful) to 5 (extremely stressful). The two other studies using a subjective scoring method employed scales ranging from -3 to +3 (Sarason et al., 1978) and 1 to 100 (Hurst et al., 1978).

For the NLESS, participants were given the following instructions: “Listed below are several life events that are often stressful for people who experience them. For each of the following events, please indicate whether or not you have experienced that event by circling either ‘Y’ (for yes) or ‘N’ (for no). If you have experienced a particular event, please use the scale below to indicate how stressful / difficult / unpleasant / painful that event has been for you. Please place your rating in the blank space provided after the statement of that life event. Please use this scale for your ratings: 1 = not very stressful at all, 2 = slightly stressful, 3 = moderately stressful, 4 = definitely stressful (but not unbearable), 5 = extremely stressful (hardly bearable), and 6 = one of the worst things I have ever had to go through.”

Of the 10 studies reviewed for the present research project: (a) six provided normative scoring for life events, (b) three provided methods for subjective scoring, and (c) one (McCubbin, Thompson, & McCubbin, 1996) simply provided a count of those events that had been experienced by each individual. One of the advantages of the NLESS is that it allows for the derivation of all three scoring methods: normative, subjective, and an individual item count.

Recent versus Distal Life Events. In the 10 studies reviewed for the present research, there was considerable variation in the measurement of when life events had occurred in participants' lives. For some checklists, participants were asked to indicate which events had occurred in the past six months (e.g., Linden, 1984), whereas other checklists used a one-year (e.g., Sarason et al., 1978; Cochrane et al., 1973) and a two-year (e.g., Hurst et al., 1978) cut-off. Furthermore, some of the checklist measures simply asked for which events had ever occurred in a participant's life.

For the NLESS, participants were asked to provide information on which negative life events had ever occurred in their lives, and then they were also asked to indicate which of these events had happened in the past two years. These multiple measurements of when life events have occurred allows for comparisons of the impact of more recent versus more distal negative life events.

Subjective Norming. A total of 146 university students (70 women, 72 men) were asked to complete the NLESS. Each of these students provided information about: (a) which life events had occurred in their lives, (b) their subjective rating of how much stress each event has caused in their lives, and (c) whether each event had occurred within the past two years.

All participants were provided a consent form in which they were advised that all data collected in the study would be confidential and that they were free to withdraw from participation at any time. All testing took place in a large-group classroom setting.

Results

Table 1 provides information concerning: (a) the 25 items comprising the final NLESS checklist, (b) the mean normative stress values for each of the 25 negative life events (based on the ratings of 259 undergraduates), (c) the mean subjective ratings of each life event, as reported by the sample of 146 university students who were questioned, and (d) the number of times each negative life event had been experienced in the sample of 146 participants.

Table 1

NLESS Items and Normative Scoring, Subjective Scoring, and Frequency of Occurrence for Each Item

<u>NLESS Life Event</u>	<u>Normative</u>	<u>Subjective</u>	<u>Frequency</u>
Death of family member	100	4.13	32
Death of close friend	94	4.86	7
Serious illness / injury to family member	79	3.90	70
Serious illness / injury to you	69	3.79	48
Serious illness / injury to close friend	66	3.80	35
Divorce of parents	80	3.91	22
Family member arrested	67	3.57	23
You arrested	74	3.40	5
You having been assaulted	69	4.06	18
Parent laid off work	65	3.44	36
Serious break-up with boyfriend / girlfriend	71	3.75	68

Family has major financial pressures	74	3.95	40
You having major financial pressures	72	3.66	29
Addiction / psychological struggle of family member	77	3.78	37
You struggling with addiction / psychological problem	68	4.31	45
Cheated on by boyfriend / girlfriend	70	3.96	23
Serious academic problems	82	4.38	13
Parents have ongoing conflicts	63	3.96	45
You having ongoing conflict with parents	66	4.03	37
You experiencing abuse / violence at home	86	4.89	9
Family losing house through fire, flood, etc.	82	3.33	3
Unwanted sexual behavior imposed on you	85	4.38	13
Unwanted pregnancy (either you or you being the father)	86	5.00	1
Serious conflict with close friend	58	3.76	78
Serious conflict with boss at work	61	3.48	21

Please note: The NLESS questionnaire may be found in Appendix A.

Descriptive analyses revealed that the total normative scores for the 146 university participants ranged between 0 and 1225 (mean = 390.87, SD = 271.78). For the subjective ratings, the range was 0 to 84 (mean = 21.44, SD = 16.83). A comparison of the number of events experienced by men versus women revealed that women reported having experienced a significantly greater number of negative life events than men ($t = -2.194, p < .03$). The mean number of negative life events experienced by women = 6.11 (SD = 4.09), whereas for men this value = 4.79 (SD = 3.01).

Analyses of the subjective ratings provided by men versus women revealed that there were two negative life event items on which men's ratings differed significantly from those of women: (a) death of family member (men's ratings were lower, $t = -2.272$, $p < .05$), and (b) death of a close friend (women's ratings were lower, $t = +3.904$, $p < .01$).

A bivariate correlation of the normative ratings of stress with participants' subjective ratings of stress yielded an $r = +.579$ ($p < .001$). This value reveals that there is a significant degree of agreement between what university students proposed the stress level would be for various negative life events and how much stress was actually felt by those participants who had actually experienced the event. That being stated, however, this r -value is far from +1.00, suggesting that subjective measures of negative life event stress may provide a valuable addition to normative estimates of stress.

Discussion

The development of a measure of negative life event stress has been reported in the present study. This Negative Life Events Scale for Students (NLESS) has restricted the types of events measured to those which are: (a) germane to a student population, (b) unpleasant, and (c) long-term. The NLESS provides both normative and subjective scoring, and it allows for the measurement of recent events versus those that have occurred in the past. Initial investigations suggest that the NLESS may be a valuable research tool, with potential for predictive efficacy.

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