This document begins by providing a brief historical overview of past attempts at classification, assessment, and treatment of students with school refusal behaviors. Limitations of traditional classification strategies are explored. Recent accomplishments with this population are then discussed, including the development of the School Refusal Assessment Scale (SRAS), a measure designed to assess the maintaining variables of school refusal, and the prediction of effective, prescriptively assigned treatments based on child and parent ratings. The functional model of assessing school refusal behavior described in this paper focuses on why children refuse school. It is hypothesized that children generally refuse school for negative reinforcement (avoiding stimuli within a school setting that provoke negative affectivity) and/or positive reinforcement (pursuing rewarding stimuli outside of school). The reliability and validity of the SRAS are described. Overall, the data derived from this study provide initial support for a functional model of assessing and treating children and adolescents with school refusal behavior. (NB)
Toward a Functional Model of Assessing and Treating Children and Adolescents with School Refusal Behavior

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TOWARD A FUNCTIONAL MODEL OF ASSESSING AND TREATING CHILDREN AND ADOLESCENTS WITH SCHOOL REFUSAL BEHAVIOR

I. Welcome and introduction to topic

Definition of school refusal behavior will be a refusal to attend school or difficulties going to school or remaining in school for the entire day.

II. What will be discussed?

In keeping with the theme of the conference, I would like to discuss two major topics. First, I will provide a brief historical overview to describe past attempts at classification, assessment, and treatment for this population, including some key limitations.

Second, I will discuss some of our recent accomplishments with this population, including the development of a measure designed to assess the maintaining variables of school refusal and the prediction of effective, prescriptively assigned treatments based on these child and parent ratings.

In addition, I will mention some of our treatment work currently in progress and its implications for further study.

III. Why is this topic important?

This topic is important since it may occur in up to 8% of all school-aged children. In addition, school refusal may create significant short-term and long-term problems, including a significant interference in normal daily functioning and increased risks for social and occupational problems later in adulthood, including a higher risk for agoraphobia. These are in addition, of course, to the obvious implications for not finishing school.

Several researchers have reported, however, that no long-term problems exist if the situation is resolved quickly.

Still, although important for children, families, and educators (including those who lose funds for nonattendance), the treatment of school refusal behavior remains a relatively neglected area of child clinical practice.
This neglect is partially due to the problems of traditional classification, assessment, and treatment strategies for this population, many of which have not fully considered the varied or heterogeneous nature of school refusal behavior and have not clearly outlined prescriptive treatment approaches, or those that will be most effective for one particular child with school refusal behavior.

IV. The traditional classification of school refusal behavior

One of the earliest conceptualizations of school absenteeism (SLIDE ONE) invoked a heterogeneous approach (Broadwin).

Later conceptualizations of school refusal advocated a psychodynamic approach, proposing that overdependency on the part of the mother and child resulted in the development of a severe anxiety response from both parties upon separation and, subsequently, refusal to attend school (SLIDE).

During the 1960's and 1970's, several authors advocated a move toward dichotomizing school refusal behavior. For example, Kennedy separated children with school refusal behavior into Type I and Type II categories, distinguishing children on the basis of acute vs. chronic and less severe vs. severe types of school refusal (SLIDE). Other dichotomizing classification systems focused on "common and induced," "neurotic and characterological," and "ego-alien and ego-syntonic" school refusal behavior.

The advent of the behavioral approach in the 1950's and 1960's influenced the conceptualization of school refusal, painting absenteeism as a learned aversion response (SLIDE), a view that acts as a precursor to our contemporary functional model to be discussed. Unfortunately, this view did not spawn a great deal of systematic research in this area (SLIDE TWO), and as late as 1984 Klungness and Gredler stated that ....

Since 1980, several researchers have attempted to specifically classify school refusal behavior via DSM-III or DSM-III-R diagnostic categories. Cynthia Last and her colleagues, for example, have concluded that school phobia and separation anxiety disorder may be separate categories of school refusal (SLIDE).
The use of diagnoses to distinguish subtypes of school refusal was made more complicated, however, by Gail Bernstein and her colleagues, who advocated a classification system of school refusal focusing on the presence of an anxiety disorder, an affective disorder, both, or neither (SLIDE).

We concluded last year, however, from our study of over 50 children with school refusal assessed via the ADIS-C that no ...

Indeed, Burke and Silverman (1987) were among the first to lament that not enough attention was being given to assigning prescriptive treatment to subtypes of children with school refusal, and concluded that (last sentence).

Atkinson and her colleagues (1989) summed up the general frustration of the field by stating that ...

V. Limitations of traditional classification strategies

Despite the promise of traditional classification strategies for this population, several problems are inherent:

1. Many of the early approaches were based on clinical consensus, not empirical evidence. Several focused predominantly on intrapsychic or internal factors, evaluating only the child and not his or her interpersonal relationships or social reinforcement systems.

2. The validity of the newer approaches, as applied to school refusal, remains controversial. No criteria exist, for example, for determining whether a child with school refusal behavior is avoiding school or simply wishes to remain home. The diagnostic system has also been criticized for difficulty in determining primary diagnostic criteria and poor contribution to knowledge of treatment outcome.

3. One of the most severe problems of traditional classification approaches for this population is the lack of appropriate assessment measures shown to contribute to positive therapeutic efficacy, or adequate treatment utility. Given the heterogeneity of this population, it is unfortunate that the proper identification of subtypes based on a functional analysis of behavior has not been conducted.
Given this, we believe that a distinct need exists for theory-oriented research in this area that will interface assessment and treatment and provide clinicians with recommendations for prescriptive treatment strategies, i.e., which treatment will work best for a particular child with school refusal.

VI. **Accomplishments: A functional model of assessing school refusal behavior**

In response to these limitations, we have attempted to shift again the focus of classifying school refusal behavior, this time toward a more functional approach, focusing on why children refuse school and less on the topographical behaviors per se.

Specifically, we have hypothesized that children generally refuse school for negative reinforcement, such as avoiding stimuli within a school setting that provoke negative affectivity, and/or positive reinforcement, such as pursuing rewarding stimuli outside the school setting such as playing, being with friends, or parental attention.

In light of this hypothesis, we have collected initial data on an instrument designed to assess these motivating conditions in children with school refusal, the School Refusal Assessment Scale (SRAS). The SRAS is based on clinical and research evidence that children refuse or have difficulty attending school for a variety of reasons related to negative and positive reinforcement, namely (SLIDE THREE):

1. Avoidance of stimuli provoking negative affectivity (e.g., fearfulness, general anxiety, depression, low self-esteem)
2. Escape from aversive social or evaluative situations
3. Attention-getting behavior, and/or
4. Positive tangible reinforcement
VII. Reliability and validity of the SRAS

To evaluate the reliability and validity of the SRAS, we examined 42 subjects with difficulties attending school or refusal to attend school for less than one year.

Sixteen questions, four per maintaining condition, comprise the SRAS. Each question is rated on a scale of 0 to 6, from never to always. The scale is administered to children and parents separately, after which means for each condition are computed and ranked. The highest-scoring condition is considered to be the primary maintaining variable of school refusal behavior for a particular child.

To assess concurrent validity (SLIDE FOUR), we attempted to compare functional dimensions of behavior to individual keystone behaviors. In general, it was hypothesized that scores on child self-report measures of negative affectivity (e.g., STAIC, CDI) and parent and teacher ratings of internalizing behavior problems (i.e., those related to negative affect or distress) would be most highly correlated with the negative reinforcement dimension of school refusal behavior, since these children would be more likely than children with positively reinforced school refusal behavior to avoid stimuli provoking negative affect.

In general, children in the first two functional conditions (negative reinforcement) did tend to report more depression, less self-esteem, and greater social anxiety than children with positively reinforced school refusal behavior. This was generally true for teacher but not parent ratings as well.

Conversely, it was expected that children with school refusal behavior maintained by positive reinforcement would be rated by teachers and parents as having more severe acting-out or other externalizing behavior problems compared to children with negatively reinforced school refusal behavior.

In general, externalizing behavior problems were most associated with the positive reinforcement functional conditions and not with children avoiding school for negative reinforcement.
In addition, we expected that children with negatively reinforced school refusal behavior would tend to meet criteria for more traditional psychiatric disorders related to fear, anxiety, and depression on a semistructured interview given to children and parents, the Anxiety Disorders Interview Schedule for Children.

In general, this was true (SLIDE FIVE). Children who rated themselves or parents who rated their children as having negatively reinforced school refusal behavior also reported themselves or their children as meeting criteria for traditional internalizing disorders.

Conversely, those children rated highest on positively reinforced school refusal behavior were expected to meet criteria for more disorders encompassing acting-out or externalizing behavior problems (or no disorder to reflect a "truant" population). In general, children who rated themselves or parents who rated their children as having positively reinforced school refusal behavior were diagnosed with externalizing problems in a large majority of the cases.

We view these data as the first to support the concurrent validity of a classification and assessment of school refusal behavior based upon a functional approach.

VIII. A preliminary analysis of treatment utility of the functional model

To evaluate the treatment utility of the functional model, i.e., whether we can accurately predict which treatments will work best for one child with school refusal behavior, we have conducted two studies examining the assignment of prescriptive treatment based on SRAS ratings. One study has been previously reported, and involved the successful assignment of specific treatment protocols for functional subtypes of children with school refusal.

Specifically, children avoiding negative affectivity received systematic desensitization and gradual exposure to the school setting, children escaping aversive social or evaluative situations received cognitive restructuring and modeling/role-play, parents of children with attention-getting behavior were instructed to employ DRO, time-out, and shaping, and families of children refusing school for positive tangible reinforcement were subjected to contingency contracting procedures.
To evaluate the treatment utility of the functional model on a controlled basis, we are currently in the midst of attempting to show that SRAS scores can accurately predict responsiveness to prescriptive treatment and inadequate behavior change from nonprescriptive treatment.

In this study, control subjects receive inappropriate therapeutic procedures based upon the lowest mean score on the SRAS. Appropriate, prescriptive measures are then administered. Dependent measures include the self-report and parent/teacher measures shown earlier in addition to daily logs of negative affectivity and school attendance.

Results (SLIDE SIX) from six children, one experimental subject per functional condition and two control subjects, again support the contention that SRAS ratings can accurately predict successful treatment outcome for school refusal behavior. In each case, full-time school attendance was achieved with a decrease in negative affectivity.

Results from two control children indicate that nonprescriptive treatment was not effective, whereas subsequent prescriptive treatment based on SRAS ratings was successful in producing full-time school attendance with lessened negative affectivity.

IX. Summary and conclusion

Overall, these data provide initial support for a functional model of assessing and treating youngsters with school refusal behavior. The results suggest that an a priori assessment approach may be useful to predict which treatment strategy will work best or minimally for a specific child with school refusal.

We present this model as one with important clinical and research implications. These include the lessened need for divergent and extensive clinical approaches that have historically marked this population, and a guidance toward individual differences that impact strongly on therapeutic outcome. The model also provides an alternative method of classifying one particular behavior problem in children that may eventually be generalized to other, similar disorders such as anxiety.
Historical quotes regarding the classification and treatment of school refusal behavior

1. **Broadwin (1932)**

Truancy "may represent an act of defiance, an attempt to obtain love, or escapes from real situations to which it is difficult to adjust" (p. 254).

2. **Johnson et al. (1941)**

"The term 'school phobia' might well include the numberless cases of ... anxiety which occur among children who are afraid to leave home" due to "a poorly resolved dependency relationship between the child and its mother" (p. 708).

**Johnson (1955)**

"School phobia is a misnomer. Actually, it is separation anxiety which occurs not only in early childhood but also in later years ... " (p. 307).

3. **Kennedy (1965)**

"Two types of school phobia ... are referred to as Type 1 school phobia, or the neurotic crisis, and Type 2 school phobia, or the way-of-life phobia" (p. 285).

4. **Hersen (1971)**

"An alternative to the psychoanalytic model that involves a more parsimonious and systematic mode for treatment for ... school phobias in particular is based on learning theory and principles of conditioning. (S)chool phobia is viewed as a conditioned fear and avoidance response which ... is amenable to an extinction or counterconditioning process" (p. 100).
5. **Klungness and Gredler (1984)**

"Given the lack of well-controlled and comparative studies (for school refusal), it is necessary to rely upon clinical experience and judgement rather than upon the systematic application of empirical research findings" (pp. 36-37).

6. **Last et al. (1987)**

"Separation anxiety disorder and school phobic disorder differ on a number of dimensions, thus supporting the use of DSM-III criteria for differentially diagnosing the two anxiety disorders" (p. 656).


"Children with school phobia can be divided into four subgroups: those with both affective and anxiety disorders, those with an affective disorder only, those with an anxiety disorder only, and those with no affective or anxiety disorder" (p. 73).

8. **Kearney and Silverman (1990)**

"(N)o strong pattern of comorbidity appears to exist, suggesting further the heterogeneity of problematic behaviors in children who refuse to go to school ... Given (this), it seems imperative to associate specific individual variables with effective treatment strategies" (pp. 342, 363).

9. **Burke and Silverman (1987)**

"Although there is a substantial body of research on the diagnosis and treatment of school refusal, relatively less research has been directed towards identifying variables which predict individuals' response to treatment. Except for a few controlled case studies, ... the tendency has been to treat all school refusers in similar fashion" (p. 353).

10. **Atkinson et al. (1989)**

"There is controversy about all aspects of school refusal" (p. 191).
Correlations between SRAS-C, SRAS-P, or SRAS-T conditions and respective child, parent, and teacher measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>SRAS conditions</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Child test-retest reliability</td>
<td>.59**</td>
</tr>
<tr>
<td>Parent test-retest reliability</td>
<td>.60**</td>
</tr>
<tr>
<td>Parent interrater reliability</td>
<td>.40**</td>
</tr>
<tr>
<td>Fear Survey Schedule for Children</td>
<td>.04</td>
</tr>
<tr>
<td>Children's Manifest Anxiety Scale</td>
<td>.31</td>
</tr>
<tr>
<td>State-Trait Anxiety Inventory</td>
<td>.33*</td>
</tr>
<tr>
<td>Children's Depression Inventory</td>
<td>.33*</td>
</tr>
<tr>
<td>Piers-Harris Self-Concept Scale</td>
<td>-.31*</td>
</tr>
<tr>
<td>Social Anxiety Scale for Children</td>
<td>.12</td>
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<tr>
<td>Child Behavior Checklist</td>
<td></td>
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<tr>
<td>- Internalizing T</td>
<td>.35*</td>
</tr>
<tr>
<td>- Externalizing T</td>
<td>-.13</td>
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<tr>
<td>Teacher Report Form</td>
<td></td>
</tr>
<tr>
<td>- Internalizing T</td>
<td>.48*</td>
</tr>
<tr>
<td>- Externalizing T</td>
<td>.12</td>
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</table>

SRAS condition 1: ANA.  SRAS condition 2: ESE.  ** p < .01.
SRAS condition 3: AGB.  SRAS condition 4: PTR.  * p < .05.
Comparisons of child/parent ratings of either negatively or positively reinforced school refusal behavior on the SRAS across diagnoses as reported by children and parents

<table>
<thead>
<tr>
<th>School refusal determined as negatively reinforced</th>
<th>Internalizing disorders</th>
<th>Externalizing disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child rating</td>
<td>60.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Parent rating</td>
<td>58.8</td>
<td>41.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School refusal determined as positively reinforced</th>
<th>Internalizing disorders</th>
<th>Externalizing disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child rating</td>
<td>14.3</td>
<td>85.7</td>
</tr>
<tr>
<td>Parent rating</td>
<td>27.3</td>
<td>72.7</td>
</tr>
</tbody>
</table>

All numbers represent percentage diagnosed.
Pre- and post-treatment values for subjects comprising a controlled analysis of a functional model for school refusal behavior

<table>
<thead>
<tr>
<th></th>
<th>Pre-treatment</th>
<th>Post-treatment</th>
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</thead>
<tbody>
<tr>
<td>Percent days missed</td>
<td>46.7 (46.7)</td>
<td>0.0</td>
</tr>
<tr>
<td>Child ratings/daily anxiety</td>
<td>5.4 (4.9)</td>
<td>2.5</td>
</tr>
<tr>
<td>Child ratings/daily depression</td>
<td>4.2 (2.2)</td>
<td>3.0</td>
</tr>
<tr>
<td>Parent ratings of daily child anxiety</td>
<td>5.5 (6.1)</td>
<td>2.6</td>
</tr>
<tr>
<td>Parent ratings of daily child depression</td>
<td>4.3 (3.7)</td>
<td>3.1</td>
</tr>
<tr>
<td>Fear Survey Schedule for Children-Revised (FSSC-R)</td>
<td>152.4</td>
<td>140.0</td>
</tr>
<tr>
<td>FSSC-R school items only</td>
<td>22.4</td>
<td>18.2</td>
</tr>
<tr>
<td>Children's Manifest Anxiety Scale-Revised</td>
<td>14.8</td>
<td>13.8</td>
</tr>
<tr>
<td>Children's Depression Inventory</td>
<td>11.2</td>
<td>13.4</td>
</tr>
<tr>
<td>Social Anxiety Scale for Children</td>
<td>7.8</td>
<td>7.0</td>
</tr>
<tr>
<td>Child Behavior Checklist - Internalizing T score</td>
<td>72.4</td>
<td>71.0</td>
</tr>
<tr>
<td>Child Behavior Checklist - Externalizing T score</td>
<td>60.8</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Numbers in parentheses represent means during nonprescriptive (control) treatment.