Children's Perceptions of Mood-Related Activities:
Development of the Pleasant and Unpleasant Activities Surveys.

Paper presented at the Annual Meeting of the Midwestern Psychological Association (64th, Chicago, IL, 1992).

Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

P. M. Lewinsohn has theorized that depression is related to the amount of positive reinforcement that an individual receives. Lewinsohn has supported this model in adults by showing that depression is correlated with an increase in unpleasant activities and a decrease in pleasant activities. This study extended Lewinsohn's model by developing measures of children's mood-related activities. Subjects were children (166 boys and 156 girls), ranging in age from 8 to 12 years, who were enrolled in the public school system of a mid-sized midwestern city. Children identified, in 15-minute classroom sessions, 3 pleasant and 3 unpleasant activities. The types of activities reported differed across both age and sex. Common responses were included in the Pleasant Activities Survey and the Unpleasant Activities Survey. Several studies examined the relationship between children's activities and depression to test the generalization to children of Lewinsohn's reinforcement theory of depression. The study shows that children's mood-related activities can be reliably classified using a schema adapted for children from one originally used to classify adults' activities. One table and one figure illustrate the discussion. (Author/SLD)
Children's Perceptions of Mood-related Activities: Development of the Pleasant and Unpleasant Activities Surveys

Michael Wierzbicki
Marquette University

Paper presented at the 1992 meeting of the Midwestern Psychological Association, Chicago, IL.

Running head: CHILDREN'S MOOD-RELATED ACTIVITIES
Abstract

Lewinsohn has theorized that depression is related to the amount of positive reinforcement which an individual receives. Lewinsohn has supported this model in adults by showing that depression is correlated with an increase in unpleasant activities and a decrease in pleasant activities. This study extended Lewinsohn's model by developing measures of children's mood-related activities. Subjects were children (166 boys, 156 girls), ranging from 8 to 12 years, who were enrolled in the public school system of a mid-sized midwestern city. Children identified, in 15-minute classroom sessions, three pleasant and three unpleasant activities. The types of activities reported differed across both age and sex. Common responses were included in the Pleasant and Unpleasant Activities Surveys (PAS, UAS). Several studies examined the relationship between children's activities and depression, to test the generalization to children of Lewinsohn's reinforcement theory of depression.
Children's Perceptions of Mood-related Activities: Development of the Pleasant and Unpleasant Activities Surveys

Since the 1970s, psychologists have devoted an increasing amount of attention to childhood depression. In 1983, Kaslow and Rehm reviewed the literature on childhood depression and concluded that the manifestation of depression in children parallels that of depression in adults, with some additional developmentally appropriate symptoms. DSM-III-R (American Psychiatric Association, 1987) concurred, indicating that the essential features of mood disorders in children are the same as in adults.

Because depression in children resembles depression in adults, recent research has addressed whether theories of depression, originally developed and tested within adult populations, might generalize to children.

One model of depression that has been examined extensively in adults is that of Lewinsohn (1974), who proposed that depression is caused by a decrease in positive reinforcement. According to Lewinsohn, factors that limit reinforcement, such as infrequent engagement in pleasant activities, will increase depression.

Lewinsohn and others have examined this model in adults, showing that depression is correlated with pleasant and unpleasant activities in students (Lewinsohn & Libet, 1972), community volunteers (Lewinsohn & Amenson, 1978; Lewinsohn, Mermelstein, Alexander, & MacPhillamy, 1985), and patients (Grosscup & Lewinsohn, 1980; Lewinsohn & Talkington, 1979).
Recent studies have examined the extent to which Lewinsohn's model generalizes to children. Neither Kaslow, Rehm, and Siegel (1984) nor Wierzbicki and McCabe (1988) found a relationship between children's depression and activity levels assessed by the Social Competence scales of Achenbach's (1978) Child Behavior Checklist (CBCL). Wierzbicki and McCabe suggested that these scales (which measure activities, school relationships, and school performance) may not adequately assess the types of activities that are influential in producing depression. They suggested that researchers should consider the relationship between children's depression and their engagement in pleasant and unpleasant activities.

Garber (1982) developed the Children's Event Schedule (CES), which includes 75 pleasant and 75 unpleasant childhood activities. However, little information has appeared in the literature to date concerning the development, reliability, and validity of the CES.

Carey, Kelly, Buss, and Scott (1986) developed the Adolescent Activities Checklist (AAC). This measure consists of 100 pleasant and unpleasant activities that are rated for frequency and impact. Carey et al. found a positive relationship in nonpatient adolescents between self-reported depression and engagement in unpleasant activities.

Children and adolescents do not necessarily engage in the same activities, and so the AAC may not generalize from adolescents to children. There is a need for an empirically based activities
checklist for use with children. Such a checklist will be useful in examining the relationship between depression and activities in children and so testing the generalization to children of Lewinsohn's reinforcement model of depression.

This paper describes the development of schedules of pleasant and unpleasant activities in which children commonly engage. It also summarizes a series of studies which have been conducted in order to test the generalization to children of Lewinsohn's reinforcement model of depression.

Method

Subjects

Subjects were children (166 boys, 156 girls) enrolled in grades 2 through 5 of a public school system in a midsized midwestern city.

Procedure

Subjects participated in the study as part of a regular weekly class called "Guidance," which was led by an M.A.-level psychologist. Subjects were allowed 15 minutes to write down three pleasant and three unpleasant activities. After these responses were collected, the guidance instructor led a classroom discussion on the relationship between activities and feelings.

Results

Children provided 966 pleasant and 963 unpleasant responses. Activities were classified into seven pleasant and six unpleasant categories, which were adapted for children from Lewinsohn's
Mood-related Activities

measures. Categories of pleasant activities, in descending order of the frequency with which they were reported by children, were: (a) Recreation, (b) Competency, (c) Physical Activity, (d) Social Interaction, (e) Comfort, (f) Family Interaction, and (g) Other. Two raters assigned pleasant activities to these categories, agreeing on 91.2 percent of the assignments.

Categories of unpleasant activities, in descending order of the frequency with which they were reported by children, were: (a) Family, (b) Inconvenience, (c) School, (d) Social, (e) Health, and (f) Other. Three raters assigned the unpleasant activities to categories. All three raters agreed on 82.6 percent of the activities, and two of the three raters agreed on another 16.8 percent of the activities.

Thus, children's pleasant and unpleasant activities could be assigned reliably to categories which had been adapted from Lewinsohn's measures of adults' mood-related activities.

A logit analysis was conducted to determine the relationship between children's age, sex, and the frequency with which they reported different types of activities. This analysis found several significant (p<.01) differences across sex and age. Boys identified fewer pleasant Family activities and more pleasant Competency and Physical Activities than girls. Boys also reported more unpleasant School activities than girls. Finally, older children identified more pleasant Social activities than younger children.
Mood-related Activities

Those pleasant and unpleasant activities which were reported by at least ten children were selected for inclusion in measures of children's mood-related activities. Several additional activities which had been reported by fewer than ten children were also selected to ensure that the categories of pleasant and unpleasant activities would be represented proportionally. In this way, 70 activities were assigned to both the Pleasant Activities Survey (PAS; Wierzbicki, 1992a) and Unpleasant Activities Survey (UAS; Wierzbicki, 1992b).

The PAS and UAS are analogous to Lewinsohn's Pleasant and Unpleasant Events Schedules (PES, UES) which have been used extensively with adults. Children read each item, and then rate on a 3-point scale both the frequency and impact of the activity in the last few weeks. In this way, scores are obtained for the Frequency, (Un)Pleasantness, and Total (defined as the cross-product of Frequency and (Un)Pleasantness scores).

Parent forms of the PAS and UAS have also been used, in which parents rate the frequency and impact of their children's recent pleasant and unpleasant activities.

Several subsequent studies have been performed to investigate the psychometric properties of these scales.

The internal consistency of the measures is high, with Cronbach's alpha coefficient > .87 (p<.01) for the Frequency, (Un)Pleasantness, and Total scores of both the PAS and UAS for both the child and parent forms (Wierzbicki & Sayler, 1989).
Internal consistency has also been demonstrated by the finding that most PAS and UAS items are significantly positively correlated with the corrected total score. Median Item-Total (Corrected) correlations for Frequency, (Un)Pleasantness, and Total scores, for Child and Parent forms of the UAS and PAS ranged from .31 to .48 (Wierzbicki & Sayler, 1989). Thus, both the child and parent forms of both the UAS and PAS have adequate internal consistency.

Criterion-related validity of the activity measures has been examined by calculating the correlations between the scales of the child and parent forms. The correlations between children's and parents' ratings of the Frequency, (Un)Pleasantness, and Total of children's pleasant and unpleasant activities were all significant (p<.01), ranging from .23 to .49 (Wierzbicki & Sayler, 1989).

Construct validity of the PAS and UAS has been examined in studies of the relationship between children's mood-related activities and depression. In a study of 138 normal children and their parents, children's self-reported depression was significantly positively correlated with the two forms of the UAS. In addition, parents' ratings of their children's depression were significantly negatively correlated with children's engagement in pleasant activities (although children's self-reported depression was unrelated to pleasant activities) (Wierzbicki & Kaff, 1991). These correlations are presented in Table 1.
Another study examined the relationship between depression level and unpleasant activities in learning disabled and normal children (Kaff, in press). This study found that learning disabled children reported both significantly higher depression and engagement in unpleasant activities than normal children. In addition, throughout the entire sample of children, there was a significant relationship between depression level and engagement in unpleasant activities.

Discussion

Preliminary studies have examined children's engagement in pleasant and unpleasant activities and the relationship between children's level of depression and engagement in mood-related activities. This research has demonstrated that children's mood-related activities can be reliably classified using a schema, adapted for children, originally used to classify adults' activities. In addition, the types of activities which children report as pleasant and unpleasant vary as a function of sex and age.

Boys and girls differed in terms of the frequency with which they report Family, Competency, and Physical Activities as pleasant, and the frequency with which they report School activities as unpleasant. These sex differences are consistent
with previous research on mood-related behavior. For example, Wierzbicki (1989) examined children's attempts to cope with depression and found similar sex differences. These results are also consistent with reports of adults' mood-related activities (Funabiki, Bologna, Pepping, & Fitzgerald, 1980; Rippe, 1977).

Initial studies of the PAS and UAS have found that they have high internal consistency and at least moderate criterion-related and construct validity. Future studies should continue to examine the psychometric properties of these scales.

Future studies should also explore the clinical applications of these instruments. These scales may be useful supplements in the assessment of childhood depression. For example, they may help to identify children who, on the basis of engagement in mood-related activities, may be at risk for depression. In addition, they may be useful in targeting behaviors for change in behavioral treatment programs of depression.

Another potential application of these instruments combines Lewinsohn's behavioral approach with cognitive models of depression. For example, Lewinsohn posited that social skills deficits lead to decreased reinforcement which in turn leads to increased depression. The concept of social skill can be generalized to include cognitive coping skills, such as those employed in efforts to cope with depressing circumstances.

One study has identified those unpleasant activities on the UAS which are most strongly correlated with children's level of
depression. Current research efforts are addressing the development of a measure of children's ability to cope with these particular activities. Although other investigators have examined the relationship between children's cognitive coping skills and depression, an advantage of a new coping measure derived from the UAS is that it would address children's abilities to cope with exactly those unpleasant activities or circumstances which have been empirically shown to be the most strongly related to depression.

If successful, this work may identify problem-solving deficits that are related to depression in children, and may support a problem-solving approach to the treatment of childhood depression.
Mood-related Activities

References


Mood-related Activities


Wierzbicki, M. (1992a). The pleasant activities survey. [HAPI 
online database record]. Pittsburgh, PA: Behavioral 
Measurement Database Services (Producer). McLean, VA: BRS 
Search Service (online Vendor).

Wierzbicki, M. (1992b). The unpleasant activities survey. [HAPI 
online database record]. Pittsburgh, PA: Behavioral 
Measurement Database Services (Producer). McLean, VA: BRS 
Search Service (online Vendor).

in pleasant and unpleasant activities in normal children. 
Journal of Clinical Psychology, 47, 499-505

level, and subsequent depressed mood in children. Journal of 
Clinical Child Psychology, 17, 203-208.

activities in normal children. Paper presented at the meeting 
of the Midwestern Psychological Association, Chicago, IL.
Author Notes

Requests for reprints should be sent to Michael Wierzbicki,
Department of Psychology, Marquette University, Milwaukee, WI
53233.
Footnotes

1 Median Item-Total (corrected) correlations for Frequency, (Un)Pleasantness, and Total scores, for Child and Parent forms of the UAS and PAS, respectively, were as follows: Child-UAS (.38, .43, .42), Parent-UAS (.36, .45, .42), Child-PAS (.39, .47, .48), and Parent-PAS (.32, .31, .34).

2 The correlations between children's and parents' ratings of the Frequency, Unpleasantness, and Total Unpleasantness of children's unpleasant activities were .27, .27, and .39. The correlations between children's and parents' ratings of the Frequency, Pleasantness, and Total Pleasantness of children's pleasant activities were .49, .23, and .45.
Table 1  
Correlations Between Children’s Mood and Engagement in Unpleasant and Pleasant Activities  

<table>
<thead>
<tr>
<th>UAS/PAS Form</th>
<th>Child CDI</th>
<th>Parent CDI</th>
<th>Parent CDI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rCDI,UAS</td>
<td>rCDI,PAS</td>
<td>rCDI,UAS</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>.40**</td>
<td>-.04</td>
<td>.17*</td>
</tr>
<tr>
<td>Impact</td>
<td>.16*</td>
<td>-.18</td>
<td>.12</td>
</tr>
<tr>
<td>Total</td>
<td>.39**</td>
<td>-.10</td>
<td>.23**</td>
</tr>
<tr>
<td>Parent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>.15</td>
<td>-.04</td>
<td>.32**</td>
</tr>
<tr>
<td>Impact</td>
<td>.24**</td>
<td>.05</td>
<td>.24**</td>
</tr>
<tr>
<td>Total</td>
<td>.29**</td>
<td>.02</td>
<td>.38**</td>
</tr>
</tbody>
</table>

Notes. UAS=Unpleasant Activity Schedule. PAS=Pleasant Activities Schedule. CDI=Children’s Depression Inventory. n = 115 for UAS correlations. n = 67 for PAS correlations.  
Table adapted from Wierzbicki & Kaff, 1991.  
*P < .05. **P < .01.
## Mood-related Activities

### Figure 1

#### Examples of Pleasant and Unpleasant Activities by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pleasant</strong></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td>Playing; Going to an amusement park</td>
</tr>
<tr>
<td>Competency</td>
<td>Working with a computer; Getting good grades</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>Riding a bicycle; Playing football</td>
</tr>
<tr>
<td>Social Interaction</td>
<td>Going to a friend's house; Playing with friends; Having a boy- or girlfriend</td>
</tr>
<tr>
<td>Comfort</td>
<td>Eating ice cream; Taking a nap</td>
</tr>
<tr>
<td>Family Interaction</td>
<td>Visiting relatives; Playing with a family member</td>
</tr>
<tr>
<td><strong>Unpleasant</strong></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>Being grounded by parents; Fighting with a family member</td>
</tr>
<tr>
<td>Inconvenience</td>
<td>Having to do something you don't want to do</td>
</tr>
<tr>
<td>School</td>
<td>Taking tests; Getting bad grades; Going to a class you don't like</td>
</tr>
<tr>
<td>Social</td>
<td>Fighting with friends; Not getting along with others</td>
</tr>
<tr>
<td>Health</td>
<td>Being sick; Taking medicine; Getting shots</td>
</tr>
</tbody>
</table>