Self-initiation of activities by individuals may have an affect on their mood. To study the relationship between the appraisal of self-initiated activities and dimensions of positive or negative affect 36 graduate students (22 female and 14 male) engaging in a total of 202 activities appraised dimensions of the activities and responded to a 60-adjective Mood Checklist (M. A. Zevon and A. Tellegen) before and after each activity. Activities reported were academic, leisure, work related, daily living, and miscellaneous pursuits. Results showed that the expectation of pleasure and control over participation appraisal dimensions were important in accounting for post-activity positive affect but not for post-activity negative affect. The subject's usual level of enjoyment in the activity was not an important contributor to post-activity positive affect. Overall, the results lend support to the distinction between self-initiated and prompted engagement in activity and their effects on mood. (BH)
The Effects of Self-Initiated Activity and Appraisal on Mood

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Abstract

The relationship between the appraisal of self-initiated activities and the dimensions of positive and negative affect was investigated. Thirty-six subjects engaging in 202 activities appraised several dimensions of the selected activities and responded to a mood adjective checklist before and after each activity. The expectation of pleasure and control over participation appraisal dimensions were important in accounting for post-activity positive affect but not for post-activity negative affect. The subjects' usual level of enjoyment in the activity was not an important contributor to post-activity positive affect. Additional analyses examined the relationship between disconfirmation of expectations and mood.
The Effects of Self-Initiated Activity and Appraisal on Mood

The relationship between activities and depression has become a focal point in the recent clinical and personality literature. Most evident has been the dramatic increase in investigations which adopt a behavioral or cognitive-behavioral approach to the study of this relationship (Waskow, 1981). As a number of investigators have noted (e.g. Biglan and Craker, 1982; Blaney, 1981), the literature is replete with reports of treatment studies for depression which include interventions designed to increase the subjects' rate of pleasant activities (Hammen and Glass, 1975; Harmon, Nelson and Hayes, 1980; Lewinsohn and Graf, 1973; Rehm, 1978). Indeed, attempts to enhance the individuals' engagement in pleasant activities have become a basic component of both cognitive and behavioral approaches to the treatment of depression (Blaney, 1981).

While correlational evidence regarding the relationship of mood ratings and pleasant activities are plentiful (e.g. Lewinsohn and Graf, 1973; Rehm, 1978), the causal relationships are far from established (Biglan and Dow, 1981). Biglan and Crake (1982) have recently reported the results of a study which investigated the utility of goal setting and self-reward for increasing pleasant activities. While they were ultimately successful in manipulating and increasing the rate of pleasant activities in their subjects via the self-reward component of their treatment, this increase did not produce any improvement in mood, a finding that is echoed in other investigations (Hammen and Glass, 1975). In discussing their results, Biglan and Craker raise the interesting hypothesis that subjects who increase their level of pleasant activity in response to overt
prompts may not experience a corresponding increase in enjoyment or positive affect. The individuals perceived self-initiation of activities may, therefore, be an important component of the activity and mood relationship.

The present study draws upon this distinction and investigates the relationship between self-initiated activities and the dimensions of positive and negative affect. We have expanded the domain of activities beyond the exclusive focus on pleasant activities in order to capture a more representative sample of life events, and chose the positive and negative affect dimensions (Tellegen, 1980a; Zevon and Tellegen, 1982), rather than a global measure of depression, in order to allow for a more precise assessment of the relationship of activities and mood. The dimensions of positive and negative affect have been shown to relate in a simple structure manner to a number of important psychological processes such as mood (Zevon and Tellegen, 1982), well-being (Bradburn and Caplovitz, 1965) and depression and anxiety (Hall, 1977); as well as dimensions of personality (Costa and McCrae, 1980). Three parameters of the individuals' perception and appraisal of events were also investigated, i.e., expectation of pleasure, perception of control over participation, and prior or usual enjoyment of the activity.

Method

Subjects

The sample consisted of 22 female and 12 male graduate students, ranging in age from 23 years to 49 years old, with an average age of 27.3.
Procedure

The subjects were requested to choose molar events which could be readily characterized by a single principal activity. This molar event was to have a clearly defined starting and stopping point with no more than three hours between the beginning and ending point of the activity. In addition, subjects were instructed to choose six different types of activities and to engage in no more than one activity per day. After subjects had chosen an activity, their instructions were as follows: complete the Before Activity Questionnaire no more than 10 minutes before engaging in the activity and complete the After Activity Questionnaire within 10 minutes of the end of the activity.

Measures

Before Activity Questionnaire (BAQ). The first section of the BAQ contains the Mood Checklist (MCL) (Zevon and Tellegen, 1982). The MCL consists of 60 adjectives, three adjectives from each of 20 empirically derived mood categories (Zevon and Tellegen, 1982). Subjects recorded how they felt at the time of completing the checklist by endorsing the adjectives on a five point scale, i.e. 1) Very slightly or not at all; 2) A little; 3) Moderately; 4) Quite a bit; 5) Very much. The MCL is scored on two scales, positive affect and negative affect. The dimensions of positive and negative affect have been shown to be independent contributors to mood in a number of investigations (Hall, 1980; Tellegen, 1980a; Tellegen, 1980b; Zevon and Tellegen, 1982). The third section of the BAQ contains the following activity appraisals: expectation of pleasure in the activity, perception of control over participation in the activity, and rating of the usual level of enjoyment associated with the activity. Each of these measures employs a five point rating scale anchored at each scale point.
After Activity Questionnaire (AAQ). The first section of the AAQ contains the randomly re-ordered MCL adjectives. In the second section, the subject rates the level of pleasure they experienced in the activity, describes the activity, and notes whether anything particularly pleasant or upsetting occurred.

Analysis

Differences among means on the positive and negative affect scales were tested with a one-way analysis of covariance with the respective before activity positive and negative affect scores as covariates. The analysis of covariance was used to test the relative contributions of the following appraisal dimensions: expectation of pleasure, control over participation, and usual level of enjoyment in the activity.

Results

The completed questionnaires showed that subjects substantially complied with experimental instructions. Thirty subjects returned data on six activities; three subjects returned data on five activities and three subjects returned data on seven activities; for a total of 202 activities. Subjects chose activities which they reported participating in as often as sixty times per month and as rarely as less than once per month (Md=1.1 per week). The sample of activities had a mean duration of 2 hours and seventeen minutes. A preliminary sorting of activities into content categories resulted in the following: Academic (27%), Leisure and recreation (23%), Work related (21%), Tasks of daily living (19%) and Miscellaneous (less than 10%).
One-way analyses of variance on pre-activity positive and negative affect scales showed no significant mean differences between groups on the three appraisal dimensions of expectation of pleasure, perception of control over participation, and usual level of enjoyment. As recommended by Cronbach and Furby (1970), changes on repeated measures were examined via analysis of covariance with pre-affect scores varied against post-affect scores.

Table 1 shows adjusted means and standard deviations of post-activity positive and negative affect scores by appraisal dimensions. Significant post positive affect differences were found for both the expectation of pleasure, $F (1,196)=4.29, p \leq .01$, and control over participation, $F (1,196)=5.08, p \leq .01$, but not for usual level of enjoyment, $F (1,196)=2.78, p \leq .07$. None of the post negative affect differences were found to be significant for the three appraisal dimensions.

Results of the one-way analysis of covariance with the pre-activity positive affect scale and the usual enjoyment of activity scale as covariates demonstrated that expectation of pleasure accounted for a substantial proportion of the post-positive affect scores, $F (2,196)=4.59, p \leq .01$, while control over participation accounted for a smaller proportion of the variance, $F (2,196)=2.61, p \leq .08$. Analysis of covariance with the pre-activity positive affect scale and expectation of pleasure as covariates supported the previous finding that the usual level of enjoyment, $F (2,196)=1.67$, did not contribute to differences in post-activity mood. Similar results were found for the usual level of enjoyment variable with control over participation as a covariate, $F (2,196)=.91$. 

Again, no statistically significant differences were found with the post-test activity negative affect scores.

Additional exploratory analyses were designed to examine the influence of expectations which were not confirmed on post-activity mood.

The five levels of the measure of expectations of pleasure were completely crossed with the five levels of reported pleasure from the activity. Confirmation of expectations was defined as a categorical match of expected level of pleasure with the actual level of pleasure derived from participating in the activity. Levels of disconfirmation were defined as slightly or moderately positive and slightly or moderately negative. A positive disconfirmation occurred when an individual expected an activity not to be pleasurable and found that it was, in fact, a pleasurable activity. A negative disconfirmation occurred when an individual expected a pleasurable experience and reported that the activity had not been pleasurable.

Two one-way analyses of covariance were performed for five levels of disconfirmed expectation on post-activity affect with pre-activity affect as a covariate.

Table 2 and Figure 1 illustrate results of these covariance analyses. Significant post-activity positive affect differences, $F(1,96)=13.9, p<.001$ and post-activity negative affect differences, $F(1,96)=5.52, p<.001$, were found.

Scheffé contrasts on the post-activity positive affect showed that the confirmed, the slightly and moderately positive disconfirmed, and the slightly negative disconfirmed groups did not differ significantly ($p<.05$);
this was also true when the slightly negative and moderately negative disconfirmed groups were contrasted. Scheffé contrasts on the post-activity negative affect showed no significant differences among the mean scores of these five groups.

Discussion

Based on the covariance analyses reported above, the distinction between self-initiated and prompted engagement in activity seems warranted (Biglan and Craker, 1982). For this sample of self-selected activities, a significant shift from pre- to post-activity was found for the positive affect dimension, but not for the negative affect dimension.

The shift in positive affect seems to be moderated by the individual's pre-activity appraisal. The expectation of pleasure appraisal dimension emerged as the single most important factor in accounting for the pre- to post-activity positive affect mood shift. The appraisal dimension of control over participation, although less important in accounting for the post-positive affect shift, was nonetheless a contributor to the observed change. The subject's appraisal of prior or usual level of enjoyment of the activity seems to make little contribution to this positive affect shift.

With one exception, results from the disconfirmation of expectations analyses were as predicted. A linear decrease in positive affect and a linear increase in negative affect was found across the moderately positive, slightly positive, confirmed, and slightly negative levels. Surprisingly, the disconfirmation of a moderately positive expectation showed a reversal of this linear relationship, i.e., an increase in positive affect and a slight decrease in negative affect. This finding may be an anomaly in that the number of activities at this level was the
smallest \( n=5 \) of any level. Inspection of these activities, however, reveals that they involved an unexpected turn of events (e.g., visiting a friend one has not seen for several years and being treated badly). The associated decrease in negative affect and increase in positive affect may reflect the individual's sense of relief at completing these, in some way aversive, activities.

Overall, these results lend support to the centrality of the control dimension (Abramson, Seligman and Teasdale, 1978) and the expectation of pleasure appraisal dimension (Lazarus and Launier, 1978) in understanding post-activity mood shift. Strikingly, post-activity negative affect was unaffected by the appraisal dimensions. This differential reactivity of the two affect dimensions is not unique to this study. Hall (1977), for example, found that indicators of positive and negative affect were related in a clear divergent-discriminant pattern to measures of depression and anxiety in a psychiatric sample. Zevon and Tellegen (1982), in a longitudinal intraindividual study of mood change, reported that positive affect is experienced over a broader range of expression relative to negative affect.

The differential reactivity of the two affect dimensions noted in these and the present study lead credence to the conceptualization and measurement of mood in terms of the distinct dimensions of positive and negative affect. In the present case, this more precise specification of affect states yielded information which would have been unavailable via more global measures of affect or depression.
Reference Notes


References


Table 1

Adjusted Means and Standard Deviations of Post-Activity Positive and Negative Affect Scores, by Appraisal Dimensions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Positive Affect</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Expectation</td>
<td></td>
</tr>
<tr>
<td>Very pleasurable</td>
<td>103</td>
</tr>
<tr>
<td>Neither</td>
<td>41</td>
</tr>
<tr>
<td>Very unpleasurable</td>
<td>58</td>
</tr>
<tr>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>Little/no control</td>
<td>51</td>
</tr>
<tr>
<td>Some control</td>
<td>40</td>
</tr>
<tr>
<td>Substantial/completed control</td>
<td>110</td>
</tr>
<tr>
<td>Enjoyment</td>
<td></td>
</tr>
<tr>
<td>Extremely enjoyable</td>
<td>95</td>
</tr>
<tr>
<td>Moderately enjoyable</td>
<td>36</td>
</tr>
<tr>
<td>Slightly/not enjoyable</td>
<td>69</td>
</tr>
</tbody>
</table>

Note - n = 202
Table 2

Adjusted Means and Standard Deviations of Positive and Negative Affect Scores, by Confirmed and Disconfirmed Expectations

<table>
<thead>
<tr>
<th>Level</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Disconfirmed</td>
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<td></td>
</tr>
<tr>
<td>Moderately positive</td>
<td>16</td>
<td>71.68</td>
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<tr>
<td>Slightly positive</td>
<td>38</td>
<td>66.17</td>
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<tr>
<td>Confirmation</td>
<td>120</td>
<td>56.74</td>
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<tr>
<td>Disconfirmed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly negative</td>
<td>23</td>
<td>49.12</td>
</tr>
<tr>
<td>Moderately negative</td>
<td>5</td>
<td>58.19</td>
</tr>
</tbody>
</table>

Note - n = 202
Figure Caption

Figure 1. Effects of confirmed and disconfirmed expectations on post-activity affect (adjusted for pre-activity affect).