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Rating life events : the effect of experience and point of reference

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AN ABSTRACT OF THE THESIS OF Richard John Alden for the
Master of Science in Psychology presented November 4, 1983.

Title: Rating Life Events:

The Effect of Experience and Point of Reference

APPROVED BY MEMBERS OF THE THESIS COMMITTEE:

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Life events inventories have been extensively used to investigate the relationship between stressful life events and the etiology of disease. In order to elucidate conceptual and methodological issues surrounding the use of these instruments, a Life Events Questionnaire was constructed and administered to 100 university students. Subjects

indicated which of 40 events they had experienced and rated all events on a 20 point scale based on the amount of readjustment judged to be required by each event, both for themselves and for a hypothetical average person. Results of a three-way ANOVA indicated that in the majority of cases, neither the gender nor the experience of the rater, nor the point of reference used in making the judgment had a significant effect on the magnitude of the ratings obtained. For ratings of events which did show significant group differences, the primary finding was that normative values appear to be more consistently applied to estimates of others' reactions than to those of the raters themselves.

RATING LIFE EVENTS:
THE EFFECT OF EXPERIENCE
AND POINT OF REFERENCE

by

RICHARD JOHN ALDEN

A thesis submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE
in
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1983

TO THE OFFICE OF GRADUATE STUDIES AND RESEARCH

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CHAPTER I

INTRODUCTION

An extensive body of literature indicates that stressful life events may contribute to the etiology or exacerbation of various diseases and disorders (Barrett, Rose, & Klerman, 1979; Dohrenwend & Dohrenwend, 1974, 1981; Gunderson & Rahe, 1974; Rabkin & Struening, 1976; Selye, 1980). While the notion that stress may be a precursor to physical or psychological conditions has high face validity, research on the actual measurement of stressful life events has been hampered by a number of as yet unresolved methodological and conceptual issues (Brown, 1974; Hurst, 1979; Mechanic, 1975). Considerable attention has focused on the use of life events checklists to measure stressors and particularly on issues related to the scaling of life events (Cleary, 1980; Tausig, 1982). The present study addresses certain critical assumptions involved in the construction and use of such instruments.

A major controversy in this field has been whether the actual stressfulness of life events can be measured "objectively" based on average group perceptions or whether it must be assessed "subjectively" for each individual.

Dohrenwend and Dohrenwend (1980) have adopted from Gordon Allport the notion of nomothetic versus idiographic procedures to characterize this basic difference among researchers.

The objective or nomothetic approach is implicit in the work of Holmes and his colleagues (Holmes & Masuda, 1974; Holmes & Rahe, 1967) and has been used extensively throughout the life events literature (e.g., Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978; Paykel, Prusoff, & Uhlenhuth, 1971). Under this system of measurement, a standard score is assigned to a particular life event based on average ratings obtained from an independent group of judges. Typically, the judges are presented with a list of possibly stressful life events and asked to rate them all, usually in terms of the amount of readjustment required by the events. These average scores are then used to predict the impact of the events on individuals, usually by adding up scores for experienced events to obtain a total in Life Change Units (LCU) and then comparing this measure to some outcome measure of physical or mental distress. The rationale for the nomothetic technique was derived from the research of S.S. Stevens (1957) who showed that "there is a general psychophysical law relating subjective magnitude to stimulus

magnitude, and that this law is simply that equal stimulus ratios produce equal subjective ratios" (p. 153). Of course, regarding the question of stressfulness, there is no measure of the stimulus dimension available. Proponents of this approach have argued however that this problem does not preclude development of valid scales and that judges could utilize an "innate psychological capacity for making quantitative judgments about psychosocial as well as psychophysical phenomena." (Holmes & Rahe, 1967, p. 217). Indeed it may be unnecessary to posit "innate capacities" in support of the nomothetic argument. Much learning that occurs in a social context does depend not on direct but rather on vicarious experience, which may be transmitted through persons or generations as social norms (Bandura & Walters, 1963). Dohrenwend and Dohrenwend (1981) have argued that in this way "individuals who have not personally experienced an event could come to have definite expectations concerning its stressfulness" (p. 12).

In contrast to the nomothetic approach is the subjective or idiographic method based on the assumption that the stressfulness of life events primarily depends on how they are perceived by the individual (Hinckle, 1973; Lazarus, 1966; Sarason, Johnson, & Siegal, 1978). This position has received

support from a number of studies which have demonstrated that subjective self-ratings of stressful events are better than group average ratings in predicting certain stress-related outcome variables (Theorell, 1974; Vinokur & Selzer, 1975; Yamamoto & Kinney, 1976). Critics of the self-report approach (Dohrenwend et al., 1978; Rahe, 1979) point out that this finding amounts to a tautology, that an individualized measure is "not a clean measure of environmental input in a stress process" (Dohrenwend et al., 1978, p. 206) but is rather a result of environmental input, confounded with individual predispositions and assessments of the very outcome it seeks to predict.

Related to this issue is the debate concerning "desirability" of events. Several researchers (Dohrenwend et al., 1978; Holmes & Rahe, 1967), in addition to generally favoring the nomothetic approach to scaling, have assumed that the critical dimension of stressful life events is the amount of change or readjustment in the life pattern or activities of the individual, for better or worse. However several authors have demonstrated that undesirable events are better predictors of symptoms than total change measures (Gersten, Langner, Eisenberg & Simcha-Fagan, 1977; Mueller, Edwards, & Yarvis, 1977; Ross & Mirowsky, 1979; Tausig, 1982;

Vinokur & Selzer, 1975). This result seems to hold true when desirability is assessed both by groups of independent raters and by individual respondents. On the other hand, Thoits (1981) has demonstrated that, when one controls for items in the life events scale that overlap the dependent variable (in this case health-related events), desirability does not affect the relationship of events to dependent measures of illness. For the present study the "readjustment" orientation is used.

These conflicting theoretical viewpoints have, not surprisingly, given rise to different measurement techniques. Researchers favoring the nomothetic method have concentrated on the formal properties of stressors and have attempted to minimize the effect of individual differences between judges in the rating of events. Most of the major life inventories using this method (Dohrenwend et al., 1978; Holmes & Rahe, 1967; Paykel, et al., 1971) were constructed by asking subjects to rate events based not on how they themselves were or would be affected but rather on how "most people" or "the average person" would be affected. Also, subjects were asked to rate all the events on a list and not to distinguish between events which they have personally experienced and those which they have not experienced. Both these procedures

represent an attempt to make the ratings "less subjective," more oriented to the event itself or to normative perceptions of the events than to differences related to personal or outcome variables. One problem with trying to arrive at perceptual norms in the nomothetic tradition is that differential ratings may be given depending on whether the rater has actually experienced the event, has known somebody who has, or is basing his or her judgment on opinion or imagination. In fact Dohrenwend and Dohrenwend (1980) have hypothesized that the judgments of the inexperienced about a given event will actually be less variable, and presumably therefore more "objective," than judgments of those who have experienced the event because inexperienced judgments will "represent a distillate from which effects due to specific personal and situational contexts have been at least partially removed" (p. 14).

Studies from the idiographic perspective (Hurst, Jenkins, & Rose, 1978; Rahe, 1981; Sarason et al., 1978) have asked subjects to rate events with reference to themselves, not to the "average person." However these studies have only asked for ratings of those items which subjects themselves have experienced.

A search of the literature revealed no studies in which

subjects have been asked to rate all events, experienced and unexperienced, with respect to themselves -- that is, how they have been affected or how they estimate they would be affected. Furthermore no studies have asked whether the point of reference used for making judgments (i.e. for "self" versus for "average person") might influence the ratings obtained.

On the question of the influence of experience on ratings, the evidence from the literature is mixed. The Dohrenwends' hypothesis concerning the variability of experienced versus inexperienced ratings has been contradicted in findings by Horowitz, Schaefer, and Cooney (1974) who found that magnitudes of experienced judgments differed in opposite directions depending on type and recency of event judged but that overall variability of inexperienced judgments was greater. Likewise, Grant, Gerst, and Yager (1976), using a sample of psychiatric patients, found greater variability for inexperienced raters although they found no difference between the magnitude of experienced and inexperienced ratings.

Another source of individual difference in ratings which has received infrequent attention in the literature has been that due to gender. Most studies reviewed either did not attend to this question or circumvented it by using a

single gender sample. Two studies (Dohrenwend, 1978; Horowitz et al., 1974) reported that women tend to give the same event higher ratings than do men, and three studies (Grant et al., 1976; Holmes & Rahe, 1967; Paykel et al., 1971) reported no significant sex differences.

In summary, the present study addresses three major issues:

- 1) The nomothetic approach assumes that normative ratings of life events can be obtained by instructing raters to estimate how the "average person" would be affected. It further assumes that asking people to rate events as they have been or imagine they would be affected produces a different, "contaminated" rating of the event. Of course, the "average person" technique itself may be confounded by individual differences in the ways people arrive at such an estimate. The first hypothesis to be tested predicts that there will be no difference between ratings obtained using the two points of reference methods.
- 2) Rating experienced events and rating unexperienced events may involve distinct processes and therefore produce different values. The second hypothesis predicts that there will be such a significant difference between ratings obtained for experienced and those obtained for unexperienced events

and that this difference will prevail even when raters are specifically asked to discount personal experience.

3) The third hypothesis predicts that there will be significant overall differences based on the gender of the raters.

CHAPTER II

METHOD

Subjects

Subjects were 100 students in psychology classes at Portland State University. The sample was composed of 54 females and 46 males, with a mean age of 25.2 years ($SD = 5.0$) and a range of 18 - 35 years. Subjects volunteered their participation in "a research project investigating how people evaluate the impact of various life events." In most cases, subjects received extra class credit for participating. Data from an additional 19 subjects was gathered but not included in the present study. Nine of these subjects were over 35 years of age; seven had difficulty with the task because of language or cultural differences; and three did not complete the task.

Instrument

The Life Events Questionnaire (LEQ) was constructed based on results of a preliminary study assessing the frequency at which particular events occur in a university

population. To this end, a list describing 116 life events was presented to a sample of 48 female and 40 male psychology students. The mean age of the students was 25.9 (SD = 5.5).

The list of events was mainly taken from the Psychiatric Epidemiology Research Interview (PERI) Life Events Scale (Dohrenwend et al., 1978). The 102 item PERI scale was chosen over other widely used scales, most notably the Social Readjustment Rating Scale (Holmes & Rahe, 1967), owing to its increased comprehensiveness of events, clearer event descriptions, and improved sampling and construction procedures. Dohrenwend et al. obtained average ratings of the events from several sampling groups of New York City adults from various ethnic and social groups, using a variant of the "readjustment" instructions used by Holmes and Rahe. Mean ratings and rankings of events have been provided by Dohrenwend et al. The life events list used in the preliminary study included all 102 PERI items. In addition, 14 items which seemed especially appropriate for students were added from other life events inventories - 10 from the Life Experiences Survey (Sarason et al., 1978) 2 from a scale developed by Paykel et al. (1971) and 1 from the Holmes and Rahe scale.

These 116 items were arranged in chance order, and students were asked to indicate which events they had experienced in the past 12 months and which events they had experienced in their entire lives. Subjects were not asked to rate the events. Subjects responded anonymously, and demographic data was gathered on age and sex. Subjects reported a mean of 13.4 events ($SD = 8.8$) experienced in the past 12 months and 32.9 events ($SD = 18.8$) experienced in their entire lives.

From this preliminary study, 40 event descriptions were selected for inclusion in the LEQ. In order that the items be well distributed with respect to both frequency of reported occurrence and published readjustment ratings, the following selection procedure was employed. First, all 116 items were rank ordered and divided into quartiles based on frequency of entire life occurrence, as determined for this population by the preliminary study. Items which applied to one sex only (e.g., "Became pregnant") were eliminated. Next, each quartile was further divided into quartiles based on the PERI readjustment rankings obtained from the New York City sample by Dohrenwend et al. (1978). From each of these 16 groups, two events were selected, usually the event with the highest and the event with the median ranking, although substitutions were made to avoid having too many items

describing similar life areas (e.g., family, work, school, etc.). Eight non-PERI items were also selected, two from each of the four frequency quartiles. The resulting 40 items were arranged in chance order.

The LEQ had two parts, both of which included the 40 event descriptions with spaces for subjects to rate each event. One part had additional spaces for subjects to indicate which events they had experienced in their entire lives and which they had experienced in the past 12 months. This latter part constituted the "self" condition, the remaining part being the "other" condition. Written instructions accompanied each part. Two forms of the LEQ were prepared; these were identical except that in one the self-other presentation order was reversed and the written instructions modified accordingly. (See Appendix A for one form of the LEQ.)

Procedure

The LEQ was administered to groups of subjects; 55 received the self-other form, 45 the other-self form. The written instructions, which were also read aloud by the examiner, explained the concepts of life change and readjustment and instructed subjects to rate the amount of readjustment required by each event on a 0 - 20 scale. Under the

self condition, subjects were asked to rate according to how much change would be required by an event "for you personally" and to indicate which events they had experienced in the past 12 months and which they had experienced ever in their entire lives. Under the other condition, subjects were asked to rate according to how much change each event would require "for most people or for the average person, not just for you." (See Appendix A for complete instructions.)

After subjects had finished the first part they were given a distraction task before beginning the second part. A packet of various paper-and-pencil mazes was passed around and subjects were asked to choose a maze and work on it. The distraction task lasted 10 minutes or until all subjects had finished their mazes.

As in the preliminary study, demographic data on subject age and sex was collected and appropriate precautions were taken to maintain confidentiality. The examiner was available throughout to answer questions and to debrief subjects following completion of the questionnaire. One item, "Lost driver's license," required particular clarification after it became evident that two disparate interpretations were being made (i.e., "revoked" versus "misplaced"). The last approximately 35% of subjects were instructed verbally to use the "revoked" interpretation.

CHAPTER III

RESULTS

The data on mean rating, rank, and frequency of experience for each of the 40 LEQ items are presented in Table I. In testing for possible presentation order effects, no difference was found between mean ratings for subjects using the self-other form and those for subjects using the other-self form of the LEQ, in both the self condition $t(98) = -0.615$, $p > .50$, and the other condition $t(98) = -0.129$, $p > .50$. Therefore data gathered on the two forms were pooled for this and all subsequent analyses.

Turning to data on the frequency of experience, events which were most frequently experienced tended to receive lower ratings. This was true of 12 month experience for both self and other conditions: $r(38) = -.539$, $p < .01$ and $r(38) = -.580$, $p < .01$, respectively; and of whole life experience: $r(38) = -.662$, $p < .01$ and $r(38) = -.691$, $p < .01$. Furthermore, frequency of whole life experience was positively correlated with age of the subjects: $r(98) = .621$, $p < .01$, although for frequency of 12 month experience a slightly negative correlation was obtained: $r(98) = -.122$, $p < .10$.

That is, older subjects tended to report more experience

TABLE I

MEAN RATINGS, RANKS, AND FREQUENCIES
OF EXPERIENCE

Event	Mean Rating (SD)		Rank of Mean		Frequency of Experience	
	Self	Other	Self	Other	Months	Life
21. Spouse/partner died	19.08 (1.76)	19.15 (2.03)	1	1	0	1
22. Divorced	17.57 (3.00)	17.75 (2.54)	2	2	2	13
30. Birth of first child	16.78 (3.40)	16.74 (3.58)	3	3	5	20
31. Married	16.46 (3.72)	16.70 (3.68)	4	5	2	34
38. Close friend died	16.25 (3.50)	15.80 (4.01)	5	8	11	36
19. Spouse/partner unfaithful	16.00 (4.04)	16.72 (3.00)	6	4	6	24
29. Arrested	15.75 (4.02)	15.72 (3.61)	7	9	3	22
23. Spouse/partner relations got worse	15.60 (3.38)	15.25 (3.14)	8	12	27	52
37. Adopted a child	15.52 (3.95)	15.17 (4.17)	9	13	0	3

TABLE I (Continued)

Event	Mean Rating (SD)		Rank of		Frequency of Experience	
	Self	Other	Mean	Other		
			Self	Other	Months	Life
6. Moved to a new country	15.34 (3.97)	16.08 (3.52)	10	6	2	19
24. Assaulted	15.27 (4.33)	15.48 (3.83)	11	11	1	13
13. Found out couldn't have children	15.17 (5.06)	15.97 (4.58)	12	7	0	3
11. Engagement broken	14.91 (3.60)	15.52 (3.28)	13	10	7	17
8. Started living with spouse/partner	14.48 (3.84)	14.50 (3.74)	14	15	15	55
36. Started a business	14.29 (3.57)	14.43 (3.79)	15	16	4	16
7. School finance problems	14.18 (4.43)	14.64 (3.27)	16	14	34	46
28. Involved in lawsuit	13.45 (3.89)	13.27 (4.12)	17	18	8	21
25. Started love affair	13.38 (4.18)	12.16 (4.00)	18	25	28	69
34. Changed to worse job	13.20 (3.83)	13.36 (3.43)	19	17	10	32
14. Academic probation	12.77 (4.32)	11.97 (3.56)	20	26	7	15

TABLE I (Continued)

Event	Mean Rating (SD)		Rank of Mean		Frequency of Experience Months	Life
	Self	Other	Self	Other		
27. Robbed	12.51 (4.66)	13.02 (4.14)	21	20	13	38
16. First time left home	12.12 (5.08)	13.19 (4.28)	22	19	13	92
32. Physical illness	12.11 (4.65)	12.39 (4.24)	23	24	29	66
3. Lost driver's license	11.81 (6.00)	12.41 (5.25)	24	23	5	23
5. Dismissed from school residence	11.65 (4.86)	12.47 (4.06)	25	22	0	9
4. Left Armed Services	11.50 (5.52)	12.60 (4.73)	26	21	1	9
10. Non-spouse family argument	11.48 (4.30)	11.56 (4.07)	27	28	38	74
26. Someone overstayed in house	11.27 (4.25)	10.68 (3.96)	28	32	16	34
17. Trouble with a boss	11.06 (3.87)	11.27 (3.73)	29	31	18	61
12. Didn't get expected raise	10.79 (4.11)	11.88 (3.85)	30	27	9	36
18. Took out mortgage	10.71 (4.01)	11.50 (3.86)	31	29	3	19
20. Went off welfare	10.45 (4.69)	11.44 (4.36)	32	30	10	50

Event	Mean Rating (SD)		Rank of Mean		Frequency of Experience 12 Months
	Self	Other	Self	Other	
35. Promoted at work	9.99 (4.30)	10.01 (4.60)	33	33	14 51
39. Non-work finances improve	9.36 (4.84)	9.95 (4.89)	34	34	25 45
40. Non-injury accident	9.16 (4.36)	8.31 (4.14)	35	36	18 73
33. Moved to better residence	8.56 (3.94)	9.38 (4.26)	36	35	18 60
9. Made new friends	8.14 (3.92)	8.22 (3.76)	37	37	82 95
15. Minor legal violation	7.89 (4.30)	7.67 (3.70)	38	38	25 62
2. Dropped hobby, recreation	7.25 (4.85)	7.20 (4.15)	39	39	40 90
1. Acquired pet	6.64 (4.17)	6.81 (3.58)	40	40	24 88

Note: Some event descriptions have been abbreviated.
(See Appendix A for full descriptions.)

overall, but younger subjects were slightly more apt to report recent events. Despite this, age was not strongly correlated with the dependent variable. Pearson correlation coefficients for age and ratings of the 40 events ranged from $r(98) = .148, p > .10$ (item #16 in the other condition) to $r(98) = -.207, p < .05$ (item #11 in the self condition). Finally, the relationship between frequency of experience and gender was examined. For 12 month experience, mean frequencies of experience for males and females were 5.53 events and 5.61 events respectively, not a significant difference: $t(98) = -1.419, p > .10$. For whole life experience however, mean frequency of experience for males was 16.89 and for females 14.24, which did represent a significant difference: $t(98) = 2.317, p < .02$.

Preliminary to performing an analysis of variance on the obtained ratings, Tukey's test for nonadditivity with one degree of freedom (Kirk, 1968; Tukey, 1949) was done to determine whether subject and item effects were additive in their interaction. The test for nonadditivity was insignificant both for the self and for the other condition: $F(1, 3860) = 0.32, p > .25$ and $F(1, 3860) = 1.18, p > .25$ respectively. (See Appendix B for a summary of this calculation.)

Next, each subject's rating of a particular event was

transformed into a residual term representing the difference between the observed rating and the rating expected based on this additive model for that item and that subject. That is, the term contained an adjustment for overall personal differences based on a particular subject's tendency to rate high or low and for overall item differences based on whether a particular item is likely, on the average to be perceived as requiring a large or small amount of readjustment. Each residual term was calculated as $R_{ij} = Y_{ij} - \bar{Y}_i - \bar{Y}_j + \bar{Y}$, where Y_{ij} is the rating of person i on item j , \bar{Y}_i is the person mean, \bar{Y}_j is the item mean, and \bar{Y} is the grand mean.

Next, a three-way analysis of variance (gender x experience x point of reference) with repeated measures on the last dimension was performed for each of the 40 LEQ event items. The dependent variable was represented by the residual terms. The results of the analyses are presented in Appendix C. Significant main effects ($p < .05$) due to gender were found for 8 events (#3, 24, 38), due to experience for 8 events (#3, 4, 9, 14, 15, 17, 32), and due to point of reference for 8 events (#4, 6, 11, 12, 16, 18, 19, 33). Significant effects due to the interaction of gender and experience were found for 3 events (#10, 28, 38), due to the interaction of gender and point of reference for 4 events (#3, 24, 36, 40),

and due to the interaction of experience and point of reference for 4 events (#14, 27, 29, 35). No three-way interaction effects were found to be significant at the designated level.

CHAPTER IV

DISCUSSION

Results indicate limited support for the original hypotheses. Twenty-nine significant main and interaction effects (out of 280 tests) were noted for 23 out of the 40 event items.

The cumulative binomial probability for 29 or more out of a possible 280 effects significant at the .05 level is extremely low ($P = .0003$). However it would be very misleading, without replicating this study, to presume that the same events would consistently show those effects. Indeed, this points out one of the drawbacks of an experimental design which uses such a large number of statistical tests.

The significant effects are summarized in Tables II - VII and in Figures 1 - 11. In most instances, no significant group differences were found. That is, ratings for events were, for the most part, independent of the rater's gender, experience of the particular event, or whether rating was done for self or for a hypothetical average person. Thus the present study does not present sufficient evidence to reject the notion of socially normative ratings, although the possibility remains that differences may exist along

dimensions other than the three tested here. While the significant effects noted here are then exceptions to the more general finding of no difference, they nonetheless do suggest certain trends and are worth examining more closely.

Main Effect: Point of Reference

Contrary to the first hypothesis, the evidence appears to support the idea that subjects rate some events differently for themselves than they do for "most people". A significant main effect due to point of reference was obtained for eight events, as indicated in Table II. In all these cases, ratings for self were lower than ratings for others. Subjects felt either that these events required less readjustment for themselves than for most people or that they themselves were generally more able to cope with stressful life events than the average person. This is consistent with studies on attribution processes which indicate that people are generally more likely to incorporate perceptions of self-determination and freedom into their self images than into their representations of other people (Monson & Snyder, 1977; Wolosin, Sherman & Mynatt, 1972).

Main Effect: Experience

Main effects due to rater's experience of an event were found for six events. Data is presented in Table III.

"Lost driver's license" is not included in this analysis owing to the aforementioned confusion regarding its interpretation. In three of these cases experienced raters gave higher ratings than inexperienced raters, and in three the opposite results were obtained. Thus, in most cases judgments of the readjustment required by an event were not affected by experience. When experience did alter judgments, there was not a systematic trend as to the direction of the difference.

Main Effect: Gender

Turning to effects due to gender, main effects are presented in Table IV. Again, discounting "Lost driver's license," gender differences were found for two events -- "Assaulted" and "Close friend died". For both events, females gave ratings significantly higher than those given by men. These two events were also among the seven PERI items found to be gender dependent by Dohrenwend et al. (1978). Of course, results here are highly equivocal since out of 40 items 2 would be expected to show a difference on chance alone.

Interaction Effect: Point of Reference X Experience

The notion that people will seek to maximize their sense of freedom from environmental constraints relative to others is further supported when considered in conjunction with the effects of experience. Ratings for four events indicated a significant interaction between point of reference and experience (see Table V and Figures 1 - 4). The most striking result here was that in each case experience had the greatest effect on ratings for self; readjustment ratings for others were considerably more similar and less affected by rater experience. This supports the notion that social norms regarding the stressfulness of some life events may exist relatively independent of personal experience. While information and insights gained by living through those events do influence raters' estimates of their own readjustment, they are apparently not relied upon to estimate readjustment for others. Three of these events involved clearly undesirable circumstances -- "Academic probation", "Robbed", and "Arrested." For all three, readjustment for self is rated lower by experienced raters compared with self ratings by inexperienced ones. Furthermore, experienced raters consistently judged these events to be more stressful for others than they were for themselves. This may represent an

"innoculation" effect (Caplan, 1981). That is, the successful management of a threatening situation may develop new capabilities and coping skills so that similar threats are subsequently experienced as less stressful. The disparity between experienced and inexperienced self ratings suggests that anticipated negative events were seen as more stressful than those same events seen in retrospect. Although causal explanations are not explicitly invoked in the present study, this interaction suggests that experienced raters tend to attribute the lowered stress of the experienced event more to factors related to individual coping skills than to their estimate of the event itself, as reflected in the stability of the ratings for others. This may be seen as an effort to bolster self-esteem and as such is consonant with the observation made by Monson and Snyder (1977) that "actor's self-attributions should be more influenced by the quest for positive self-regard than should observers' attributions about actors" (p. 103). Similar speculation may account for why on a more socially desirable event such as "Promoted at work" experienced raters inflated the significance of the event for themselves and why those not promoted tended to minimize its significance.

Interaction Effect: Point of Reference X Gender

Turning to the interaction of reference and gender, as seen in Table VI and Figures 5 - 8, it is interesting that for all four events in which significant differences were found males rated events as requiring more adjustment for others than for themselves and women did the opposite, i.e., rated events as more stressful for themselves than for others. Under the stress of these events, men imagine themselves to be less vulnerable and women imagine themselves to be more vulnerable. Certain studies of sex differences are consistent with this finding. Hyde and Rosenberg (1980) have reported that females generally showed lower self-confidence than men in estimating their performance on an upcoming examination; males tended to overestimate and females tended to underestimate their own actual performances.

Interaction Effect: Experience X Gender

The gender difference in what we have termed self-confidence needs to be qualified further when experience is taken into account. Experience and gender interaction are summarized in Table VII and Figures 9 - 11. For two of these three events -- "Involved in a lawsuit" and "Close friend died" -- the effect of experience was to lower female ratings and raise male ratings. Lenney (1977) found that if females

are given clear and unambiguous feedback about how well they are doing or how good their abilities are, then their estimates are not lower than those of males. This appears to agree with results on these two events, if we consider the experience of an event to constitute a type of feedback information. Females may be more receptive to a stress inoculation effect or may experience more success than males in resolving certain types of crisis situations. At any rate, for these two events, females felt themselves better able to cope after actually having had the experience.

In an effort to find patterns of responding in the great bulk of cases which did not show significant group differences, nonparametric tests were performed to determine if differences existed based on whether the event rated was judged overall to require a high or low degree of readjustment.

Is there something about the quality of the event itself which influences differences in group ratings? The inventory was dichotomized, and events obtaining grand mean ratings greater than 14 on the 20 point scale were considered to be in the high stress range. Those rating below 14 were considered low stress. Frequency counts were made of high and low stress events based on differential group rating (e.g., number of high vs. low stress events rated higher by unexperiences vs.

experienced raters.) The only significant relationship discovered was for gender differences, $X^2(1) = 4.63, p < .05$. Females tended to rate events higher than males did more frequently for high stress events than for low stress events. On low stress events, male and female ratings were generally more similar. This may reflect more on the specific content of the high stress items than on their overall ratings per se. Eleven of the 16 high stress items clearly involve major changes in interpersonal relationships, i.e., "Spouse/partner died", "Divorced", "Birth of first child", "Married", "Spouse/partner unfaithful". Thus, the gender differences found here may support the notion that females are more engaged by these concerns and would therefore rate them differentially higher.

If life event inventories are to have practical value in the measurement of stress, group differences need to be more than statistically significant by themselves. The crucial question is whether differences in ratings will differentially predict some outcome measure such as illness. For example, Rahe (1981) did find that while objective group norms provided adequate power to predict certain somatic symptoms in male subjects, subjective ratings by females of

their own life changes were very much better indicators of subsequent pathology.

On the other hand, the results obtained here suggest that life events ratings by themselves are relatively robust measures. Indeed what the life events field needs, more than methodological refinements, is a clearer theoretical formulation of the relationship between social phenomena and the etiology of various classes of illness. Recall that the Holmes and Rahe model is based on a medical model of illness in which the well being of the individual is seen to be undermined by a noxious social agent (life event) which then manifests itself as an illness. It is a model which dates back to the work of Adolf Meyer (1951). As Turek (1983) has stated, the germ theory of disease from which this model is derived is an outmoded notion which medical theoreticians themselves have since discarded in favor of a more interactionist approach. The recent growth of interest in the social support construct as a mitigating factor in the stress-illness connection (Caplan, 1981) represents the first conceptual step toward a less reductionist and more clinically meaningful model.

The present study did not specifically address the relationship between life event ratings and outcome measures.

Nevertheless, the findings do have implications for further research into the nature of social judgments and the perception and evaluation of stressful life events.

On a number of event items tested an inoculation to stress effect was involved in our speculations. One possible research study which would be very amenable to this type of methodology would test this speculation by focusing on the generalizability of the alleged effect. That is, if ratings are controlled for age, do more experienced raters rate events differently than do those with less experience, and if so what types of events enhance resistance to future stresses. For example, would a person who has gone through a divorce rate a family argument as more or less stressful than a person without the divorce experience?

Another important factor not considered in the present study is the recency of experienced events. Horowitz et al. (1972) found that the more recent the experience, the higher it was rated for stress. By analyzing data for whole life experience only, the present study may underestimate the potential effect of experience on ratings.

The present study was designed to investigate group differences in the rating of life events. The major finding was that in most cases the factors considered -- reference,

experience, and gender -- made little difference in how people rated events, a result which is consistent with the concept of generalized cultural norms for rating stressful events. Indeed, when rankings of the 32 PERI items from Dohrenwend et al. (1978) for the other condition were compared with ratings obtained from the New York City sample, a substantial positive correlation was obtained, $r(30) = .731, p < .01$. These normative values seem to be more consistently applied to estimates of others' reactions than to those of the raters themselves. That is, we tend to agree on how other people would respond, although we retain the notion that as individuals we would respond more differently ourselves. This was seen most clearly in the effects involving point of reference, in which ratings for others appeared more stable than ratings for self as to the effects of gender and experience. The nomothetic approach, which argues that the concept of average person is a socially accessible one, is supported in this respect.

TABLE II

MEAN RATINGS AND STANDARD DEVIATIONS

FOR EVENTS WITH A SIGNIFICANT POINT OF REFERENCE EFFECT

Event	Self (n=100)	Other (n=100)	Total (n=200)
4. Left Armed Services	11.50 (5.52)	< 12.60 (4.73)	12.05 (5.16)
6. Moved to a new country	15.34 (3.97)	< 16.08 (3.52)	15.71 (3.76)
11. Engagement broken	14.91 (3.60)	< 15.52 (3.28)	15.22 (3.45)
12. Didn't get expected raise	10.79 (4.11)	< 11.88 (3.85)	11.34 (4.01)
16. First time left home	12.12 (5.08)	< 13.19 (4.28)	6.60 (4.72)
18. Took out mortgage	10.71 (4.01)	< 11.50 (3.86)	11.11 (3.95)
19. Spouse/partner unfaithful	16.00 (4.04)	< 16.72 (3.00)	16.36 (3.41)
33. Moved to better residence	8.56 (3.94)	< 9.38 (4.26)	8.97 (4.11)

Note: Numbers in parentheses are standard deviations.

TABLE III
 MEAN RATINGS AND STANDARD DEVIATIONS
 FOR EVENTS WITH A SIGNIFICANT EXPERIENCE EFFECT

<u>Event</u>	<u>Unexperienced</u>		<u>Experienced</u>	<u>Total</u>
3. Lost driver's license	13.06 (4.69) n=77	>	8.91 (5.45) n=23	12.11 (5.16) n=100
4. Left Armed Services	11.63 (4.65) n=91	<	16.28 (3.39) n=9	12.05 (4.73) n=100
9. Made new friends	7.10 (2.53) n=5	<	8.23 (3.46) n=95	8.18 (3.41) n=100
14. Academic probation	12.61 (2.91) n=78	>	11.52 (4.39) n=22	12.37 (3.30) n=100
15. Minor legal violation	9.13 (2.99) n=38	>	6.95 (3.54) n=62	7.78 (3.49) n=100
17. Trouble with a boss	10.19 (3.19) n=39	<	11.79 (3.02) n=61	11.17 (3.17) n=100
32. Physical illness	13.71 (3.48) n=34	>	11.50 (4.27) n=66	12.25 (4.13) n=100

Note: Numbers in parentheses are standard deviations.

TABLE IV
 MEAN RATINGS AND STANDARD DEVIATIONS
 FOR EVENTS WITH A SIGNIFICANT GENDER EFFECT

Event	Males (n=46)	Females (n=54)	Total (n=100)
3. Lost driver's license	13.00 (4.57)	11.35 (5.54)	12.11 (5.16)
24. Assaulted	13.92 (3.69)	16.61 (9.92)	15.38 (3.65)
38. Close friend died	14.91 (3.78)	16.96 (3.13)	16.03 (3.53)

Note: Numbers in parentheses are standard deviations.

TABLE V

MEAN RATINGS AND STANDARD DEVIATIONS

FOR EVENTS WITH A SIGNIFICANT EXPERIENCE x REFERENCE EFFECT

<u>Event</u>		<u>Unexperienced</u>	<u>Experienced</u>	<u>Total</u>
14. Academic probation	Self	13.28 (3.85) n=78	10.95 (5.39) n=22	12.77 (4.32) n=100
	Other	11.94 (3.35) n=78	12.09 (4.30) n=22	11.97 (3.55) n=100
	Total	12.61 (2.91) n=156	11.52 (4.39) n=44	12.37 (3.30) n=200
27. Robbed	Self	13.19 (4.40) n=62	11.39 (4.91) n=38	12.51 (4.66) n=100
	Other	12.98 (3.97) n=62	13.08 (4.46) n=38	13.02 (4.14) n=100
	Total	13.09 (4.14) n=124	12.24 (4.72) n=76	12.77 (4.39) n=200

<u>Event</u>		<u>Unexperienced</u>	<u>Experienced</u>	<u>Total</u>
29. Arrested	Self	16.00 (3.83) n=78	14.86 (4.61) n=22	15.75 (4.02) n=100
	Other	15.65 (3.50) n=78	15.95 (4.03) n=22	15.72 (3.61) n=100
	Total	15.83 (3.39) n=156	15.41 (4.08) n=44	15.73 (3.53) n=200
35. Promoted at work	Self	9.51 (3.73) n=49	10.45 (4.78) n=51	9.99 (4.30) n=100
	Other	10.16 (4.85) n=49	9.86 (4.39) n=51	10.01 (4.60) n=100
	Total	9.84 (4.30) n=98	10.16 (4.58) n=102	9.99 (4.44) n=200

Note: Numbers in parentheses are standard deviations.

TABLE VI

MEAN RATINGS AND STANDARD DEVIATIONS

FOR EVENTS WITH A SIGNIFICANT GENDER x REFERENCE EFFECT

<u>Event</u>		<u>Self</u>	<u>Other</u>	<u>Total</u>
3. Lost driver's license	Male	12.20 (5.89) n=46	13.80 (4.64) n=46	13.00 (4.57) n=92
	Female	11.48 (6.13) n=54	11.22 (5.48) n=54	11.35 (5.54) n=108
	Total	11.81 (6.00) n=100	12.41 (5.25) n=100	12.11 (5.36) n=200
36. Started a business	Male	13.02 (3.92) n=46	14.02 (4.00) n=46	13.52 (3.98) n=92
	Female	15.37 (2.85) n=54	14.78 (3.61) n=54	15.08 (3.23) n=108
	Total	14.29 (3.57) n=100	14.43 (3.79) n=100	14.36 (3.62) n=200

<u>Event</u>		<u>Self</u>	<u>Other</u>	<u>Total</u>
24. Assaulted	Male	13.13 (4.75) n=46	14.72 (3.58) n=46	13.93 (4.23) n=92
	Female	17.09 (2.93) n=54	16.13 (3.94) n=54	16.61 (3.43) n=108
	Total	15.27 (4.34) n=100	15.48 (3.83) n=100	15.38 (3.65) n=200
40. Non-injury accident	Male	8.11 (4.27) n=46	8.36 (4.31) n=46	8.24 (4.29) n=92
	Female	10.06 (4.28) n=54	8.26 (4.02) n=54	9.16 (4.15) n=108
	Total	9.16 (4.36) n=100	8.31 (4.13) n=100	8.74 (4.22) n=200

Note: Numbers in parentheses are standard deviations.

TABLE VII

MEAN RATINGS AND STANDARD DEVIATIONS

FOR EVENTS WITH A SIGNIFICANT GENDER x EXPERIENCE EFFECT

Event		Unexperi- enced	Experi- enced	Total
10. Non-spouse family argument	Male	13.36 (2.04) n= 11	10.26 (3.87) n= 35	11.81 (3.75) n= 46
	Female	11.40 (2.47) n= 15	12.26 (3.10) n= 39	11.83 (2.94) n= 54
	Total	12.23 (2.46) n= 26	11.31 (3.60) n= 74	11.55 (3.35) n=100
28. Involved in a lawsuit	Male	12.18 (4.03) n= 33	13.69 (2.72) n= 13	12.61 (3.75) n= 46
	Female	14.37 (3.14) n= 46	11.88 (4.69) n= 8	14.00 (3.48) n= 54
	Total	13.46 (3.68) n= 79	13.00 (3.60) n= 21	13.36 (3.65) n=100

<u>Event</u>		<u>Unexperi- enced</u>	<u>Experi- enced</u>	<u>Total</u>
38. Close friend died	Male	14.44 (3.66) n= 27	15.58 (3.78) n= 19	15.01 (3.72) n= 46
	Female	17.42 (2.92) n= 37	16.00 (3.34) n= 17	16.71 (3.05) n= 54
	Total	16.16 (3.55) n= 64	15.78 (3.53) n= 36	16.03 (3.53) n=100

Note: Numbers in parentheses are standard deviations.

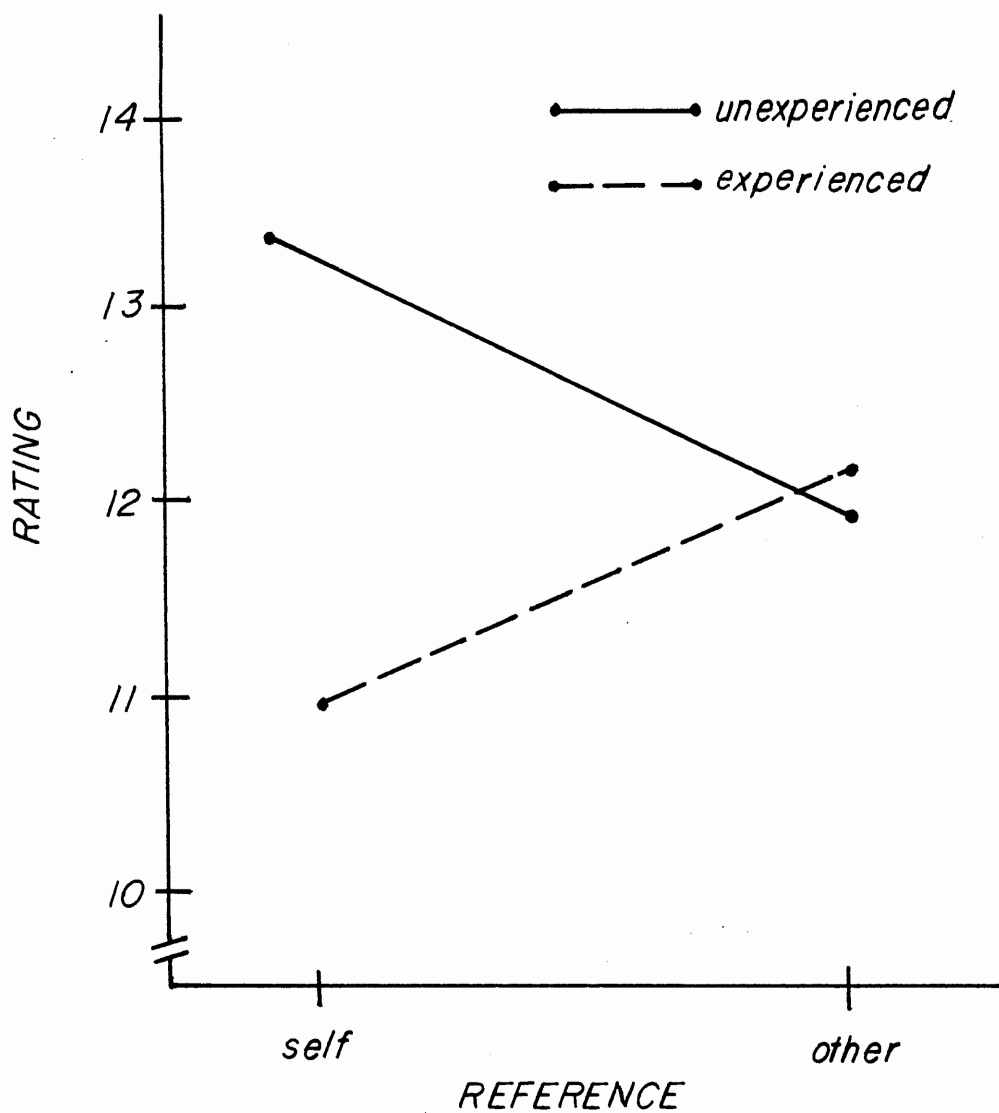


Figure 1. Mean readjustment ratings as a function of point of reference and experience. Event No. 14: Academic probation.

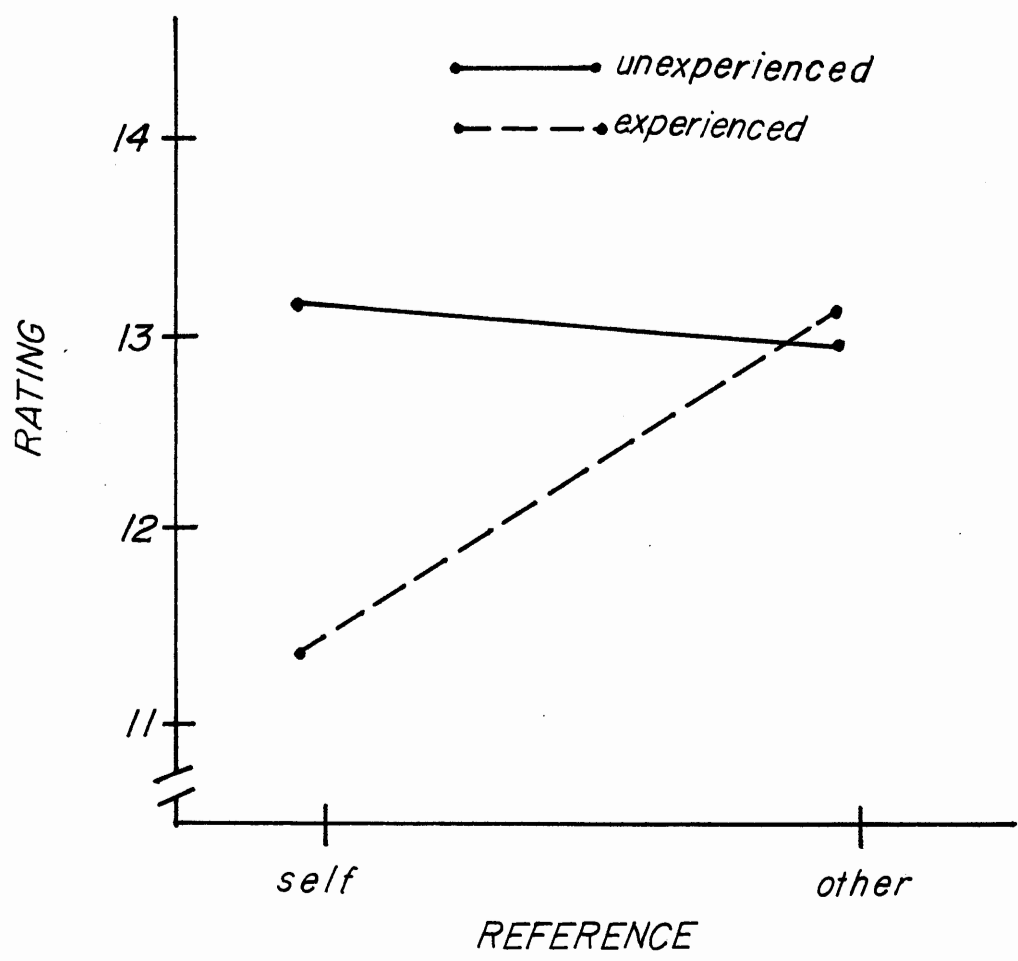


Figure 2. Mean readjustment ratings as a function of point of reference and experience. Event No. 27: Robbed.

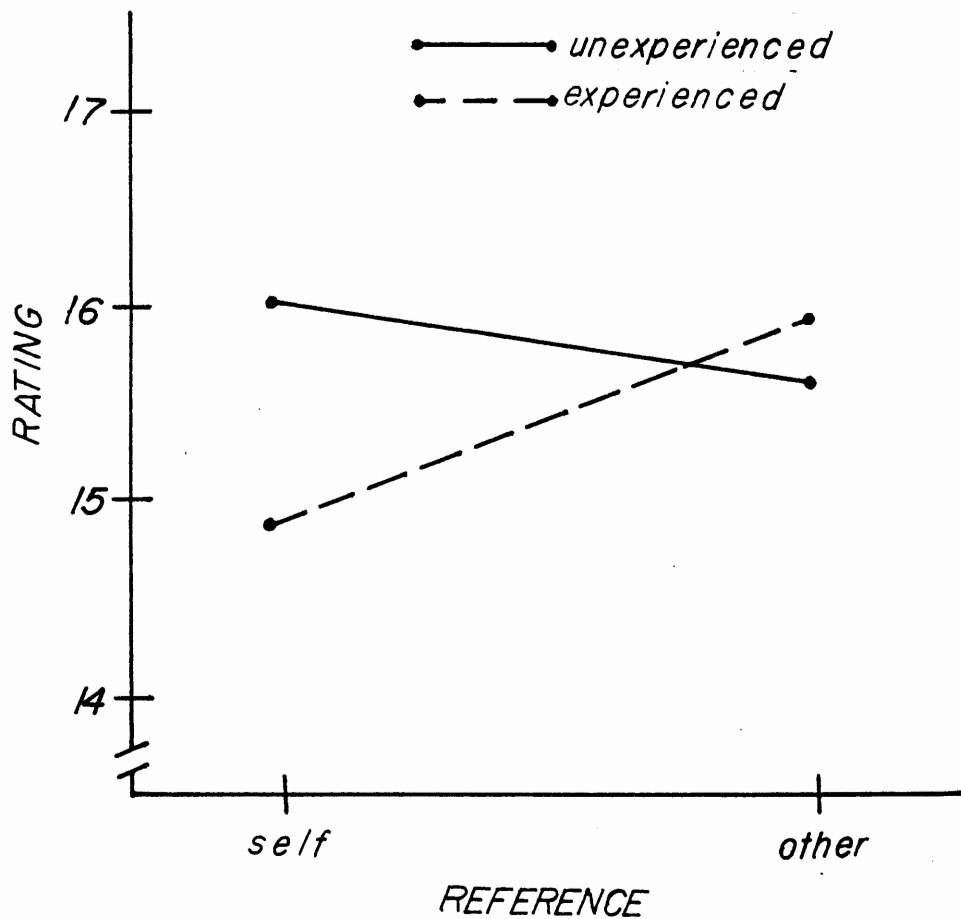


Figure 3 . Mean readjustment ratings as a function of point of reference and experience. Event No. 29: Arrested.

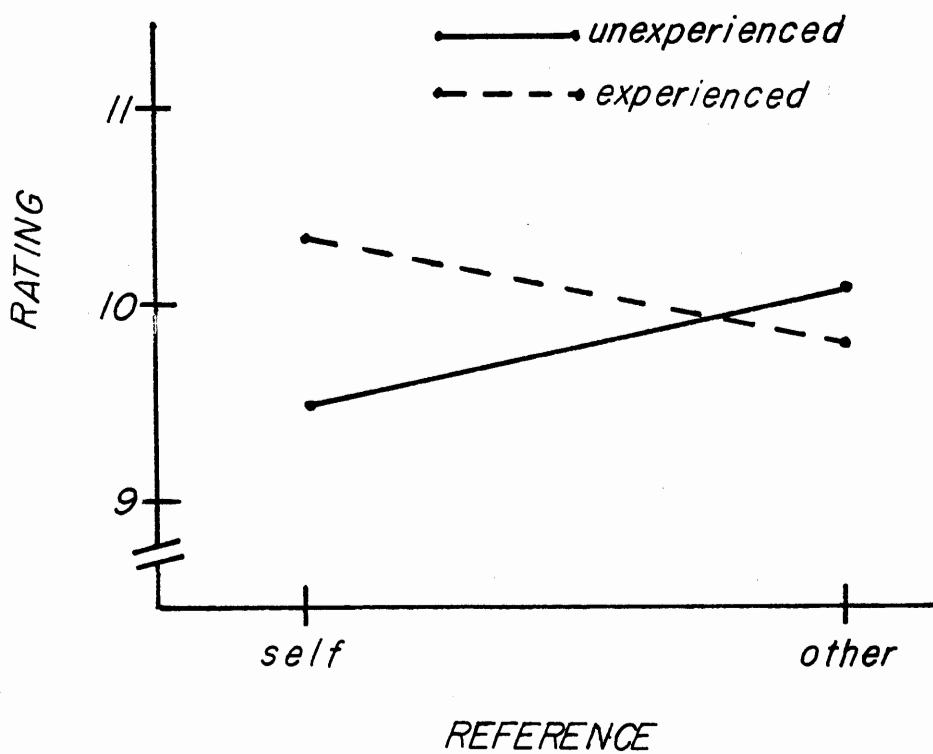


Figure 4. Mean readjustment ratings as a function of point of reference and experience. Event No. 35: Promoted at work.

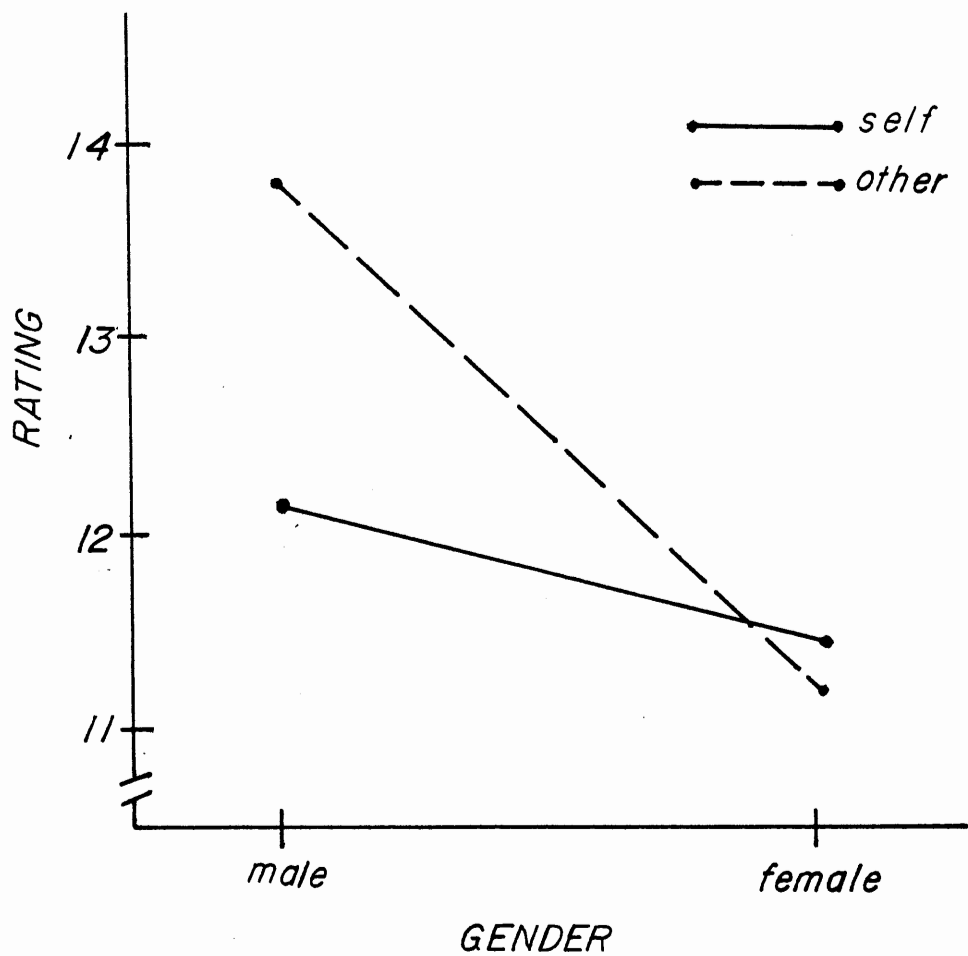


Figure 5. Mean readjustment ratings as a function of gender and point of reference. Event No. 3: Lost driver's license.

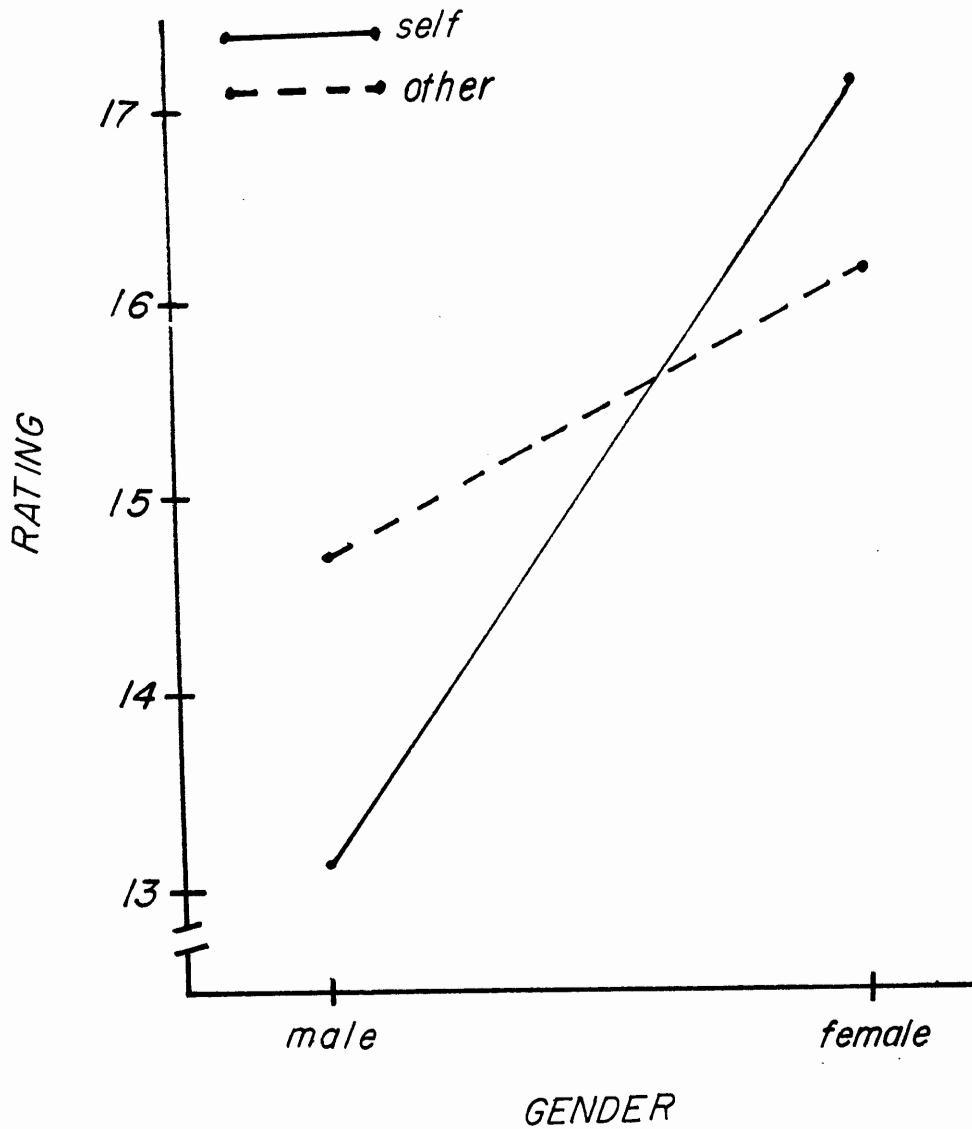


Figure 6. Mean readjustment ratings as a function of gender and point of reference. Event No. 24: Assaulted.



Figure 7. Mean readjustment ratings as a function of gender and point of reference. Event No. 36: Started a business or professional practice.

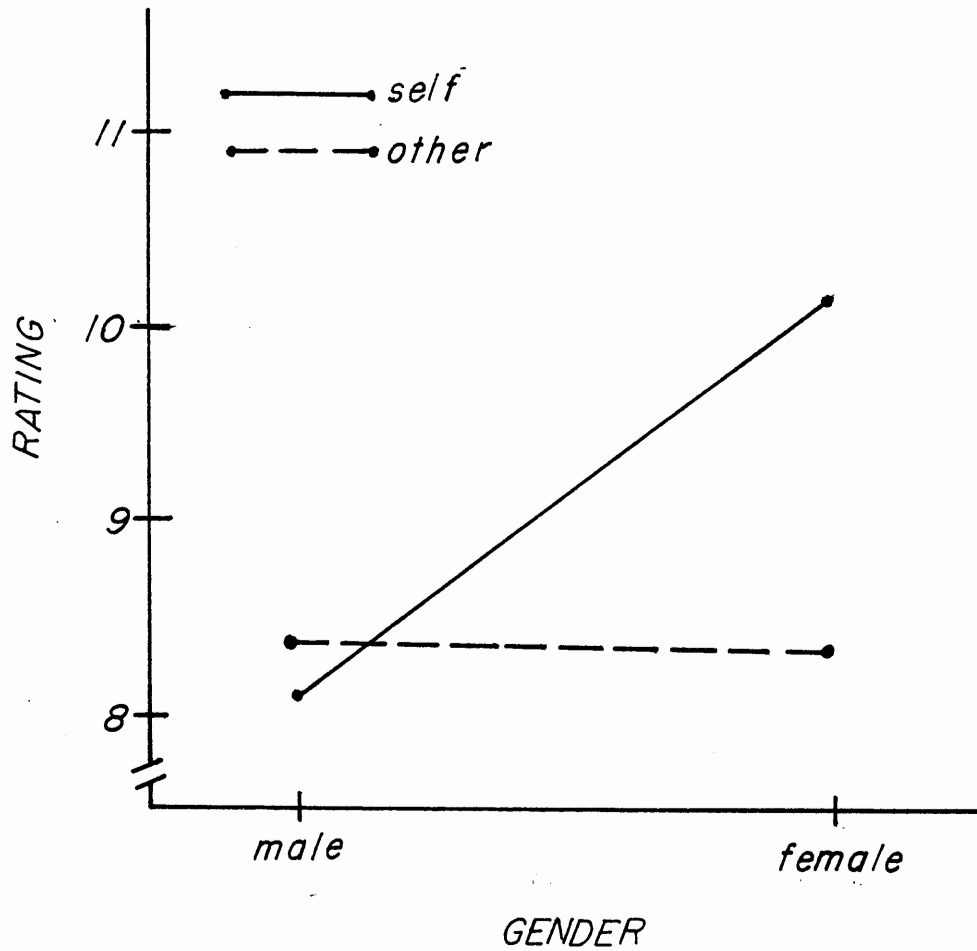


Figure 8. Mean readjustment ratings as a function of gender and point of reference. Event No. 40: Accident in which there were no injuries.

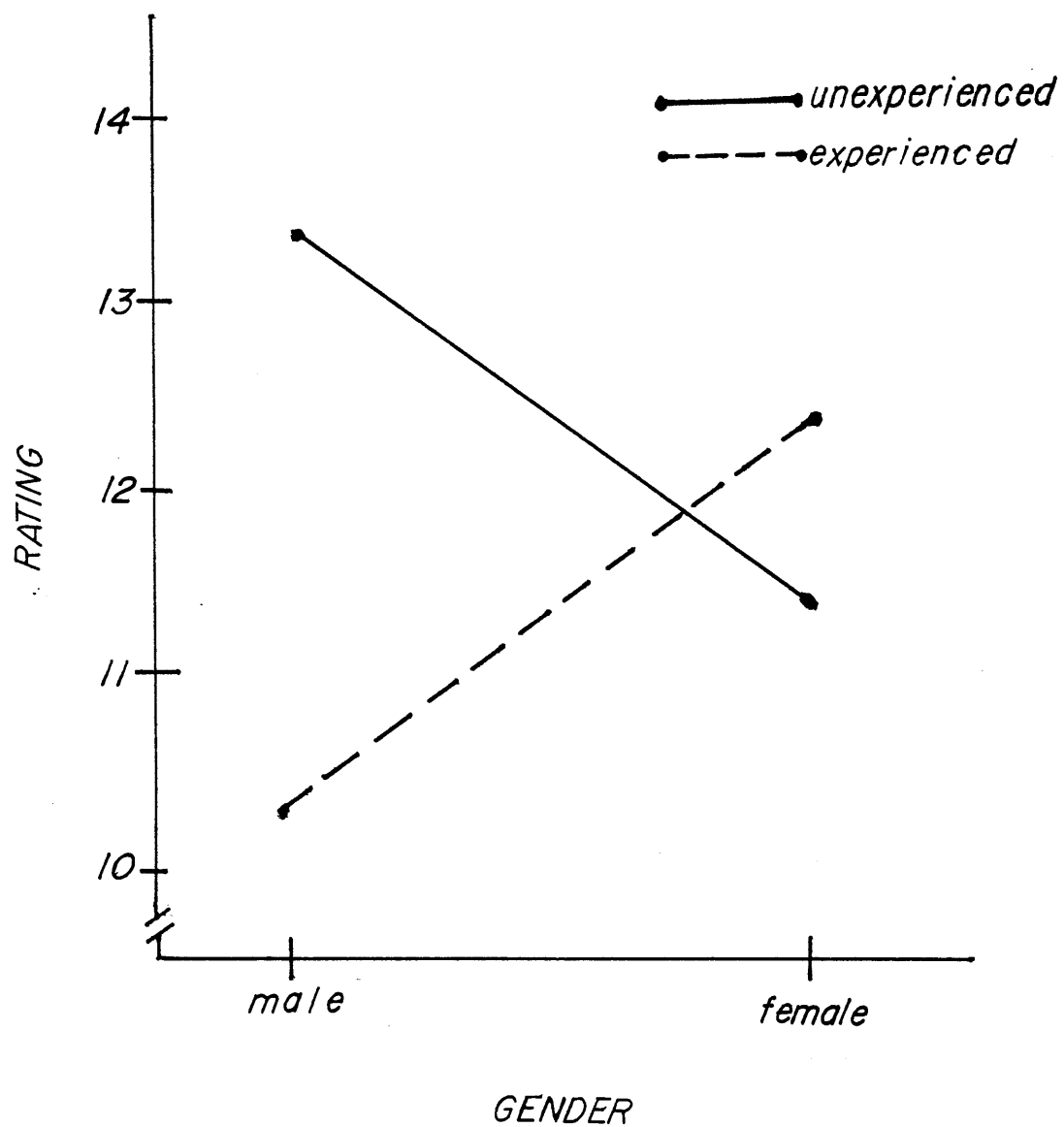


Figure 9. Mean readjustment ratings as a function of gender and experience. Event No. 10: Serious family argument other than with spouse/partner.

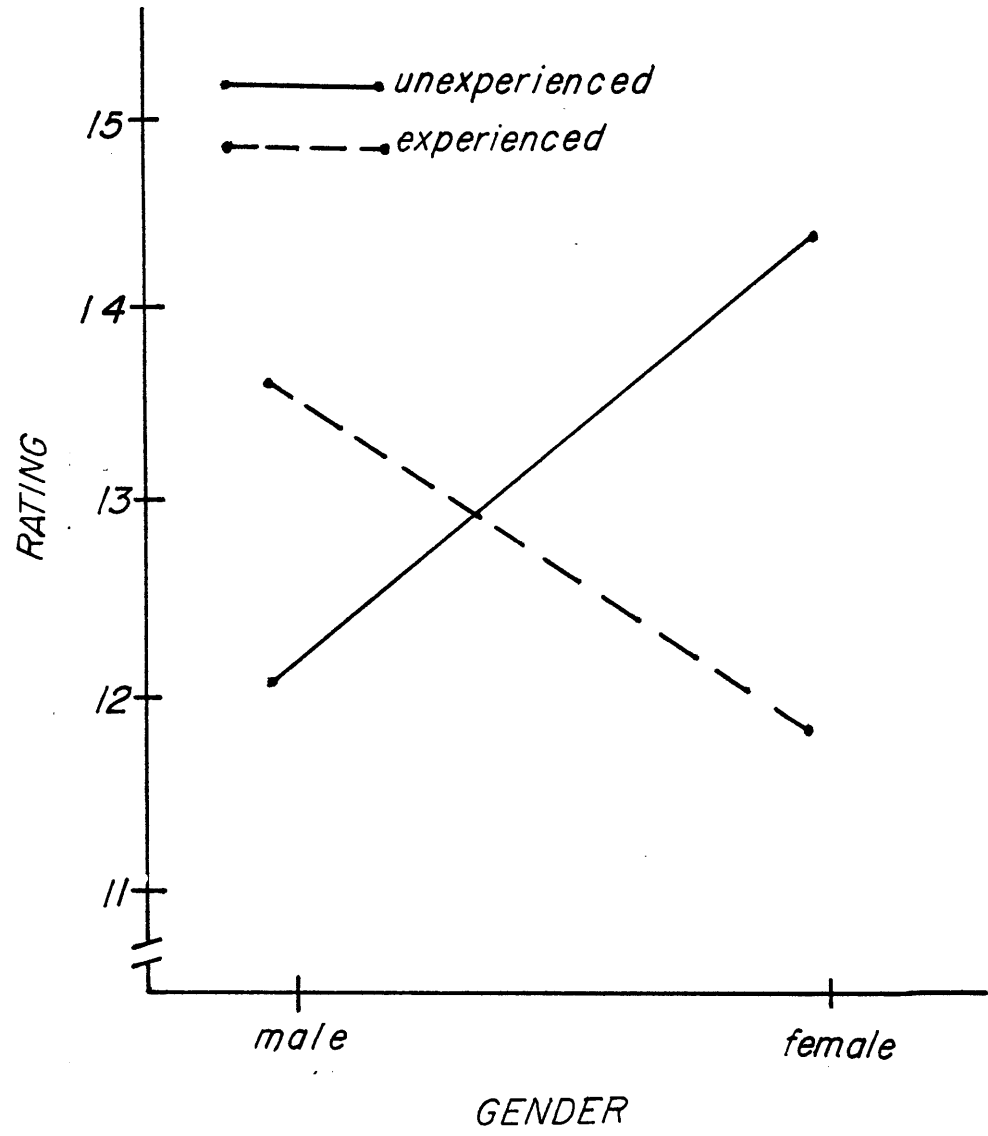


Figure 10. Mean readjustment ratings as a function of gender and experience. Event No. 28: Involved in a lawsuit.

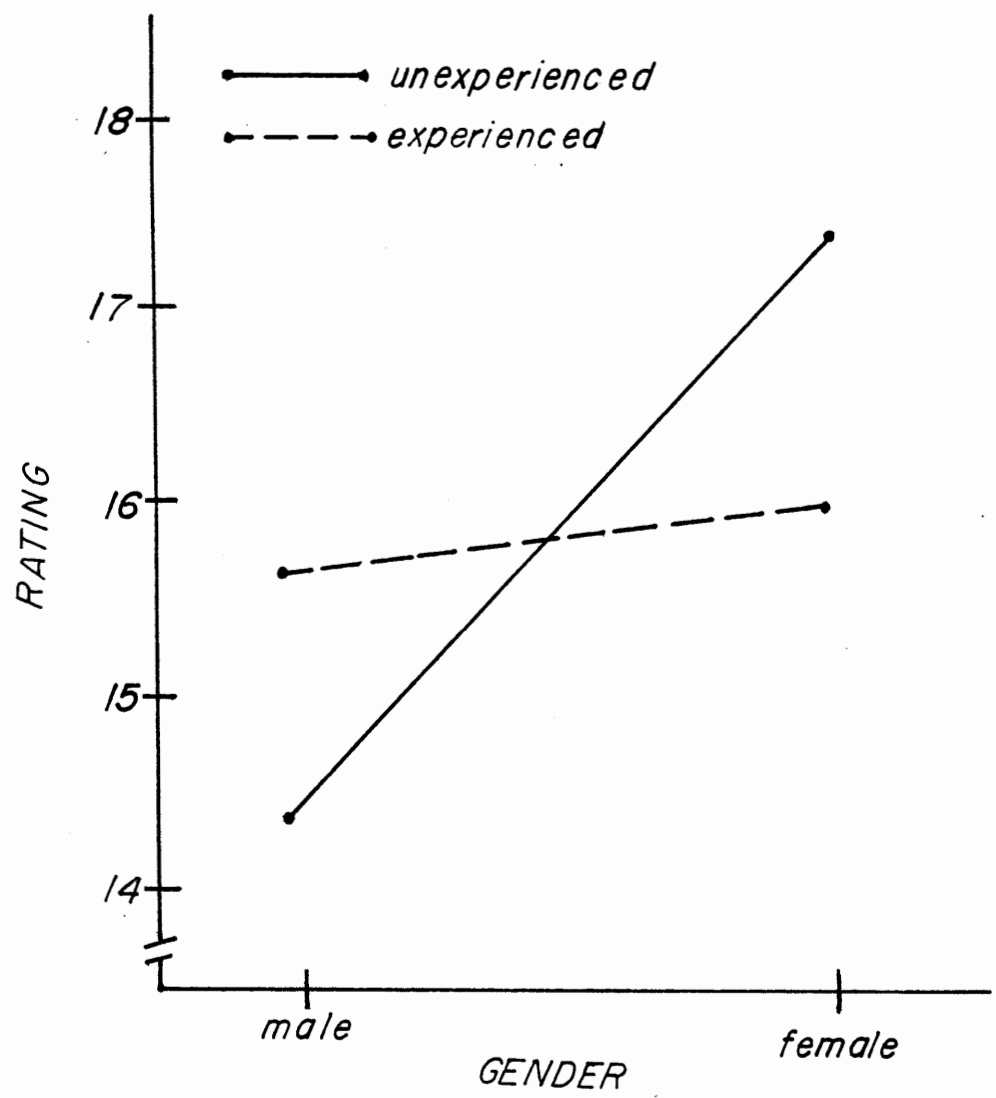


Figure 11. Mean readjustment ratings as a function of gender and experience. Event No. 38: Close friend died.

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APPENDIX A

LIFE EVENTS QUESTIONNAIRE

Part I

Thank you for your participation.

Certain life events require people to adapt or readjust to changes in their accustomed patterns of behavior. The degree of readjustment and the amount of time required to make it vary with different events and different individuals.

What follows is a list describing 40 life events which sometimes happen to people. These include both desirable and undesirable events, and may include some events which have happened to you personally. I would like you to rate each event for the amount of personal change and adjustment you feel is required by that event, regardless of its desirability. Try to think about how much of a change each event requires for you personally. Even if you have never experienced a particular event, try to think about how you would be affected if it did happen to you and rate it accordingly. Remember, you are rating each event for yourself, not anyone else.

Your ratings can range from 0 to 20. For example, if you think that "acquiring a pet" requires very little adjustment, use a low number, near zero, and place it in the blank to the right of the event. However, if you think acquiring a pet requires a great deal of adjustment, place a high number, nearer to 20, in the blank. If you think it requires medium adjustment, choose and enter an intermediate number between 0 and 20.

At the top of page #1, please indicate your age and whether you are female or male. Do not put your name anywhere on the questionnaire. Briefly read through all the items to familiarize yourself with the range of events listed. Then go back through the list and rate each event from 0 to 20. Also place a mark in the space to the right of that provided for your rating, indicating whether you have experienced the event personally and when that happened. For example, if you have experienced that event in the past 12

months, place a check mark in the space marked "12 months" and another in the space marked "Whole Life." If you have ever experienced an event during your lifetime, but not within the last 12 months, just put one check in the "Whole Life" space. If you have never experienced an event, give it a rating but leave the other spaces blank.

When you are finished, place the questionnaire on the corner of your desk. The examiner will collect it and give you another task to perform.

Please be assured that your identity and the content of your answers will remain strictly confidential. Thank you.

Richard Alden

Age: _____

Sex: F M

Life Event	Rating (0-20)	12 Months	Whole Life
1. Acquired a pet			
2. Dropped a hobby, sport, craft or recreational activity			
3. Lost driver's license			
4. Left Armed Services			
5. Dismissed from a school dormitory or other residence			
6. Moved to a new country			
7. Financial problems concerning school (in danger of not having sufficient money to continue)			
8. Started living with spouse/partner			
9. Made new friends			
10. Serious family argument other than with spouse/partner			
11. Engagement broken			
12. Did not get an expected wage or salary increase			
13. Found out couldn't have children			
14. Academic probation			

Life Event	Rating (0-20)	12 Months	Whole Life
15. Minor legal violation			
16. Left home for the first time			
17. Had trouble with a boss			
18. Took out mortgage			
19. Spouse/partner unfaithful			
20. Went off welfare			
21. Spouse/partner died			
22. Divorced			
23. Relations with spouse/partner changed for the worse			
24. Assaulted			
25. Started a love affair			
26. Someone stayed on in the household after he/she was expected to leave			
27. Robbed			
28. Involved in a lawsuit			
29. Arrested			
30. Birth of first child			
31. Married			
32. Physical illness			

Life Event	Rating (0-20)	12 Months	Whole Life
33. Moved to a better residence or neighborhood			
34. Changed jobs for a worse one			
35. Promoted at work			
36. Started a business or professional practice			
37. Adopted a child			
38. Close friend died			
39. Had financial improvement not related to work			
40. Accident in which there were no injuries			

LIFE EVENTS QUESTIONNAIRE

Part II

What follows is another list of 40 life events like the one you just filled out. I would like you to rate, again from 0 to 20, each event depending on the amount of personal change or adjustment required by an event for most people or for the average person, not just for you. In arriving at your ratings, use any knowledge which you feel is relevant, including what you have learned from your own experience and from family, friends, and acquaintances. Remember, you are to give ratings for how most people, not just you, would be affected.

Again, indicate your age and sex at the top of page #1. Read through the items, then rate each one from 0 to 20. When you are finished, you may turn the questionnaire in and leave.

If you have any questions about the questionnaire now or at any other time, I would be glad to discuss them with you. I can usually be reached in my office in Cramer Hall (392B) or through my box in the Psychology Department office. Thanks again. Your time and effort are much appreciated.

Richard Alden

Age: _____

Sex: F M

L i f e E v e n t	Rating (0-20)
1. Acquired a pet	
2. Dropped a hobby, sport, craft, or recreational activity	
3. Lost driver's license	
4. Left Armed Services	
5. Dismissed from a school dormitory or other residence	
6. Moved to a new country	
7. Financial problems concerning school (in danger of not having sufficient money to continue)	
8. Started living with spouse/partner	
9. Made new friends	
10. Serious family argument other than with spouse/partner	
11. Engagement broken	
12. Did not get an expected wage or salary increase	
13. Found out couldn't have children	
14. Academic probation	
15. Minor legal violation	

L i f e E v e n t	Rating (0-20)
16. Left home for the first time	
17. Had trouble with a boss	
18. Took out mortgage	
19. Spouse/partner unfaithful	
20. Went off welfare	
21. Spouse/partner died	
22. Divorce	
23. Relations with spouse/partner changed for the worse	
24. Assaulted	
25. Started a love affair	
26. Someone stayed on in the household after he/she was expected to leave	
27. Robbed	
28. Involved in a lawsuit	
29. Arrested	
30. Birth of first child	
31. Married	
32. Physical illness	
33. Moved to a better residence or neighborhood	

L i f e E v e n t	Rating (0-20)
34. Changed jobs for a worse one	
35. Promoted at work	
36. Started a business or professional practice	
37. Adopted a child	
38. Close friend died	
39. Had financial improvement not related to work	
40. Accident in which there were no injuries	

APPENDIX B

SUMMARY OF TUKEY'S TEST FOR NON-ADDITIVITY

R = rating

B = sum of ratings by subject_i

S = sum of ratings by item_j

\overline{BS} = grand mean

$$d_{ij} = (B_i - \overline{BS})(S_j - \overline{BS})$$

Self condition

$$\sum_1^{4000} R = 50,990$$

$$\sum_1^{4000} R^2 = 756,456 = [BS]$$

$$\frac{\left(\sum_1^{4000} R\right)^2}{N} = 649,995.03 = [X]$$

$$\sum_1^{40} \frac{\left(\sum_1^{100} B\right)^2}{40} = 685,942.44 = [B]$$

$$\sum_1^{100} \frac{\left(\sum_1^{40} S\right)^2}{40} = 666,256.95 = [S]$$

$$SS_{\text{residual}} = [BS] - [B] - [S] + [X] = 54,251.64$$

$$SS_{\text{nonadd}} = \frac{\left(\sum \sum d_{ij} BS_{ij}\right)^2}{\left(\sum d_i^2\right)\left(\sum d_j^2\right)} = 4.44$$

$$SS_{\text{remainder}} = SS_{\text{residual}} - SS_{\text{nonadd}} = 54,247.19$$

$$df_{\text{nonadd}} = 1$$

$$df_{\text{remainder}} = df_{\text{residual}} - 1 = 3,860$$

$$F = \frac{SS_{\text{nonadd}} / df_{\text{nonadd}}}{SS_{\text{remainder}} / df_{\text{remainder}}} = 0.32$$

$$df = 1, 3860, p > .25$$

Other condition

$$\sum_1^{4000} R = 51,880$$

$$\sum_1^{4000} R^2 = 768,306 = [BS]$$

$$\frac{\left(\sum_1^{4000} R\right)^2}{N} = 672,883.60 = [X]$$

$$\sum_1^{40} \frac{\left(\sum_1^{100} B\right)^2}{100} = 707,765.34 = [B]$$

$$\sum_1^{100} \frac{\left(\sum_1^{40} S\right)^2}{40} = 687,319.40 = [S]$$

$$SS_{\text{residual}} = [BS] - [B] - [S] + [X] = 46,104.86$$

$$SS_{\text{nonadd}} = \frac{\left(\sum \sum d_{ij} BS_{ij}\right)^2}{\left(\sum d_i^2\right)\left(\sum d_j^2\right)} = 14.11$$

$$SS_{\text{remainder}} = SS_{\text{residual}} - SS_{\text{nonadd}} = 46,090.75$$

$$df_{\text{nonadd}} = 1$$

$$df_{\text{remainder}} = 3,860$$

$$F = \frac{SS_{\text{nonadd}} / df_{\text{nonadd}}}{SS_{\text{remainder}} / df_{\text{remainder}}} = 1.18$$

$$df = 1, 3860, p > .25$$

APPENDIX C

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 1: Acquired a pet

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	6,178.80	_____	_____	_____
Between subjects	99	4,973.80	_____	_____	_____
Main effects	2	94.91	47.46	0.94	.40
Gender (G)	1	46.93	46.93	0.93	.34
Experience (E)	1	56.61	56.61	1.12	.30
G x E	1	11.48	11.48	0.23	.64
Error _b	96	4,867.41	50.71	_____	_____
Within subjects	100	1,205.00	_____	_____	_____
Reference (R)	1	2.89	2.89	0.23	>.25
2-way interactions	2	17.87	17.87	0.72	.49
G x R	1	6.49	6.49	0.53	.47
E x R	1	9.77	9.77	0.79	.38
G x E x R	1	0.45	0.45	0.04	.84
Error _w	96	1,183.79	12.33	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 2: Dropped a hobby, sport, craft, recreation

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	7,579.15	_____	_____	_____
Between subjects	99	5,536.15	_____	_____	_____
Main effects	2	149.26	74.63	1.36	.26
Gender (G)	1	68.41	68.41	1.25	.27
Experience (E)	1	94.61	94.61	1.72	.19
G x E	1	111.57	111.57	2.03	.16
Error _b	96	5,275.32	54.95	_____	_____
Within subjects	100	2,043.00	_____	_____	_____
Reference (R)	1	0.25	0.25	0.01	>.25
2-way interactions	2	4.44	2.22	0.11	.90
G x R	1	1.08	1.08	0.05	.82
E x R	1	3.70	3.70	0.17	.68
G x E x R	1	0.56	0.56	0.03	.87
Error _w	96	2,037.75	21.23	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES OF ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 3: Lost driver's license

Source	df	SS	MS	F	p
Total	199	11,819.56			
Between subjects	99	9,745.56			
Main effects	2	1,672.87	836.43	9.95	.00
Gender (G)	1	1,039.56	1,039.56	7.92	.006*
Experience (E)	1	1,672.87	1,672.87	12.37	.001*
G x E	1	3.75	3.75	0.05	.83
Error _b	96	8,068.94	84.06		
Within subjects	100	2,074.00			
Reference	1	36.00	36.00	1.84	>.25
2-way interactions	2	149.75	74.87	3.82	.03
G x R	1	83.70	83.70	4.27	.04 *
E x R	1	63.07	63.07	3.23	.08
G x E x R	1	6.84	6.84	0.35	.56
Error _w	96	1,881.41	19.60		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 4: Left Armed Services

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	9,637.82			
Between subjects	99	7,897.82			
Main effects	2	542.30	271.15	3.54	.04
Gender (G)	1	71.93	71.93	0.94	.34
Experience (E)	1	345.35	345.35	4.51	.04*
G x E	1	8.33	8.33	0.11	.74
Error _b	96	7,374.19	76.53		
Within subjects	100	1,740.00			
Reference (R)	1	121.00	121.00	7.41	<.01*
2-way interactions	2	51.62	25.81	1.58	.21
G x R	1	16.75	16.75	1.03	.31
E x R	1	20.95	20.95	1.28	.26
G x E x R	1	0.00	0.00	0.00	1.00
Error _w	96	1,567.38	16.33		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 5: Dismissed from school residence

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	6,832.36			
Between subjects	99	4,600.36			
Main effects	2	0.24	0.12	0.00	1.00
Gender (G)	1	0.16	0.16	0.00	.96
Experience (E)	1	0.08	0.08	0.00	.97
G x E	1	37.01	37.01	0.78	.38
Error _b	96	4,563.12	47.53		
Within subjects	100	2,232.00			
Reference (R)	1	67.24	67.24	3.10	<.10
2-way interactions	2	29.81	14.90	0.69	.51
G x R	1	7.95	7.95	0.37	.55
E x R	1	21.60	21.60	1.00	.32
G x E x R	1	53.55	53.55	2.47	.12
Error _w	96	2,081.40	21.68		

TABLE VII

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 6: Moved to new country

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,872.42	_____	_____	_____
Between subjects	99	3,637.41	_____	_____	_____
Main effects	2	132.56	66.28	1.82	.16
Gender (G)	1	76.92	76.92	2.11	.15
Experience (E)	1	64.14	64.14	1.76	.19
G x E	1	1.63	1.63	0.05	.83
Error _b	96	3,503.22	36.49	_____	_____
Within subjects	100	1,236.01	_____	_____	_____
Reference (R)	1	54.76	54.76	4.48	<.05*
2-way interactions	2	5.71	2.85	0.23	.79
G x R	1	1.61	1.61	0.13	.72
E x R	1	3.76	3.76	0.31	.58
G x E x R	1	2.03	2.03	0.17	.69
Error _w	96	1,173.51	12.22	_____	_____

Asterisk denotes that $p = \leq .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 7: Financial problems re school

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,898.41			
Between subjects	99	2,804.41			
Main effects	2	41.84	20.92	0.73	.48
Gender (G)	1	16.17	16.17	0.57	.45
Experience (E)	1	27.03	27.03	0.95	.33
G x E	1	17.08	17.08	0.60	.44
Error _b	96	2,745.50	28.60		
Within subjects	100	2,094.00			
Reference (R)	1	21.16	21.16	1.00	>.25
2-way interactions	2	11.41	5.70	0.27	.77
G x R	1	10.34	10.34	0.49	.49
E x R	1	1.31	1.31	0.06	.80
G x E x R	1	27.14	27.14	1.28	.26
Error _w	96	2,034.29	21.19		

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 8: Started living with spouse/partner

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	3,764.75	_____	_____	_____
Between subjects	99	2,522.75	_____	_____	_____
Main effects	2	30.76	15.38	0.60	.55
Gender (G)	1	28.92	28.92	1.13	.29
Experience (E)	1	6.53	6.53	0.26	.62
G x E	1	33.74	33.74	1.32	.25
Error _b	96	2,458.25	25.61	_____	_____
Within subjects	100	1,242.00	_____	_____	_____
Reference (R)	1	0.04	0.04	0.00	>.25
2-way interactions	2	12.84	6.42	0.50	.61
G x R	1	5.03	5.03	0.40	.53
E x R	1	4.86	4.86	0.38	.54
G x E x R	1	2.39	2.39	0.19	.67
Error _w	96	1,226.73	12.78	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 9: Made new friends

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,537.70			
Between subjects	99	3,311.70			
Main effects	2	271.62	135.81	4.31	.02
Gender (G)	1	1.03	1.03	0.03	.86
Experience (E)	1	267.33	267.33	8.48	.004*
G x E	1	14.83	14.83	0.47	.49
Error _b	96	3,025.25	31.51		
Within subjects	100	1,226.00			
Reference (R)	1	0.64	0.64	0.05	>.25
2-way interactions	2	6.24	3.12	0.25	.78
G x R	1	1.78	1.78	0.14	.71
E x R	1	4.08	4.08	0.32	.57
G x E x R	1	6.28	6.28	0.50	.48
Error _w	96	1,212.84	12.63		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 10: Serious non-spouse family argument

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	5,389.36			
Between subjects	99	2,919.37			
Main effects	2	23.09	11.55	0.42	.66
Gender (G)	1	1.47	1.47	0.05	.82
Experience (E)	1	21.09	21.09	0.77	.38
G x E	1	272.56	272.56	9.97	.002*
Error _b	96	2,623.72	27.33		
Within subjects	100	2,469.99			
Reference (R)	1	1.96	1.96	0.08	>.25
2-way interactions	2	19.24	9.96	0.39	.68
G x R	1	18.96	18.96	0.77	.38
E x R	1	0.53	0.53	0.02	.88
G x E x R	1	83.97	83.97	3.41	.07
Error _w	96	2,364.82	24.63		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 11: Engagement broken

Source	df	SS	MS	F	p
Total	199	3,594.27			
Between subjects	99	2,663.28			
Main effects	2	50.26	25.13	0.92	.40
Gender (G)	1	0.37	0.37	0.01	.91
Experience (E)	1	50.26	50.26	1.81	.18
G x E	1	1.80	1.80	0.07	.80
Error _b	96	2,611.22	27.20		
Within subjects	100	930.99			
Reference (R)	1	37.21	37.21	4.03	<.05*
2-way interactions	2	3.77	1.88	0.20	.82
G x R	1	3.38	3.38	0.36	.55
E x R	1	0.56	0.56	0.06	.81
G x E x R	1	4.11	4.11	0.45	.51
Error _w	96	885.90	9.23		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 12: Didn't get expected raise

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,587.27	_____	_____	_____
Between subjects	99	2,820.34	_____	_____	_____
Main effects	2	1.81	0.91	0.03	.97
Gender (G)	1	0.18	0.18	0.01	.94
Experience (E)	1	1.38	1.38	0.05	.83
G x E	1	58.46	58.46	2.03	.16
Error _b	96	2,760.07	28.75	_____	_____
Within subjects	100	1,766.93	_____	_____	_____
Reference (R)	1	118.81	118.81	6.94	<.01*
2-way interactions	2	4.06	2.03	0.12	.89
G x R	1	0.73	0.73	0.04	.84
E x R	1	2.67	2.67	0.16	.69
G x E x R	1	0.05	0.05	0.00	.96
Error _w	96	1,644.01	17.13	_____	_____

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 13: Found out couldn't have children

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	7,164.67	_____	_____	_____
Between subjects	99	4,744.67	_____	_____	_____
Main effects	2	174.69	87.35	1.85	.16
Gender (G)	1	123.78	123.78	2.62	.11
Experience (E)	1	39.76	39.76	0.84	.36
G x E	1	40.22	40.22	0.85	.36
Error _b	96	4,529.76	47.19	_____	_____
Within subjects	100	2,420.00	_____	_____	_____
Reference (R)	1	64.00	64.00	2.72	<.10
2-way interactions	2	85.54	42.77	1.82	.17
G x R	1	1.914	1.914	0.08	.78
E x R	1	81.35	81.35	3.46	.07
G x E x R	1	12.21	12.21	0.52	.47
Error _w	96	2,258.25	23.52	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 14: Academic probation

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	5,244.57	_____	_____	_____
Between subjects	99	3,308.57	_____	_____	_____
Main effects	2	125.70	62.85	1.91	.15
Gender (G)	1	5.77	5.77	0.18	.68
Experience (E)	1	125.61	125.61	3.81	.05*
G x E	1	19.27	19.27	0.58	.45
Error _b	96	3,163.60	32.95	_____	_____
Within subjects	100	1,936.00	_____	_____	_____
Reference (R)	1	64.00	64.00	3.50	<.10
2-way interactions	2	115.36	57.68	3.15	.05
G x R	1	9.60	9.60	0.52	.47
E x R	1	90.60	90.60	4.95	.03*
G x E x R	1	1.13	1.13	0.06	.80
Error _w	96	1,755.51	18.29	_____	_____

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 15: Minor legal violation

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	6,076.35	_____	_____	_____
Between subjects	99	4,540.35	_____	_____	_____
Main effects	2	401.68	200.82	4.80	.01
Gender (G)	1	6.14	6.14	0.15	.70
Experience (E)	1	400.09	400.09	9.55	.003*
G x E	1	118.01	118.01	2.82	.10
Error _b	96	4,020.69	_____	_____	_____
Within subjects	100	1,536.00	_____	_____	_____
Reference (R)	1	4.84	4.84	0.31	>.25
2-way interactions	2	45.98	22.99	1.49	.23
G x R	1	24.76	24.76	1.61	.210
E x R	1	29.69	29.69	1.93	.17
G x E x R	1	5.46	5.46	0.35	.55
Error _w	96	1,479.72	15.41	_____	_____

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 16: Left home for first time

Source	df	SS	MS	F	p
Total	199	7,381.43			
Between subjects	99	5,774.43			
Main effects	2	77.28	38.64	0.66	.52
Gender (G)	1	68.03	68.03	1.16	.28
Experience (E)	1	21.32	21.32	0.36	.55
G x E	1	73.82	73.82	1.26	.26
Error _b	96	5,623.32	58.58		
Within subjects	100	1,607.00			
Reference (R)	1	114.49	114.49	7.67	< .01*
2-way interactions	2	39.17	19.59	1.31	.27
G x R	1	1.91	1.91	0.13	.72
E x R	1	32.59	32.59	2.19	.14
G x E x R	1	21.40	21.40	1.44	.23
Error _w	96	1,431.94	14.92		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 17: Had trouble with a boss

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,086.98			
Between subjects	99	2,347.98			
Main effects	2	236.99	118.50	5.48	.006
Gender (G)	1	4.30	4.30	0.20	.66
Experience (E)	1	226.21	226.21	10.46	.002*
G x E	1	34.12	34.12	1.58	.21
Error _b	96	2,076.87	21.63		
Within subjects	100	1,739.00			
Reference (R)	1	4.41	4.41	0.25	>.25
2-way interactions	2	39.88	19.94	1.13	.33
G x R	1	28.00	28.00	1.59	.21
E x R	1	9.08	9.08	0.51	.47
G x E x R	1	0.11	0.11	0.00	.94
Error _w	96	1,694.60	17.65		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 18: Took out mortgage

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	5,139.18			
Between subjects	99	3,810.18			
Main effects	2	11.40	5.70	0.14	.87
Gender (G)	1	0.54	0.54	0.01	.91
Experience (E)	1	10.80	10.80	0.27	.60
G x E	1	3.33	3.33	0.08	.77
Error _b	96	3,795.45	39.54		
Within subjects	100	1,329.00			
Reference (R)	1	62.41	62.41	4.75	<.05*
2-way interactions	2	5.99	3.00	0.23	.80
G x R	1	4.38	4.38	0.33	.57
E x R	1	1.69	1.69	0.13	.72
G x E x R	1	0.60	0.60	0.05	.83
Error _w	96	1,260.00	13.13		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 19: Spouse/partner unfaithful

Source	df	SS	MS	F	p
Total	199	3,827.51			
Between subjects	99	2,693.51			
Main effects	2	6.52	3.26	0.12	.89
Gender (G)	1	6.48	6.48	0.23	.63
Experience (E)	1	0.30	0.30	0.01	.92
G x E	1	8.15	8.15	0.29	.59
Error _b	96	2,678.85	27.91		
Within subjects	100	1,134.00			
Reference (R)	1	51.84	51.84	4.76	< .05*
2-way interactions	2	35.23	17.62	1.62	.20
G x R	1	32.33	32.33	2.97	.08
E x R	1	6.14	6.14	0.56	.45
G x E x R	1	1.47	1.47	0.14	.71
Error _w	96	1,045.46	10.89		

Asterisk denotes that $p \leq .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 20: Went off welfare

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	6,499.70	_____	_____	_____
Between subjects	99	3,740.70	_____	_____	_____
Main effects	2	40.21	20.11	0.53	.59
Gender (G)	1	38.07	38.07	1.00	.32
Experience (E)	1	3.02	3.02	0.53	.78
G x E	1	40.51	40.51	1.06	.31
Error _b	96	3,659.98	38.13	_____	_____
Within subjects	100	2,759.00	_____	_____	_____
Reference (R)	1	98.01	98.01	3.59	<.10
2-way interactions	2	22.62	11.31	0.42	.66
G x R	1	0.79	0.79	0.03	.87
E x R	1	21.42	21.42	0.79	.38
G x E x R	1	19.40	19.40	0.71	.40
Error _w	96	2,618.97	27.28	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 21: Spouse/partner died

Source	df	SS	MS	F	p
Total	199	1,725.48			
Between subjects	99	1,336.48			
Main effects	2	14.46	7.23	0.53	.59
Gender (G)	1	9.25	9.25	0.68	.41
Experience (E)	1	6.53	6.53	0.48	.49
G x E ^a	1				
Error _b	96	1,322.01	13.63		
Within subjects	100	389.00			
Reference (R)	1	0.49	0.49	0.12	>.25
2-way interactions	2	1.35	0.67	0.17	.85
G x R	1	1.34	1.34	0.17	.56
E x R	1	0.00	0.00	0.00	.99
G x E x R	1				
Error _w	96	387.16	3.99		

^aDue to empty cell, higher order interactions have been suppressed.

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 22: Divorced

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	2,806.97	_____	_____	_____
Between subjects	99	2,136.96	_____	_____	_____
Main effects	2	41.16	20.58	0.96	.39
Gender (G)	1	27.54	27.54	1.28	.26
Experience (E)	1	13.58	13.58	0.63	.43
G x E	1	29.34	29.34	1.36	.25
Error _b	96	2,066.47	21.53	_____	_____
Within subjects	100	670.01	_____	_____	_____
Reference (R)	1	3.24	3.24	0.49	>.25
2-way interactions	2	18.65	9.32	1.39	.25
G x R	1	2.15	2.15	0.32	.57
E x R	1	16.51	16.51	2.47	.12
G x E x R	1	7.00	7.00	1.05	.31
Error _w	96	641.12	6.68	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 23: Relations with spouse/partner got worse

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	2,908.11	_____	_____	_____
Between subjects	99	1,929.10	_____	_____	_____
Main effects	2	21.73	10.86	0.55	.58
Gender (G)	1	2.27	2.27	0.12	.74
Experience (E)	1	19.50	19.50	0.99	.32
G x E	1	16.73	16.73	0.85	.36
Error _b	96	1,890.64	19.69	_____	_____
Within subjects	100	979.01	_____	_____	_____
Reference (R)	1	12.25	12.25	1.23	>.25
2-way interactions	2	11.96	5.98	0.60	.55
G x R	1	11.76	11.76	1.86	.28
E x R	1	0.18	0.18	0.02	.89
G x E x R	1	1.99	1.99	0.20	.66
Error _w	96	952.81	9.93	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 24: Assaulted

Source	df	SS	MS	F	p
Total	199	4,767.45			
Between subjects	99	3,416.45			
Main effects	2	332.11	166.06	5.18	.007
Gender (G)	1	310.24	310.24	9.67	.002*
Experience (E)	1	6.35	6.35	0.20	.66
G x E	1	3.04	3.04	0.10	.76
Error _b	96	3,081.30	32.10		
Within subjects	100	1,351.00			
Reference (R)	1	4.41	4.41	0.37	>.25
2-way interactions	2	201.53	100.76	8.45	.00
G x R	1	140.51	140.51	11.79	.001*
E x R	1	40.02	40.02	3.36	.07
G x E x R	1	0.55	0.55	0.05	.83
Error _w	96	1,144.51	11.92		

Asterisk denotes that $p \leq .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 25: Started a love affair

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,624.70			
Between subjects	99	3,386.32			
Main effects	2	128.97	64.49	1.90	.16
Gender (G)	1	8.72	8.72	0.26	.61
Experience (E)	1	123.46	123.46	3.64	.06
G x E	1	0.001	0.001	0.00	1.00
Error _b	96	3,527.35	33.93		
Within subjects	100	1,238.38			
Reference	1	1.22	1.22	0.10	>.25
2-way interactions	2	30.88	15.44	1.23	.30
G x R	1	30.19	30.19	2.40	.12
E x R	1	1.27	1.27	0.10	.75
G x E x R	1	0.00	0.00	0.00	.99
Error _w	96	1,206.28	12.57		

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 26: Someone stayed on in household
after he was expected to leave

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,680.74	_____	_____	_____
Between subjects	99	3,427.75	_____	_____	_____
Main effects	2	136.89	68.44	2.06	.13
Gender (G)	1	86.34	86.34	2.59	.11
Experience (E)	1	48.54	48.54	1.46	.23
G x E	1	94.98	94.98	2.85	.09
Error _b	96	3,195.89	33.29	_____	_____
Within subjects	100	1,252.99	_____	_____	_____
Reference (R)	1	34.81	34.81	2.81	<.10
2-way interactions	2	26.43	13.22	1.07	.35
G x R	1	20.08	20.08	1.62	.21
E x R	1	6.70	6.70	0.54	.46
G x E x R	1	1.17	1.17	0.10	.76
Error _w	96	1,190.58	12.40	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 27: Robbed

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	5,477.29	_____	_____	_____
Between subjects	99	4,164.28	_____	_____	_____
Main effects	2	129.50	64.75	1.54	.22
Gender (G)	1	87.50	87.50	2.08	.15
Experience (E)	1	21.33	21.33	0.51	.48
G x E	1	0.02	0.02	0.00	.99
Error _b	96	4,034.77	42.03	_____	_____
Within subjects	100	1,313.01	_____	_____	_____
Reference (R)	1	26.01	26.01	2.16	> .10
2-way interactions	2	129.88	64.94	5.39	.006
G x R	1	45.37	45.37	3.77	.06
E x R	1	60.41	60.41	5.01	.03 *
G x E x R	1	0.26	0.26	0.02	.86
Error _w	96	1,156.86	12.05	_____	_____

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 28: Involved in a lawsuit

Source	df	SS	MS	F	p
Total	199	4,585.97			
Between subjects	99	3,499.96			
Main effects	2	28.21	14.10	0.41	.67
Gender (G)	1	23.39	23.39	0.68	.41
Experience (E)	1	1.88	1.88	0.05	.82
G x E	1	169.28	169.28	4.92	.03*
Error _b	96	3,302.48	34.40		
Within subjects	100	1,086.01			
Reference (R)	1	3.24	3.24	0.29	>.25
2-way interactions	2	4.57	2.28	0.20	.82
G x R	1	0.92	0.92	0.08	.78
E x R	1	2.98	2.98	0.27	.61
G x E x R	1	5.28	5.28	0.47	.49
Error _w	96	1,072.92	11.18		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 29: Arrested

Source	df	SS	MS	F	p
Total	199	4,090.04			
Between subjects	99	3,271.04			
Main effects	2	123.95	61.97	1.89	.16
Gender (G)	1	4.76	4.76	0.15	.70
Experience (E)	1	122.91	122.91	3.75	.06
G x E	1	2.77	2.77	0.09	.77
Error _b	96	3,144.32	32.75		
Within subjects	100	819.00			
Reference (R)	1	0.09	0.09	0.01	>.25
2-way interactions	2	35.63	17.81	2.19	.12
G x R	1	0.19	0.19	0.02	.88
E x R	1	33.99	33.99	4.17	.04*
G x E x R	1	1.20	1.20	0.15	.70
Error _w	96	782.08	8.15		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 30: Birth of first child

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	3,323.01			
Between subjects	99	2,283.01			
Main effects	2	19.79	9.89	0.42	.66
Gender (G)	1	6.78	6.78	0.29	.59
Experience (E)	1	10.27	10.27	0.44	.51
G x E	1	17.83	17.83	0.29	.59
Error _b	96	2,245.40	23.39		
Within subjects	100	1,040.00			
Reference (R)	1	0.16	0.16	0.01	>.25
2-way interactions	2	7.43	3.72	0.35	.71
G x R	1	4.19	4.19	0.39	.53
E x R	1	4.28	4.28	0.40	.53
G x E x R	1	0.17	0.17	0.02	.90
Error _w	96	1,032.24	10.75		

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 31: Married

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	3,947.31	_____	_____	_____
Between subjects	99	2,701.30	_____	_____	_____
Main effects	2	28.14	14.07	0.51	.61
Gender (G)	1	8.88	8.88	0.32	.57
Experience (E)	1	15.36	15.36	0.55	.46
G x E	1	4.05	4.05	0.15	.70
Error _b	96	2,669.12	27.80	_____	_____
Within subjects	100	1,246.01	_____	_____	_____
Reference (R)	1	5.76	5.76	0.47	>.25
2-way interactions	2	65.42	32.71	2.68	.07
G x R	1	20.24	20.24	1.66	.20
E x R	1	36.15	36.15	2.96	.08
G x E x R	1	2.91	2.91	0.24	.63
Error _w	96	1,171.92	12.21	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 32: Physical illness

Source	df	SS	MS	F	p
Total	199	6,231.68			
Between subjects	99	5,153.67			
Main effects	2	467.02	233.51	4.79	.01
Gender (G)	1	69.86	69.86	1.43	.23
Experience (E)	1	372.50	372.50	7.65	.007*
G x E	1	8.98	8.98	0.18	.67
Error _b	96	4,677.67	48.73		
Within subjects	100	1,078.01			
Reference (R)	1	7.84	7.84	0.70	>.25
2-way interactions	2	1.56	0.78	0.07	.98
G x R	1	1.45	1.45	0.13	.72
E x R	1	0.16	0.16	0.02	.90
G x E x R	1	0.09	0.09	0.01	.93
Error _w	96	1,068.52	11.13		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 33: Moved to better residence

Source	df	SS	MS	F	p
Total	199	4,723.32			
Between subjects	99	3,149.32			
Main effects	2	61.58	30.79	0.96	.39
Gender (G)	1	45.69	45.69	1.42	.24
Experience (E)	1	31.56	31.56	0.98	.32
G x E	1	7.68	7.78	0.24	.62
Error _b	96	3,079.96	32.08		
Within subjects	100	1,574.00			
Reference (R)	1	67.24	67.24	4.39	< .05*
2-way interactions	2	37.20	18.60	1.22	.30
G x R	1	37.20	37.20	2.43	.12
E x R	1	2.68	2.68	0.18	.68
G x E x R	1	0.05	0.05	0.00	.95
Error _w	96	1,469.51	15.31		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 34: Change jobs for a worse one

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	3,526.95	_____	_____	_____
Between subjects	99	2,356.95	_____	_____	_____
Main effects	2	20.57	10.28	0.43	.66
Gender (G)	1	4.16	4.16	0.17	.68
Experience (E)	1	18.47	18.47	0.76	.38
G x E	1	14.64	14.64	0.61	.44
Error _b	96	2,321.74	24.19	_____	_____
Within subjects	100	1,170.00	_____	_____	_____
Reference (R)	1	2.56	2.56	0.21	>.25
2-way interactions	2	0.74	0.37	0.03	.97
G x R	1	0.05	0.05	0.00	.95
E x R	1	0.63	0.63	0.05	.82
G x E x R	1	0.48	0.48	0.04	.84
Error _w	96	1,166.22	12.15	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 35: Promoted at work

Source	df	SS	MS	F	p
Total	199	5,120.13			
Between subjects	99	3,926.12			
Main effects	2	2.43	1.22	0.03	.97
Gender (G)	1	2.09	2.09	0.05	.82
Experience (E)	1	0.14	0.14	0.00	.95
G x E	1	30.81	30.81	0.76	.39
Error _b	96	3,892.88	40.55		
Within subjects	100	1,194.01			
Reference (R)	1	0.04	0.04	0.00	>.25
2-way interactions	2	61.15	30.57	2.63	.08
G x R	1	22.64	22.64	1.95	.17
E x R	1	46.49	46.49	4.00	.05*
G x E x R	1	17.72	17.72	1.53	.22
Error _w	96	1,115.10	11.62		

Asterisk denotes that $p = \leq .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 36: Started business

Source	df	SS	MS	F	p
Total	199	3,341.77			
Between subjects	99	2,467.76			
Main effects	2	45.38	22.69	0.91	.41
Gender (G)	1	43.49	43.49	1.75	.19
Experience (E)	1	0.00	0.00	0.00	.99
G x E	1	29.72	29.72	1.19	.28
Error _b	96	2,392.66	24.92		
Within subjects	100	874.01			
Reference (R)	1	1.96	1.96	0.24	>.25
2-way interactions	2	74.10	37.05	4.46	.01
G x R	1	50.62	50.62	6.09	.02*
E x R	1	11.09	11.09	1.34	.25
G x E x R	1	0.53	0.53	0.06	.80
Error _w	96	797.42	8.31		

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 37: Adopted a child

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	4,533.81			
Between subjects	99	3,512.80			
Main effects	2	107.37	53.69	1.53	.22
Gender (G)	1	88.54	88.54	2.52	.12
Experience (E)	1	25.14	25.14	0.72	.40
G x E	1	28.02	28.02	0.80	.37
Error _b	96	3,377.41	35.18		
Within subjects	100	1,021.01			
Reference (R)	1	12.25	12.25	1.17	>.25
2-way interactions	2	6.94	3.47	0.33	.72
G x R	1	6.93	6.93	0.67	.42
E x R	1	0.03	0.03	0.00	.96
G x E x R	1	0.73	0.73	0.07	.79
Error _w	96	1,001.09	10.43		

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 38: Close friend died

Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	3,668.60	_____	_____	_____
Between subjects	99	2,967.60	_____	_____	_____
Main effects	2	140.20	70.10	2.51	.09
Gender (G)	1	134.90	134.90	4.82	.03*
Experience (E)	1	1.22	1.22	0.04	.84
G x E	1	142.27	142.27	5.09	.03*
Error _b	96	2,685.13	27.97	_____	_____
Within subjects	100	701.00	_____	_____	_____
Reference (R)	1	20.25	20.25	2.91	<.10
2-way interactions	2	5.77	2.89	0.41	.66
G x R	1	4.10	4.10	0.59	.45
E x R	1	1.16	1.16	0.17	.68
G x E x R	1	5.53	5.53	0.79	.38
Error _w	96	669.45	6.97	_____	_____

Asterisk denotes that $p = < .05$

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 39: Non-work related financial improvement

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Total	199	6,622.53	_____	_____	_____
Between subjects	99	5,129.53	_____	_____	_____
Main effects	2	91.32	45.66	0.88	.42
Gender (G)	1	66.84	66.84	1.28	.26
Experience (E)	1	32.31	32.31	0.62	.43
G x E	1	39.94	39.94	0.77	.38
Error _b	96	4,998.27	52.07	_____	_____
Within subjects	100	1,493.00	_____	_____	_____
Reference (R)	1	34.81	34.81	2.39	>.10
2-way interactions	2	47.60	23.80	1.63	.20
G x R	1	16.93	16.93	1.16	.28
E x R	1	34.76	34.76	2.39	.13
G x E x R	1	12.71	12.71	0.87	.35
Error _w	96	1,397.88	14.56	_____	_____

SUMMARY OF THREE-WAY ANALYSIS OF VARIANCE

WITH REPEATED MEASURES ON ONE FACTOR:

GENDER x EXPERIENCE x REFERENCE

Event No. 40: Non-injury accident

Source	df	SS	MS	F	p
Total	199	5,813.16			
Between subjects	99	3,596.14			
Main effects	2	80.74	40.37	1.12	.33
Gender (G)	1	0.42	0.42	0.01	.91
Experience (E)	1	80.57	80.57	2.23	.14
G x E	1	46.97	46.97	1.30	.25
Error _b	96	3,468.42	36.13		
Within subjects	100	2,217.02			
Reference (R)	1	72.25	72.25	3.43	<.10
2-way interactions	2	116.92	58.46	2.77	.07
G x R	1	106.91	106.91	5.07	.03*
E x R	1	11.80	11.80	0.56	.46
G x E x R	1	3.00	3.00	0.14	.71
Error _w	96	2,024.85	21.09		

Asterisk denotes that $p = < .05$