

## **A Prospective Study of Life Events, Social Support, and Psychological Symptomatology During the Transition From High School to College<sup>1</sup>**

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*Life events, perceived social support, and psychological symptoms were studied prospectively among older adolescents during the transition from high school to college. These variables were reciprocally related to one another in patterns which changed over a period of 6 months. The findings are supportive of a transactional model of stress that emphasizes reciprocal, rather than linear, paths of influence. Further, the study highlights the importance of studying stress and social support during life transitions that may constitute periods of greater vulnerability to life events.*

A major focus of primary prevention efforts involves the reduction of the adverse consequences of stressful life events among children and adolescents (e.g., Bloom, 1971; Cowen, 1985; Danish, Smyer, & Nowak, 1980). These programs are based on the general assumption that stressful events cause, or at least increase, individuals' vulnerability to psychological, behavioral, or somatic disturbance. However, the evidence for this association among children and adolescents can be described as promising at best (see Compas, 1985, for a review of this literature).

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The vast majority of studies of stressful life events involving younger age groups have employed retrospective research designs in which data concerning life events and disorder are obtained at a single point in time. Among the many problems inherent in such designs is the inability to distinguish the direction of influence between stressful events and psychological or somatic symptoms. Thus, although significant correlations have been found consistently, it is unclear whether stressful events lead to increased symptoms, symptoms lead to increased negative life events, or the two are related reciprocally to one another (Compas, 1985). It is essential to clarify the nature of the relationship between events and symptoms before devising prevention programs based on the assumption that increased negative life events increase the probability of subsequent difficulties. This requires the use of prospective longitudinal designs in which stressful events, symptoms, and any variables thought to mediate the relationship between the two are assessed at more than one point in time.

Two themes in the literature on stress and disorder warrant emphasis in developing a clearer understanding of the life events-disorder relationship: (a) *reciprocal* influences of stress and disorder and (b) the importance of life *transitions* as periods of vulnerability to stressful events. Reciprocal influences are an important aspect of transactional models of personality (e.g., Bandura, 1978), human development (e.g., Cairns, Green, & MacCombie, 1980; Sameroff, 1975), and, most relevant to the present study, stress and coping processes (Lazarus & Folkman, 1984). These models deemphasize the causal predominance of either person or environment factors and emphasize the mutual effects of person and environment variables on one another. Thus, in these models negative life events may lead to psychological symptoms while symptoms may also increase the likelihood of aversive life events, in contrast to a linear "victimization" model in which stressful events lead to disorder only (see B. P. Dohrenwend & Shrout, 1985; B. S. Dohrenwend & Dohrenwend, 1981). For example, divorce of one's parents may lead to symptoms of depression, which in turn may lead to disruption of interpersonal relationships and poor performance in school (i.e., other "negative events"). In this way, events and symptoms may form an ongoing negative cycle.

The association between events and symptoms cannot be assumed to be static and unchanging. At certain times individuals may be at increased vulnerability to the adverse effects of stressful events. For example, Monroe, Imhoff, Wise, and Harris (1983) found an increased association between prior events and depression during "high-risk psychosocial circumstances." Major life transitions (e.g., parental divorce, changing schools, geographic relocation) are possible examples of such times of heightened vulnerability (Felner, Farber, & Primavera, 1983). Transitions involve periods of change,

loss, or disruption of a prior structure or order in an individual's life. Thus, a person's coping resources may be taxed by their attempts to manage the demands of the transition. Further, transitions may involve the loss of sources of social support, leaving the person less able to cope with ongoing stress (Felner et al., 1983). As a result, stressful life events which would have been managed successfully prior to the transition may now exceed the individual's coping capacities and lead to psychological or somatic distress. Thus, transitions may be an important focus for prevention programs designed to reduce stress-related problems.

The normative transition of late adolescence from living with one's parents and attending high school to moving away and attending college represents an optimal opportunity to study the association of life events and symptomatology. Leaving home and entering college involves both separation from family and friends as well as adjustment to an environment that presents new academic and social demands. These demands have been hypothesized to be a source of substantial risk and vulnerability (e.g., Bloom, 1971; Coelho, 1979). Because this transition involves separation from family and high school friends and the development of new friendship networks, social support may be a critical factor in understanding the life events-disorder relationship during this period.

The present study examined stressful life events, perceived social support, and psychological symptoms in a sample of older adolescents at three times: near the end of their senior year in high school, 2 weeks after they entered college, and 3 months after entrance to college. It was hypothesized that life events and social support would be predictive of symptoms across time. Data from a larger sample studied at the first point in time (Compas, Slavín, Wagner, & Vannatta, in press) indicated that these associations would involve events perceived as negative but not those appraised as neutral or positive, and satisfaction with social support but not the total number of support persons available to an individual. Consistent with a transactional model of stress, it was also hypothesized that psychological symptoms would predict subsequent negative life events and satisfaction with social support. Further, it was hypothesized that the second data collection, 2 weeks after students arrived at college, would represent the point of greatest vulnerability during this transition. At this point former sources of support have been left behind, new ones have not yet been generated, and adaptational demands are likely to be greatest. Accordingly, it was hypothesized that the association of symptoms at the second data collection with prior life events would be greater than the association of symptoms at the third data collection with prior life events.

A brief comment on strategies for examining the relationship between stressful events and symptomatology using panel data is necessary. Two ap-

proaches have been used in previous studies. The first involves the examination of the association between events and symptoms within a time panel, controlling for prior symptoms (e.g., Cronkite & Moos, 1984; Schaefer, Coyne, & Lazarus, 1981). A second approach focuses on the relationship of life events at one time with symptoms at a subsequent point in time, controlling for symptoms at the first point in time (e.g., Monroe et al., 1983). We have selected the second approach for two reasons. First, this approach reduces the possible confounds introduced by comparing measures of events and symptoms obtained simultaneously, including the possibility that individuals may attempt to "explain" their present distress by selectively recalling higher levels of recent life events (see Brown, Sklair, Harris, & Birley, 1973). Second, if an important step in the development of primary prevention programs involves the identification of at-risk individuals, then statistical prediction of symptomatology across time is essential. Identification of a concurrent association between life events and symptoms, even when initial symptom levels are controlled for, does not facilitate such prediction. Analyses including only two variables (i.e., negative events and symptoms; social support and symptoms) are examined prior to the more complex three-variable model (events, support, and symptoms). The two variable models provide information about the relationships among the variables and thus provide baselines against which to consider the more complex model.

## METHOD

### *Subjects*

Subjects were 64 older adolescents (12 male, 52 female) entering a public university in the Northeast. Their mean age was 18.4 years. All were white and from middle- to upper-middle class family backgrounds based on parent's education (23% of the subjects had at least one parent with a graduate degree and 76% has at least one parent with college degree). All moved from their parents' home to a university dormitory. A total of 247 subjects (90 male, 157 female) voluntarily completed questionnaires at the initial data collection (see Compas, Slavin et al., in press). However, only data from the 64 participants (or 26% of the initial sample) who completed all three of the measures at all three times are presented here. Differences between subjects who dropped out of the study and those who completed the study are presented in the Results section.

### Measures

*Life Events Measure.* The Life Events Questionnaire (Newcomb, Huba, & Bentler, 1981) was chosen as representative of life events questionnaires available for use with adolescents. It consists of 39 major life events which the authors believed to be characteristic of adolescence (e.g., parents divorced; broke up with boyfriend or girlfriend; started making own money). Respondents indicate whether they have experienced each event during the previous year, over 1 year ago, or never. The emotional impact of the events that have been experienced in the previous year are rated on a scale ranging from very negative (-2) to very positive (+2). Weighted negative event scores are calculated by summing scores rated as -1 or -2, and, similarly, weighted positive event scores are calculated by summing scores rated as +1 or +2. Positive and neutral events on the measure have not been found to correlate significantly with symptoms in prior studies (Newcomb et al., 1981) nor in our own preliminary findings (Compas, Slavin et al., in press); thus only negative event scores are utilized here.

*Social Support.* The Social Support Questionnaire (Sarason, Levine, Basham, & Sarason, 1983) was developed using a college student population and consists of 27 items, each requiring subjects to list people to whom they could turn or on whom they could rely in a specific hypothetical situation and to indicate their level of satisfaction with the social support they would receive in each situation. Two scores are derived: the average number of support persons listed for each item and the average satisfaction with support for each item. Only the satisfaction with social support scale is utilized in this study since preliminary results showed no association between number of support persons and measures of psychological symptoms (Compas, Slavin et al., in press). Sarason et al. (1983) reported high test-retest reliability over a 4-week period for satisfaction with social support ( $r = .83$ ), and they reported an alpha coefficient of internal reliability for the satisfaction scale of .94. Because of the length of the current battery of measures and the considerable amount of time required to complete the full Social Support Questionnaire, an abbreviated version was constructed by randomly selecting 14 of the 27 items. Coefficient alpha for satisfaction with social support in the present sample was .94, suggesting that the good psychometric properties of the original instrument are retained in the abbreviated version.

*Symptoms.* The Hopkins Symptom Checklist (HSCL; Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) was chosen because of the wide variety of symptoms assessed and because of its proven usefulness with nonclinical populations. It is a 58-item self-report measure of a variety of psychological

and somatic symptoms. Respondents rate the extent to which each symptom has bothered them during the past 7 days (1 = not at all, 4 = extreme distress). Reliability and validity of this scale have been well established (Derogatis et al., 1974). In the current sample an internal consistency coefficient of .95 was obtained for the total symptom scale.

### *Procedures*

A portion of university orientation sessions held in June prior to actual entrance into college (Time 1) was set aside for completion of the measures. During small group meetings with their orientation advisers, students were asked if they would be willing to volunteer to complete some questionnaires for researchers who were interested in understanding more about the process of entering college and how to make the process more enjoyable for students. Questionnaires were completed anonymously (identified only by code numbers), placed in sealed envelopes, and returned to orientation staff. Students' names, addresses, and identifying code numbers were recorded separately to enable questionnaires to be mailed for subsequent data collections. Questionnaires were mailed to the students 1 week after classes began in September (Time 2) and again after students returned from Thanksgiving recess (December, Time 3) with instructions to return the measures to the researchers via campus mail. Responses were again anonymous.

## **RESULTS**

### *Analysis of Subject Attrition*

Because of the large degree of attrition of subjects from the sample that volunteered at the first data collection point, efforts were made to determine what differences, if any, existed between those subjects who dropped out of the study and those who completed questionnaires at all three times. Comparisons of these groups at the initial data collection point showed that there were no differences at Time 1 between the two groups on measures of satisfaction with social support or symptomatology, nor were differences found on any demographic variables (e.g., father's or mother's education or the distance that subjects had moved from their homes to college). Subjects who participated in all three data collections reported more weighted negative events than those who dropped out ( $p < .01$ ), and the Pearson correlation for weighted negative events and combined symptoms at Time 1 was greater for the group that did not drop out ( $r = .42$ ) than for the group

that did drop out ( $r = .22$ ). For subjects completing all three sets of questionnaires, there also was a greater Pearson correlation for satisfaction with social support and combined symptoms at Time 1 ( $r = -.47$ ) than for the group that did not complete the entire study ( $r = -.18$ ).

### *Life Events, Social Support, and Symptomatology Scores*

Means and standard deviations for total raw events, weighted negative events, satisfaction with social support, and total HSCL scores are presented in Table I.

Scores for the sample on each of the measures were approximately equivalent to those from earlier reports on other samples. The mean number of events reported ranged from 8.06 at Time 1 to 9.52 at Time 3 in the present sample, whereas the Newcomb et al. (1981) sample reported a mean of 8.95 events. Subjects reported significantly more weighted negative events at Time 3 than either at Time 1,  $t(63) = 3.18, p < .01$  or at Time 2,  $t(63) = 2.22, p < .05$ . The mean satisfaction with social support scores in the present sample ranged from 4.95 at Time 1 to 5.21 at Time 2, which is roughly equivalent to the mean of 5.4 reported by Sarason et al. (1983). The symptom scores were also similar to those reported by Derogatis et al. (1974) for nonclinical samples. There were no significant differences among the three points in time on levels of satisfaction with social support or total HSCL symptoms.

### *Correlational Analyses*

Correlations of negative life events, satisfaction with social support, and total HSCL symptoms both within and across the three time periods are presented in Table II. All of the event-symptom correlations, both within and across time, were significant ( $p < .01$ ). The magnitudes of these correlations were large, ranging from .41 to .65. The correlations of prior events with subsequent symptoms and those of prior symptoms and subsequent events, both from Time 1 to Time 2 and from Time 2 to Time 3, were approximately equal. The correlations of satisfaction with social support and total symptoms were also significant ( $p < .01$ ) and large in magnitude, ranging from  $-.36$  to  $-.56$ .

Weighted negative event scores showed a very high degree of stability, both from Time 1 to Time 2 ( $r = .75, p < .001$ ) and from Time 2 to Time 3 ( $r = .80, p < .001$ ). There was also a high degree of stability in both satisfaction with social support scores (Time 1 to Time 2,  $r = .79, p < .001$ ; Time 2 to Time 3,  $r = .70, p < .001$ ) and total symptom scores (Time 1

**Table I.** Means and Standard Deviations of Life Events, Social Support, and Symptom Measures

Measure	June (Time 1)		September (Time 2)		December (Time 3)	
	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>
Total raw events	64	8.06	64	9.42	64	9.52
Weighted negative events	64	3.95	64	4.39	64	5.13
Satisfaction with support	46 <sup>a</sup>	4.95	52 <sup>a</sup>	5.21	43 <sup>a</sup>	5.14
Total symptoms (average per item)	57	1.62	61	1.60	63	1.54

<sup>a</sup>A number of subjects failed to complete the social support measure at each point, possibly due to its considerable length.

**Table II.** Pearson Correlations of Negative Life Events, Satisfaction with Social Support, and Total HSCL Symptoms Within and Across Time

	Time 1			Time 2			Time 3		
	Negative Life events	Social support	Symptoms	Negative life events	Social support	Symptoms	Negative life events	Social support	Symptoms
Time 1									
Negative life events	—	.20	.42 <sup>c</sup>	.75 <sup>c</sup>	.21	.52 <sup>c</sup>	.71 <sup>c</sup>	.16	.41 <sup>c</sup>
Social support		—	-.47 <sup>c</sup>	.37 <sup>b</sup>	.79 <sup>c</sup>	-.53 <sup>c</sup>	.29 <sup>a</sup>	.83 <sup>c</sup>	-.33 <sup>a</sup>
Symptoms			—	.47 <sup>c</sup>	-.44 <sup>c</sup>	.71 <sup>c</sup>	.31 <sup>b</sup>	-.60 <sup>c</sup>	.63 <sup>c</sup>
Time 2									
Negative life events				—	.21	.65 <sup>c</sup>	.80 <sup>c</sup>	.23	.54 <sup>c</sup>
Social support					—	-.56 <sup>c</sup>	.22	.71 <sup>c</sup>	-.36 <sup>b</sup>
Symptoms						—	.53 <sup>c</sup>	-.55 <sup>c</sup>	.73 <sup>c</sup>
Time 3									
Negative life events							—	.20	.58 <sup>c</sup>
Social support								—	-.43 <sup>b</sup>
Symptoms									—

<sup>a</sup>*p* < .05.

<sup>b</sup>*p* < .01.

<sup>c</sup>*p* < .001.

to Time 2,  $r = .71, p < .001$ ; Time 2 to Time 3,  $r = .73, p < .001$ ). The magnitude of these correlations underlines the need to control for such associations in evaluating the strength of event-symptom and social support-symptom relationships.

### *Regression Analyses*

Although a number of techniques are available for the analysis of three-wave, three-variable panel data such as those presented here, regression analysis was chosen because it has the advantages of allowing for the determination of the relative importance of different predictive relationships between variables and permitting control for stability in the variables over time (Asher, 1976; Kenny, 1979). In the present model each of the regression analyses control for the influence of prior events, symptoms, or social support (e.g., the equation predicting Time 2 symptoms from Time 1 life events controls for the effects of symptoms at Time 1, the equation predicting Time 3 life events from Time 2 symptoms controls for the effect of events at Time 2). In other words, each regression equation controls for the stability in the predicted variable and analyzes the degree to which another variable can account for change. Standardized regression coefficients ( $\beta$ ) are used to adjust for the different measurement scales and thus allow for comparisons between the variables (Asher, 1976). The beta weight represents the increase or decrease in the predicted variable in terms of standard deviation units of the predictor variable. While regression analysis does not permit the strong inference of causality as does a true experiment in which most or all possible confounding influences are controlled for, when used with prospective data it does provide indications of the relative strengths and directions of causal relationships.

Results of regression analyses conducted for weighted negative events and total HSCL symptoms, and for satisfaction with social support and total HSCL symptoms, are illustrated in Figures 1 and 2. As predicted, there was a significant relationship between Time 1 weighted negative events and Time 2 total HSCL symptoms, after controlling for Time 1 symptoms ( $\beta = .26, p < .05$ ). For the period from Time 2 to Time 3 neither of the relationships were significant (Time 2 weighted negative events and Time 3 symptoms,  $\beta = .12$ ; Time 2 symptoms and Time 3 weighted negative events,  $\beta = .09$ ).

Regarding satisfaction with social support and total HSCL symptoms, there was a significant relationship between Time 1 support and Time 2 symptoms, when initial symptoms were controlled for ( $\beta = -.30, p < .05$ ). Time 1 symptoms and Time 2 support were not significantly related ( $\beta = -.17$ ). Examining the relationship of Time 2 symptoms with Time 3 social support,

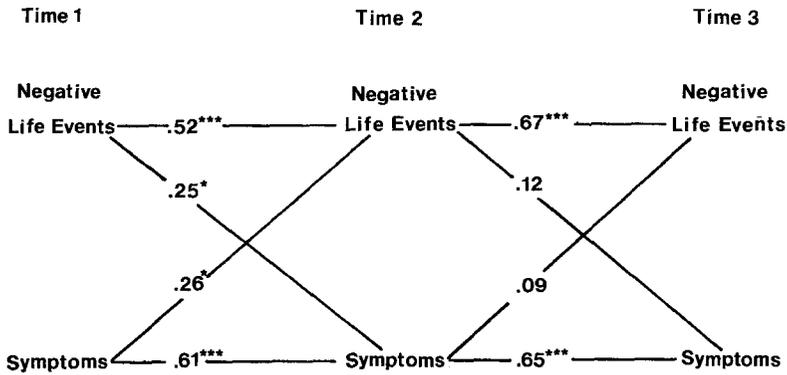


Fig. 1. Standardized regression coefficients of negative life events and total HSCL symptoms. \* $p < .05$ ; \*\*\* $p < .001$ .

there was a moderately strong, although nonsignificant, relationship after controlling for Time 2 support ( $\beta = -.25, p = .07$ ). Neither the association of Time 1 total HSCL symptoms with Time 2 satisfaction with social support nor the relationship of Time 2 support with Time 3 symptoms was significant ( $\beta = -.17$  and  $.08$ , respectively).

Regression analyses were also conducted for weighted negative events, satisfaction with social support, and total HSCL symptoms taken together. Results are presented in Figure 3. All of the event-event, support-support, and symptom-symptom relationships were highly significant. In addition, both Time 1 weighted negative events and Time 1 satisfaction with social

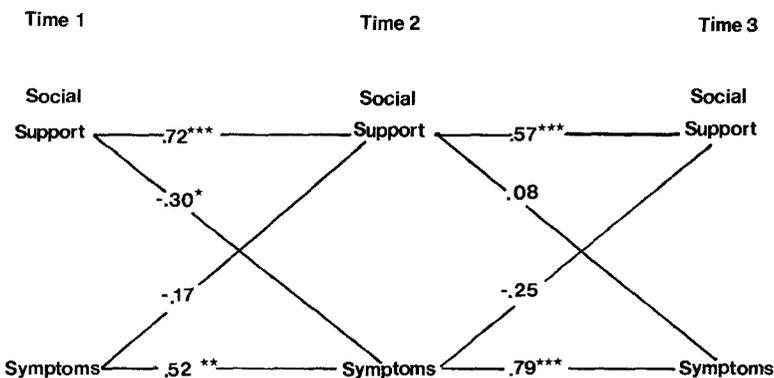


Fig. 2. Standardized regression coefficients of satisfaction with social support and total HSCL symptoms. \* $p < .05$ ; \*\*\* $p < .001$ .

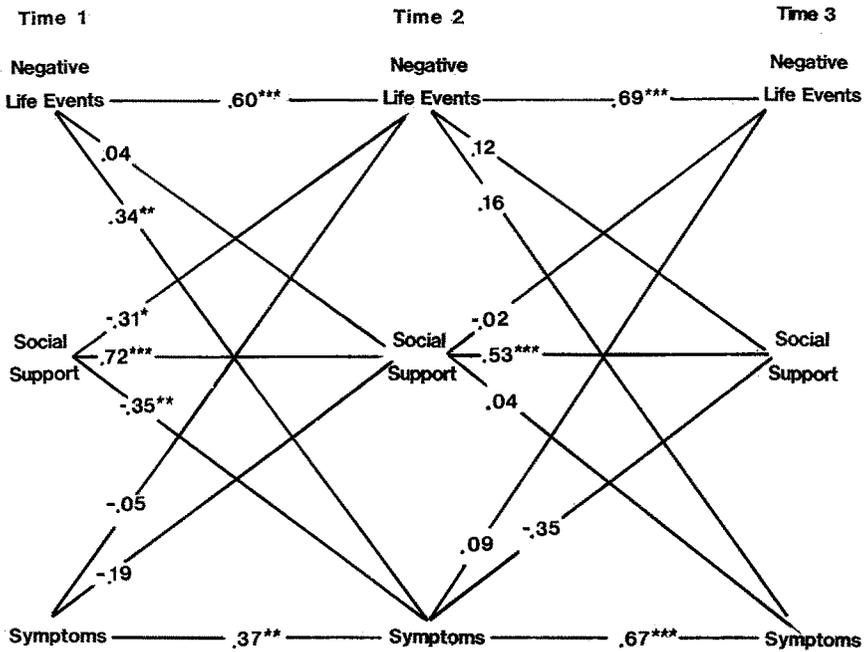


Fig. 3. Standardized regression coefficients of negative life events, satisfaction with social support, and total HSCL symptoms. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

support significantly predicted Time 2 symptoms after controlling for the influence of Time 1 symptoms ( $\beta = .34$  and  $-.35$ , respectively,  $p < .01$ ). Additionally, Time 1 satisfaction with social support significantly predicted Time 2 weighted negative life events ( $\beta = -.31$ ,  $p < .05$ ) after controlling for the effects of Time 1 symptoms and Time 1 weighted negative events. For the period from Time 2 to Time 3 none of the associations other than events, support, and symptoms with themselves were significant (although the relationship of Time 2 symptoms with Time 3 support approached significance,  $\beta = -.35$ ,  $p = .07$ ). Comparing this analysis with the earlier regression analyses, the only major difference is that the relationship of Time 1 symptoms with Time 2 weighted negative events is no longer significant ( $\beta = -.05$ ). The inclusion of Time 1 satisfaction with social support in the model has diminished this beta because of the strong association between Time 1 support and Time 1 symptoms ( $r = -.47$ ). To test for an interaction between negative events and social support, a product term of Negative Events  $\times$  Satisfaction with Social Support was entered into the regression equations as a fourth independent variable. Neither Time 1 nor Time 2 interaction terms were related to subsequent symptoms, support, or events.

## DISCUSSION

The findings support the two major hypotheses: Life events, social support, and psychological symptoms were reciprocally rather than linearly related across time and the nature of these relationships changed during a major life transition. The data need to be interpreted at two levels. First, the usefulness of these variables in *statistically predicting* individuals who are at risk for higher levels of symptomatology, greater numbers of aversive events, and dissatisfying social relationships is discussed. Second, the possible *conceptual* importance of these relationships is examined.

As noted above, the implementation of preventive interventions to reduce the incidence of psychological problems is dependent upon the identification of factors that predict symptoms across time. The present findings indicate that such prediction is possible during the late adolescent transition from high school to college. However, prediction across time was possible only when the criterion variable (psychological symptoms) was assessed at the hypothesized time of greatest vulnerability during this transition, 2 weeks after students have arrived at college. Prior life events and satisfaction with social support were not related significantly to symptomatology 3 months after entrance to college.

These findings have substantial practical importance, as 64% of the variance in psychological symptoms at the time of entrance to college (Time 2) could be accounted for by measures administered 3 months earlier during freshman orientation sessions (Time 1). This suggests that an at-risk group can be identified prior to the experience of psychological distress. Further, because life events and satisfaction with social support accounted for separate and significant portions of the variance in symptomatology beyond that explained by prior symptoms, the enhancement of coping with stressful life events as well as fostering the development of satisfying social networks both represent appropriate targets for prevention efforts.

The likely importance of early intervention is reflected by the finding that symptoms assessed immediately after entrance to college were the only significant predictor of symptom levels at the end of the semester 3 months later. That is, once students were past this initial vulnerable period, negative life events and satisfaction with social support were no longer useful in predicting later risk status. Interventions aimed at these factors may be less useful after the initial period of vulnerability.

Although the prediction of symptoms over time can be made with some confidence, the conceptual meaning of the findings must be interpreted more cautiously. The present results suggest that any of the commonly held linear models of the relationship between stressful events and symptomatology (see B. P. Dohrenwend & ShROUT, 1985; B. S. Dohrenwend & Dohrenwend, 1981)

may be inadequate. Stressful events and psychological problems may mutually influence one another, at least at certain times. The reciprocal relationship of stressful events and symptoms has not been apparent from prior cross-sectional studies. In fact, examination of the correlations of events and symptoms within any of the three panels in the present study ( $r = .42$  at Time 1,  $r = .65$  at Time 2,  $r = .58$  at Time 3) would have left the directionality of this relationship to the imagination of the researcher. Unfortunately, willingness to interpret such correlations as supporting the notion that stressful events lead to symptoms rather than the reverse has been all too common in this field. This further underscores the need for prospective studies, in which stressful events and disorder are assessed at multiple points in time, in the development of a more complete model of stress processes.

The findings of the present study also suggest that major life transitions represent an important source of vulnerability to life events. Specifically, the association of symptoms with prior life events was highest when students had recently entered a new school and living environment. Felner et al. (1983) argue that life transitions such as the entrance to college present individuals with a number of tasks to be mastered, and that the components of these tasks, which do not appear on checklists of major life events as used in the present study, represent a source of considerable strain. It is plausible, then, that the new demands and strains associated with the entrance to college (Time 2) intensified subjects' vulnerability to the effects of prior (Time 1) major events, while later in the semester (Time 3) there was less day-to-day disruption and thus less vulnerability to negative events. Whether these demands and strains are the result of increased daily hassles (e.g., Kanner, Coyne, Schaefer, & Lazarus, 1981), adjustment to a new social role (e.g., Pearlin, 1983), or other factors warrants further attention. Clearly, greater attention must be paid to the context in which the life events-symptoms relationship is being studied.

The pattern of relationships between satisfaction with social support and psychological symptoms also suggests the importance of examining the reciprocal influences of these factors on one another. Poor support may make one vulnerable to experiencing symptoms of anxiety, depression, or somatic problems during a period of transition. However, this outcome can be viewed as but one point in a larger process. The presence of these symptoms may interfere with the skills necessary to generate a new, satisfying sense of support in the college environment, as reflected in the marginally significant relationship of Time 2 symptoms with Time 3 satisfaction with social support. For example, symptoms of depression have been found to have such an influence on interpersonal relationships (Coyne, 1976). Although social support did not interact with negative life events in the prediction of symptoms, satisfaction with social support at Time 1 was inversely related to negative

events at Time 2. This suggests that dissatisfaction with social support is related to increased stressful events, or at least to the tendency to perceive events as negative.

Two major problems limit the generalizability of these findings. First, the attrition of subjects from the first to the third data collections was very high. The sample cannot be assumed to represent the general population of older adolescents making the transition from high school to college. The associations among life events, social support, and symptoms are considerably higher than those typically found in the literature, and are thus assumed to be larger than the associations in the population as a whole. The data do indicate that a subset of older adolescents are likely to be particularly vulnerable to the effects of life events during this transition, suggesting the potential importance in future research of carefully attempting to identify this apparently vulnerable subgroup. Future studies will also have to assess the extent to which these findings are limited to female adolescents, since the present sample was predominantly female. A second problem is with the measures of life events and social support used in this study. Although they were selected as the best available measures for use with adolescents, they can tell us very little about the ways in which events and support are related to one another and to symptoms. That is, by focusing only on major life events and satisfaction with support in general, these measures have overlooked the effects of daily hassles and the nature of the social support that individuals received. To address these concerns, a replication of this study is being carried out by the authors. Steps have been taken to reduce subject attrition, and more comprehensive measures of adolescent life events (Compas, Davis, & Forsythe, 1985a; 1985b) and social support (Slavin, Compas, & Davis, 1984) are being used.

In summary, the investigation of life events, social support, and psychological symptoms during adolescence is best understood from a perspective that emphasizes transactional relationships that change during major life transitions. Because of the multidirectional and changing nature of these relationships, prospective longitudinal designs are required in future studies. Further research examining these processes during life transitions which confront both adolescents and younger age groups will help to clarify how such relationships change with development.

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