Daily Patterns of Life Stressors and Their Relation to Health

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March 1981

Final Report

Approved for Public Release

Prepared for:
OFFICE OF NAVAL RESEARCH
800 North Quincy Street
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Contracts N00014-77-C-0693 and N00014-77-C-0625

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This is the final report of two research contracts, carried out between September, 1977 and March 1981. A new questionnaire to assess daily experiences was developed and it was used in a 90 prospective study of daily experiences, mood, and somatic symptomatology.
The work performed under contract N00014-77-C-0693 was carried out between September 1977 and March 1980 and overlapped with contract N00014-79-C-0625 which was carried out between September 1979 and March 1981. Both contracts supported our studies exploring the effects of daily life experiences on mood and somatic symptomatology.

Our work was divided into two major sections: the development of a new questionnaire and procedure for the accurate recording of daily experiences and the implementation of the new methodology in a longitudinal study of the relationship between life experiences and self-recorded symptomatology. The results of these studies have been presented to the Office of Naval Research in five technical reports, each of which is described more fully below.

In the first phase of the contract period, we developed a new questionnaire, the Assessment of Daily Experience (ADE), that allows subjects to record information about specific events that occurred or were anticipated during the day as well as their psychological appraisal of the checked events. In addition to events, the questionnaire also assessed daily mood and physical symptomatology. The procedure used to collect daily event information with the ADE is, we believe, unique. Because we desired "objective" reports of what happens to a person, married couples were employed in our studies. Husbands served as the targets of our investigations and spouses served as additional sources of data regarding husbands daily events. This was a fruitful approach because we found that wives occasionally reminded their husbands of events which had slipped their minds. Once there was reasonable husband-wife agreement about event occurrence, each rated their own psychological appraisal of every checked event. Four appraisal qualities were rated for each event: desirable-undesirable, changing-stabilizing, meaningfulness, and degree of control over event occurrence.

Several small studies were conducted for the purpose of gathering the events...
used in the ADE, to pilot its format and its reliability, and to explore reasons for disagreements in event reports among spouses. A detailed description of these studies, including a list of the final event checklist, is found in Technical Report 80-1, "Development of a methodology for assessing daily experiences."

Two additional Technical Reports were generated with the data collected in the first phase of the project. Report 81-1, "Hypochondriasis and tendency to adopt the sick role as moderators of the relationship between life events and somatic symptomatology," focused on two interesting personality characteristics which could affect symptom reporting - tendency to adopt a sick role and a particular view of hypochondriasis. Using retrospective reports of major life events and of symptoms during the previous year, we found that the personality characteristics moderated the magnitude of the relationship between events and symptoms. Technical Report 81-2, "The association between perceptions of daily experiences and self- and spouse-rated mood," focused on the relationship among daily events and mood with particular reference to the husbands' report of their own mood compared to wives' report of their husbands' mood. Using husbands' experiences as predictors, we found that both reports of husband mood (husbands' and wives') were related to concurrent daily experiences.

Another technical report, Report 81-3, "The objectivity and subjectivity of life events," addressed several conceptual issues concerning current use of the terms objective and subjective to describe environmental or personal experiences, and demonstrated that there were several ways in which life events and life event measures could be either objective or subjective.

In the second phase of the project instrumentation that was developed in the first phase was used in a longitudinal study of daily experiences, mood, and physical symptomatology report. With prospectively collected data we could examine daily experience as indexed by both content area of events and their psychological appraisal to predict subsequent symptom reports.
Our attrition rate in the longitudinal study was higher than we originally expected and in the end we obtained daily reports from 50 couples each reporting for an average of about 85 days. During this time husbands reported over 24,000 events and hundreds of symptoms. Technical Report 81-4, "Daily life experience and somatic symptoms: A preliminary report," describes the study in considerable detail and presents a preliminary analysis of the data. As there were not many precedents to follow, during the course of data analysis several interesting problems arose. Combining the information from the four event rating qualities across all the events checked on a given day was a difficult problem which we resolved by creating 19 event frequency variables that were easily interpretable. Likewise, for causal analyses it was crucial to distinguish between a single instance of a symptom and a series of related symptoms which spanned several days (an episode). These are only two of the issues we were faced with; many other issues are outlined in the technical report.

The preliminary analysis indicated that events which were rated as desirable and stabilizing had a protective effect in the sense that the probability of a symptom report in the five days following the event was reduced significantly. Such an effect was quite pronounced in half of the sample ($N = 25$), yet the remaining subjects exhibited very few significant reductions or exacerbations of symptomatology following events.

Several aspects of the data analysis were extremely time consuming and, unfortunately, Report 81-4 does not include the idiographic analysis. That analysis and a thorough analysis of the effects of specific events are areas for future work. The rich data base produced by two contracts has barely been tapped - and further analyses have the potential for shedding light on many interesting questions.
Index to Technical Reports and Publications

Arthur A. Stone & John M. Neale
(In Baum, A. & Singer, J. (Eds.), Advances in Environmental Psychology: Environment and Health. New York: L. Erlbaum, in press.)

Report 81-1 Hypochondria... and Tendency to Adopt the Sick Role as Moderators of the Relationship Between Life Events and Somatic Symptomatology. January 1981
Arthur A. Stone & John M. Neale
(British Journal of Medical Psychology, in press.)

Arthur A. Stone
(Journal of Research in Personality, in press.)

Report 81-3 The Objectivity and Subjectivity of Life Events. January 1981
Arthur A. Stone

Arthur A. Stone & John M. Neale
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