Teachers' Acceptability Ratings of Arbitrary Versus Functional Based Reinforcers

Cheryl Lungaro

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Date
Teachers' Acceptability Ratings of Arbitrary Versus Functional Based Reinforcers

BY
Cheryl Lungaro

THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Specialist Degree in School Psychology

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1998

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE

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1/19/98

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Teachers' Acceptability Ratings of Arbitrary Versus Functional-Based Reinforcers
Cheryl J. Lungaro
Eastern Illinois University
Abstract

Whether teachers find a reinforcer based on a functional assessment more acceptable than an arbitrarily selected reinforcer was investigated. Participants consisted of 94 elementary school teachers from 11 (8 rural, 3 suburban) schools in Illinois. Teachers were asked to complete the Intervention Rating Profile-15 after reading one of the three problem vignettes that described a common behavior problem that was maintained by peer attention. In one condition the proposed treatment included peer attention as a reward; the two remaining conditions included teacher attention and tangible items as rewards. A one-way ANOVA revealed a significant preference for the treatments based on peer attention. There was a significant correlation between acceptability and the reported likelihood of using the intervention. The implications of these results for school-based consultation are discussed.
Acknowledgments

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Lastly, I am dedicating this manuscript to my parents who have supported and encouraged all of my dreams. Without them my dreams would be unreachable.
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Teachers' Acceptability Ratings of Arbitrary Versus Functional-Based Reinforcers

The success or failure of consultation depends on whether the consultee uses a recommended treatment strategy. It has recently been suggested that teachers often fail to implement strategies developed during school-based consultation (Flugrum & Rechaly, 1994). One reason for this failure may be that the teacher finds the strategy unacceptable for his or her classroom. Therefore, it is important to study variables that may be related to treatment acceptability.

The current study examined whether teachers' acceptability ratings of interventions vary according to the type of reinforcers used. Specifically, the ratings of teachers were compared across three analogue conditions. Each condition included a problem vignette that described a common classroom problem behavior, the results of a brief functional assessment, and a reinforcement-based treatment. The three analogue conditions varied the type of reinforcer used. In one condition, the reinforcer was a naturally occurring event in the classroom that appeared to be maintaining the problem behavior (i.e., peer attention). In a second condition, the reinforcer was a naturally occurring event in the classroom that was not maintaining the problem behavior (i.e., teacher attention). In the third condition, the reinforcer was a tangible reinforcer
Assessment of Treatment Acceptability

Treatment acceptability refers to the assessment of consumers’ attitudes concerning different treatments (Elliott & Treuting, 1991). Miltenberger (1990) and others (Kazdin, 1977; Wolf, 1978) have reasoned that intervention effectiveness is not enough; treatments must also be judged as acceptable by the individuals responsible for implementation. Therefore, it is important to ask consumers whether they find the treatment procedure acceptable. Throughout the 1980s numerous studies were conducted to investigate acceptability (Miltenberger, 1990).

Several instruments have been used to design and analyze the treatment acceptability of school-based intervention strategies, i.e., the Intervention Rating Profile (IRP-15; Martens, Witt, Elliott & Darveaux, 1985), the Behavior Intervention Rating Scale (BIRS; Elliott & Treuting, 1991), the Treatment Evaluation Inventory (TEI; Kazdin, 1980), and the Treatment Evaluation Inventory Short Form (TEI-SF; Kelley, Heffer, Gresham & Elliott, 1989). The IRP-15 is a 15-item single factor scale that measures treatment acceptability. The BIRS is a revision of the IRP-15, with an additional nine items that cover the rate of behavior change, level of behavior change, maintenance of behavior change, and generalization to other behaviors and settings and peer comparisons (Elliott & Treuting,
The TEI is a 15-item questionnaire with items answered on a 7-point Likert scale and a total acceptability score of 105 (Miltenberger, 1990). The TEI-SF is a short form of the regular TEI. Kelley et al. (1989) found that both the TEI and the TEI-SF contained no difference in differentiating among treatments, both had high alpha coefficients, but the short form took less time, and was preferred by mothers who completed both forms.

The methodology used to evaluate treatment acceptability has primarily been analogue in nature (Miltenberger, 1990). One typical method for studying acceptability consists of administering rating scales to teachers who have read written vignettes that portray a problem situation in a classroom setting. A suggested intervention is described, and teachers are then instructed to use the rating scale to evaluate the intervention.

There are several advantages and disadvantages of using an analogue situation. One advantage is that the researcher has more control over variables related to treatment acceptability (Miltenberger, 1990). Also research conducted in analogue settings may takes less time for the researcher and the participants. One disadvantage is that it may lack ecological validity (Miltenberger, 1990). The participant does not actually experience the situation, but is instead required to read a vignette which describes a situation. This may result in the
Variables Related to Treatment Acceptability

Researchers have examined factors that appear to affect teachers' acceptability of school-based treatments. Recent literature has discussed a number of variables that affect treatment acceptability, including type of intervention (Martens, Peterson, Witt & Cirone, 1986; Aldrich & Martins, 1993) problem severity (Elliott & Treuting, 1991; Reimers, Wacker & Koeppel, 1987; Kazdin, 1980) amount of time the intervention takes to administer (Martens & Kelley, 1993), risk to the child (Martens, Peterson, Witt & Cirone, 1986), disruption to classmates, and cost (Reimers, et al, 1987).

The majority of studies have shown that positive or reinforcement-based procedures are more acceptable than punishment-based procedures. Martens et al. (1986) administered a 65-item questionnaire to teachers and found that when presented with various interventions to use, teachers rate these into clear categories. The interventions rated as most effective, easiest to use, and most used were those that redirected a student's behavior, as well as those that used manipulation of existing rewards. The teachers reported that the most difficult intervention to implement were those involving punishment, such as spanking.

Aldrich and Martins (1993) compared certain interventions to
determine teachers' preference. Forty eight teachers were given vignettes to read which contained problem behavioral or instructional information. The teachers were first shown a video depicting a girl exhibiting a classroom behavior problem. Teachers then rated the acceptability of the intervention using the IRP-15. Findings indicated that the teachers preferred instructional modification compared to social or emotional interventions, or assistance from others. The findings suggest that teachers may be more receptive to using instructional environment information when developing interventions to be used.

Treatment acceptability is also influenced by the severity of the problem, amount of time required, and potential "side effects" of the intervention (Elliott & Treuting, 1991; Reimers, Wacker & Koepppl, 1987). Kazdin (1980) found that the severity of problem behaviors is related to the acceptability of a treatment, i.e., the more severe the problem, the more acceptable the treatment. In summary, teachers consider many variables when rating the acceptability of classroom-based strategies.

Whenever the time involved in treatment studies has been studied, findings have consistently shown that acceptability ratings are higher when an intervention takes little time (Martens & Kelley, 1993). Teachers appeared to like the idea that an intervention takes little time to implement, therefore allowing more time for teaching.
Teachers may also rate interventions based on the risk to the child and if there is a disruption to other classmates (Martens, Peterson, Witt & Cirone, 1986). Interventions that are risky, disruptive, and costly are seen as less acceptable by teachers (Reimers et al., 1987).

Importance of Treatment Acceptability

Kazdin (1980) claims that, theoretically, acceptable interventions are likely to be implemented more often. Witt (1986) also states that many interventions are effective and are not implemented because of the negative perception by the teacher. To test the relationship between acceptability and usage, Tingstrom (1994) surveyed 89 regular and special education teachers. The independent variables were the type of intervention and behavior problem severity. Behavior problem severity was manipulated by providing separate vignettes of behavior severity for the teachers to read. Dependent variables were scores on the Intervention Rating Profile (IRP) and an additional question pertaining to the perceived efficacy and the likelihood the teacher would use the intervention. Significant correlations between perceived effectiveness and acceptability for all interventions were found. Also, a significant correlation was found between the acceptability of an intervention and reported likelihood of using the intervention. This implies that more acceptable treatments may be more likely
to be used by teachers.

In summary, there appear to be many factors that influence treatment acceptability (and therefore treatment use), including problem severity, type of intervention, and perceived effectiveness (Reimers et al., 1987). Some investigations have clearly established preference for interventions based on positive reinforcement. Very few studies, however, have assessed how treatment acceptability may be affected by the type of reinforcer used. Research suggests that children prefer reinforcers that are socially oriented (Fantuzzo, Rohrbeck, Hightower & Work, 1991), including activities, edibles, and other tangible items. There have been no studies that have specifically assessed teachers' preferences for particular types of reinforcers. This is surprising given that the choice of reinforcers may significantly influence the effectiveness of interventions. For example, recent work has suggested that reinforcers based on a prior functional assessment may be more effective than arbitrarily selected reinforcers.

Functional Assessment

Functional assessment refers to the identification of variables that maintain problem behaviors. According to Kelley (1990), many observable or unobservable events serve as antecedents to a behavior. For example, if a child does not engage in class work, and instead doodles, the child may be
positively reinforced by peers or by an increase in teacher attention. The child may also be negatively reinforced by avoiding difficult class work. Many behavior problems may be learned in a number of ways. Thus, by only looking at the "form" of the behavior, little information is given about factors that may be related to the behavior. Providing the same punishment or reinforcer for all children who exhibit the same behavior problem may be unproductive (Iwata, Vollmer & Zarcone, 1990). The same behavior displayed by two individuals may be maintained through different variables. One individual's aggressive act, for example, may be maintained by positive reinforcement, (e.g., teacher attention), while another child's aggression may be maintained by negative reinforcement, (e.g., escape from a task). Success of an intervention may be greater if the reinforcer matches the event maintaining the problem behavior (Iwata et al., 1990).

According to Iwata et al. (1990) functional analysis provides the following benefits:

1. A functional analysis of a behavior problem will suggest the antecedent conditions, the source of reinforcement that should be eliminated, the reinforcer that should be used in the treatment, and the reinforcers that are counterproductive. By determining these factors, there is a potential to increase the effectiveness of reinforcement-based procedures, thus decreasing
the use of punishment.

2. Through research, a system can be developed to classify behavior based on its function. This may be superior to classifying behavior according to its form or topography.

3. A more systematic and comprehensive approach to preventing a behavior problem may be possible.

While attempting to identify factors that maintain a behavior, the main objective is to identify the current motivational functions of behavior (Iwata et al., 1990). This involves collecting information about the behavior and how it is affected by the environment, and also how it affects the environment. There are a number of ways to collect this type of information that have been discussed in literature.

**Types of Functional Assessment**

A simple approach of collecting information about a behavior is through an indirect method (Iwata et al., 1990). Using this method, the psychologist asks a series of questions related to the behavior and the environment. From the information gathered, the psychologist makes conclusions about what functions maintain a behavior. Indirect assessment should include questions regarding: the behavior, settings in which it does and does not occur, antecedent events, and reactions of others (Iwata et al., 1990).

Iwata et al. (1990) discussed the advantages and
disadvantage of using an indirect approach. One advantage is the ease of use. Since there are only an assortment of questions to ask, not much effort is required. Second, this approach is inexpensive to use. Lastly, this approach is more efficient since it takes minutes to administer.

Some of the disadvantages are that the information gathered may not always be accurate and reliable. There have been few successful attempts to establish the reliability and validity of this method (Iwata et al., 1990).

A second approach to collecting information regarding variables that maintain a behavior is through direct naturalistic observation. This method includes directly observing disruptive behavior and calculating the percentage of occurrences followed by a particular event (e.g., talking out is followed by teacher attention 60% of the time). This “descriptive” approach is more objective and systematic since it involves first hand observation. This method allows for a quantitative approach to assessing antecedents and consequences.

Iwata et al. (1990) discussed the advantages and disadvantage of using this descriptive approach. First, as mentioned earlier, it is more objective than verbal reports. Second, they are quantitative and therefore allow conclusions to be drawn regarding the probability of events following behavior. Lastly, the observation is usually conducted in the child’s
natural environment, therefore all potential factors can be noted, instead of the factors the teacher remembers or notices.

The major disadvantage of the descriptive approach is that the events occurring do not necessarily reveal functional relationships. For example, some behavior problems may be reinforced on an intermittent schedule. Also because it is correlational, this method may suggest a function where none exists. Therefore, Iwata et al. (1990) suggest that conclusions based on this approach should be made cautiously.

A third approach is performing an actual functional analysis through manipulation and replication (Iwata et al., 1990). Variables believed to be maintaining problem behaviors are controlled while the observation is conducted. The first component is to construct a condition where the variable is present (i.e. teacher attention), alternated with another condition in which the variable is not present (i.e. no attention). Observations are conducted during both conditions, which are presented using multi element or reversal designs.

Iwata et al. (1990) described the strengths and weaknesses to this approach. First, there is a high degree of quantitative precession and hypothesis regarding maintaining variables are empirically tested. Also, the control condition (e.g., differential reinforcement of an alternative response) may suggest short term strategies for management of the problem
behavior. One disadvantage may be that this method may be too complex to use in certain treatment programs with the same consistency. If feasible, however, Iwata et al. (1990) recommend using functional analysis since it provides a convincing demonstration of a causal relationship.

Functional Versus Arbitrary Reinforcers

Fantuzzo, Rohrbeck, Hightower, and Work (1991) have reviewed the relationship between teacher use of rewards and child preferences. Subjects consisted of 69 teachers and 98 children from grade 1 through 5 in an urban school district. Students were given a child reinforcement survey to complete, and teachers completed a questionnaire where they were required to report their use of reinforcers. The results showed that teachers used a high amount of rewards across grades 1 through 5. Also, teachers in lower grades tended to use rewards more than teachers in upper grades. Children tended to prefer activities over things to keep, and social rewards were preferred over activities, things to eat, and things to keep. There was also no significant relationship between what children preferred and what teachers used.

Reinforcers used in the classroom are often selected because they are readily available or inexpensive (Fantuzzo et al., 1991). Rarely is there an attempt to select reinforcers that are already maintaining the child's behavior. However, school
psychologists are increasingly being encouraged to use functional reinforcers rather than random or arbitrary reinforcers (DuPaul, Eckert & McGoey, 1997). Treatments that include functional reinforcers may be more effective because those events that maintain the problem behavior are used to increase an alternative, appropriate behavior. However, there have been no studies that have investigated teachers' acceptability of functional versus nonfunctional reinforcers for use in the classroom.

The purpose of the current study is to determine if teachers find reinforcers based on a functional assessment more acceptable than arbitrarily selected reinforcers. Teachers were asked to complete the IRP-15 after reading one of three problem vignettes. All three vignettes describe a functional assessment of a student's disruptive behavior and an intervention based on positive reinforcement. One of three vignettes includes a reinforcer that is linked to the functional assessment results, while the other two include an arbitrarily selected reinforcer.

Method

Participants

Ninety-four elementary school teachers (87% female, 13% male) volunteered to participate. The participants were recruited from eleven (eight rural, three suburban) schools in Illinois. All participants taught grades one through eight in a
regular education classroom (see Table 1). Overall teaching experience ranged from 1 to 35 years ($M = 17$, $SD = 10.41$). Education level was also assessed, with 54.3% of teachers having earned a bachelor degree as their highest degree and 45.7% of teachers having earned at least a master degree. After being informed of the purpose of the study (see Appendix A), informed consent to participate was obtained from all teachers (see Appendix B).

**Dependent Variable**

**Intervention Rating Profile.** The acceptability of the interventions recommended by the consultant was measured using the Intervention Rating Profile -15 (IRP-15; Martens, Witt, Elliott & Darveaux, 1985). The IRP-15 consists of 15 items rated on a Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). Witt & Elliott (1985) have reported excellent reliability (coefficient alpha = .98) for the total score, which is calculated by summing item ratings (range 15-90). Higher scores on the IRP-15 indicate greater acceptability of the recommended treatment. An acceptable rating is one that is above 52.50 (Von Brock & Elliott, 1987). In addition, Elliott (1988) compiled numerous investigations that demonstrated the validity of the IRP-15 as a measure of differential acceptability of several intervention variables, such as treatment type, time requirements, and reported effectiveness. The IRP-15 measures a
teacher's perception of how appropriate an intervention is for a particular behavior problem (prior to its implementation). A complete copy of the IRP-15 is displayed in Appendix C.

**Use.** After completing the IRP-15, each teacher in the study was asked to complete demographic information (e.g., grade taught) as well as the following question, "How likely would you be to use the recommended treatment for a similar problem in your classroom?" Teachers were asked to respond by circling a number that best described their likelihood of use, ranging from 1 (not at all) to 5 (very likely). There was sufficient space to explain why they would or would not use the intervention (see Appendix D).

**Independent Variable**

To assess the relative influence of different reinforcers, problem vignettes were created for the current study (see Appendices E-G). The vignettes were developed with the following considerations in mind. First, independent seat work during teacher instruction was used because it represents learning situations frequently encountered in schools. Second, off task behavior was the selected target response displayed by the student in the vignette because it is one of the most frequently referred problems (Rosenfield, 1987).

All vignettes included a short paragraph that described a functional assessment of a common classroom behavior. The
vignettes described the out-of-seat behavior of a student and the results of a classroom observation suggesting that the problem behavior is maintained by access to peer attention. Next, an intervention based on positive reinforcement was described. For this intervention, the teacher places a check mark on the chalkboard for every 10 minutes the child remains in his seat. These check marks can be exchanged for a backup reinforcer. The particular backup reinforcer in the problem vignette was the independent variable in the current study. These backup reinforcers varied according to their relevance to the functional assessment data and represented the three experimental conditions. Each teacher was exposed to one of the following conditions.

**Peer Attention.** The problem vignette used in this condition was identical to the others except that the intervention strategy included peer attention as a backup reinforcer. Therefore, teachers in this condition rated the acceptability of using reinforcers based on the functional assessment results.

**Teacher Attention.** The problem vignette used in this condition was identical to the others except that the intervention strategy included teacher attention as a backup reinforcer. Therefore, teachers in this condition rated the use of a "natural" reinforcer that was not linked to the problem behavior.
**Tangible.** The problem vignette used in this condition was identical to the others except that the intervention strategy included tangible items (e.g., grab bag) as a backup reinforcer. Therefore, teachers in this condition rated the use of a reinforcer that was not linked to the problem behavior.

**Procedure**

Participants were recruited from local schools in Northeast and East Central Illinois. Teachers were asked to complete forms after a faculty meeting. Each teacher was given a packet containing instructions, one of three problem vignettes, an IRP-15 questionnaire, and a demographic form. The introduction was read to the participants. The participants were asked to complete the IRP-15 and demographic form after reading the problem vignette. All participants were debriefed stating that the purpose of the study was to determine what type of reinforcers teachers find most acceptable to use in their classroom (see Appendix A).

**Results**

A total of 94 teachers returned usable IRP-15 ratings and demographic information. IRP-15 scores were calculated for each of the three conditions. Twenty-eight teachers rated the vignette that described peer attention as the reinforcer to be used. Thirty-five teachers rated a vignette that described teacher attention as the reinforcer to be used. Thirty teachers
rated the vignette that described a tangible reinforcer as the reinforcer to be used. Table 2 displays the mean IRP-15 ratings and standard deviations for teachers in each condition. Inspection of mean IRP-15 ratings showed that only peer attention was rated within the “acceptable” range. The overall mean of all three vignettes was 51.6, with a range of 17 to 75. The highest mean rating was for the peer attention condition (m=60), while the teacher attention condition resulted in an acceptability rating mean of 47.6, and a tangible reinforcer received an acceptability mean rating of 48.6.

A one-way analysis of variance (ANOVA) was used to analyze the three groups using the Statistical Package for Social Sciences-SPSS (Norusis, 1986). The one-way ANOVA was performed on the total scores of the IRP-15. A post-hoc Tukeys b test was conducted to further clarify the significant difference among vignettes. An alpha level of .05 was used for all statistical tests. Significantly higher IRP-15 scores were found for the peer attention condition, F(2, 90) = 6.13, p < .01. Post-hoc comparisons revealed that teachers preferred peer attention over both teacher attention and tangible rewards.

A second one-way ANOVA was conducted to analyze the teachers’ reported likelihood of using the intervention. This one-way ANOVA was performed using ratings of “use” as the dependent variable. Teachers in the peer attention condition
were more likely to report they would use the intervention than the other two groups, $F(2, 90) = 6.13, p < .01$. Table 3 displays the mean USE score for teachers in each condition. The overall mean ratings for all teachers were 2.72, (range of 1 to 5). A significant correlation ($r = .76, p < .001$) was found between IRP-15 ratings and treatment use (see Table 4).

A 2x3 Analysis of Variance was also performed to assess if there was a difference between the education level of the teachers and their preference of the reinforcer used. There was not a significant interaction between these two variables, although there seems to be an important difference between the ratings of Bachelors versus Masters-level teachers across the three conditions, (see Table 5).

Finally, teachers were asked to state why they would or would not use the intervention. Only the comments of a few teachers seemed to link assessment information to treatment. One teacher stated that she was likely to use the intervention which included peer attention as the reinforcement, "I think the pay off here is good - time with a peer - since it seems that Jesse is seeking peer attention..." Another teacher stated she would not be likely to use the intervention based on teacher attention because, "it is probably not possible to ignore Jesse being out of his seat since it has been an ongoing problem. Jesse doesn't seem to be seeking teacher attention as much as peer-attention so
the reward of teacher time may not have value."

Across all conditions, many teachers offered reasons for using -or not using- treatments based on non-experimental variables such as practicality or problem attributions. For interventions which used a tangible reinforcement, one teacher stated she would be likely to use the tangible reward because, "Children will do anything for a prize, -incentives do work."

For interventions which used teacher attention as the reinforcement, one teacher stated she was likely to use the intervention since it was a positive reinforcement method.

As for teachers who stated they would not use the intervention, one teacher stated she was not likely to use the intervention based on peer attention because she felt it was too unstructured for a third grader. Another teacher stated she would not be likely to use the intervention based on a tangible reinforcer, "...What about the children who are doing their work? What amount of free time do they get with the teacher? ... Why is child moving? -doesn't like seatwork- -teacher can vary structure of class- -seat work can be oral- -done in a group- - does child act this way in other settings?" Another teacher stated she would not be likely to use this intervention because, "it would be too easy to be inconsistent with this procedure as it takes the teacher watching the clock and Jesse. Also, the other students are expected to stay in their seats without rewards-
hardly fair. The class prizes would get expensive, as well. There is no way to implement this procedure that would not show the student he is being rewarded for being a difficult student..."

Discussion

A total of 94 teachers were recruited from the local community. Teachers were asked to complete forms at a faculty meeting. Each teacher was given a packet containing instructions, one of three problem vignettes, an IRP-15 questionnaire, and a demographic form. The participants were asked to complete the IRP-15 and demographic form after reading the problem vignette. All teachers were given instructions, and were debriefed as to the purpose of the study. Results suggested that teachers’ acceptability ratings and likelihood of treatment use were higher when the reinforcement-based strategy was linked to a functional assessment. A significant correlation between treatment acceptability and predicted use of the intervention was also found.

Contributions of current study

The current study contributes to school psychology literature in two ways. First, it was found that teachers prefer rewards linked to the assessment. This is very promising for the current trend in developing treatments based on functional analysis. School psychologists are increasingly encouraged to
link reinforcers to the function of problem behavior; in accordance with state law and best practices (Batsche & Knoff, 1995).

Second, teachers may be more likely to use an intervention that they find acceptable (Kazdin, 1980). Since the results of the current study show that teachers preferred the reinforcer linked to the function of the behavior, they may be more likely to use these interventions in the context of school-based behavioral consultation. Therefore, the current findings may contribute to the expanding literature on treatment acceptability and those variables related to teacher use of interventions.

Limitation of Current Study

One limitation of the study would be the use of self-report for measuring treatment integrity. Teachers were simply asked if they would be likely to use an intervention. Treatment integrity was measured by teacher’s report rather than actually asking teachers to implement the intervention and directly observing its implementation.

Another limitation of the present study is its analogue format. Subjects were given a limited amount of information about the problem behavior and intervention, on which they based their acceptability ratings. When provided with such information, participants are likely to base their information solely on the information given (Witt, Martens & Elliott, 1984).
Although this is necessary for systematic study, some researchers (Hyatt & Tingstrom, 1993; Rhoades & Kratochwill, 1992; Tingstrom, Little, Edwards & Martens, 1990) have argued that both naturalistic and analogue studies of acceptability have merit and can also contribute to research pertaining to teachers' acceptability of interventions (Tingstrom, 1994). However, future studies should investigate acceptability ratings of teachers during actual consultation settings.

A final limitation is that anecdotal information did not conclusively support the notion that teachers actually used the assessment information to evaluate the intervention. Many teachers who indicated they would use the peer attention treatment made no reference to the assessment data when asked to indicate why they would use the strategy. Therefore, the present findings suggest only that, given an identical descriptive analysis of a common behavior problem, teachers may prefer to use interventions based on peer attention rather than teacher attention or tangibles. Whether these findings indicate a general preference for using peer attention, rather than a preference for any reinforcer based on a functional assessment, is unknown.

Future Directions

Results of the current study are very promising and indicate a need for additional research. Future studies should use the
same methodology to study other potential maintaining variables, such as teacher attention or escape from tasks.

These data also indicate a potential relationship between level of education and teacher ratings. It would be of interest to look further at education levels. A larger sample, however, may be needed to properly determine if there is in fact an interaction between education level and acceptability ratings.

This particular sample included regular education teachers. It would be of interest to see if special education teachers, given their specialized training, also prefer reinforcers based on assessment data.

Ultimately, future studies should include the actual use of the intervention as the dependent variable, rather than teacher self-report. Direct measures of treatment integrity, such as observed implication, may be the most valid indicators of whether a teacher finds an intervention "acceptable".

The current study addressed the question, "Do teachers prefer reinforcers based on a functional assessment?" After teachers rated one of three vignettes that compared three reinforcers, the reinforcer that matched the function of the behavior was rated as more acceptable. This type of research may contribute to our understanding of the conditions under which teachers follow through with recommendations of the school psychologist. Further study of rewards that teachers find
acceptable will help school psychologists link interventions to the function of the behavior. Also, by suggesting interventions and reinforcers that teachers find acceptable, treatment integrity may be enhanced, thus significantly increasing the efficacy of school-based consultation.
References


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<table>
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<th>Grade Level</th>
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Table 2

IRP-15 Ratings

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<tr>
<td>Tangible</td>
<td>48.6</td>
<td>18.74</td>
<td>30</td>
</tr>
</tbody>
</table>
Table 3

Teachers' Rating of Will Use

<table>
<thead>
<tr>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer attention</td>
<td>3.18</td>
<td>.91</td>
<td>28</td>
</tr>
<tr>
<td>Teacher attention</td>
<td>2.6</td>
<td>1.14</td>
<td>35</td>
</tr>
<tr>
<td>Tangible</td>
<td>2.47</td>
<td>1.22</td>
<td>30</td>
</tr>
</tbody>
</table>
Table 4

Correlations Between IRP-15, Years of experience, and Use

<table>
<thead>
<tr>
<th></th>
<th>IRP-15 Scores</th>
<th>Years</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRP-15</td>
<td>-0.0136</td>
<td>p = 0.897</td>
<td>p = 0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(93)</td>
<td>(94)</td>
</tr>
<tr>
<td>Years</td>
<td>-0.0136</td>
<td>-0.0136</td>
<td>p = -0.0136</td>
</tr>
<tr>
<td></td>
<td>p = 0.897</td>
<td></td>
<td>p = 0.897</td>
</tr>
<tr>
<td></td>
<td>(94)</td>
<td></td>
<td>(94)</td>
</tr>
<tr>
<td>Will use</td>
<td>*0.7597</td>
<td>-0.0556</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>p = 0.000</td>
<td></td>
<td>p = 0.596</td>
</tr>
<tr>
<td></td>
<td>(94)</td>
<td></td>
<td>(93)</td>
</tr>
</tbody>
</table>

Note. * represents a significant correlation. Numbers in parentheses represent n.
Table 5
Means for IRP-15 Scores Across Educational Level and Vignette

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Peer</th>
<th>Teacher</th>
<th>Tangible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's (50)</td>
<td>59.00 (15)</td>
<td>48.88 (16)</td>
<td>51.74 (19)</td>
</tr>
<tr>
<td>Master's (43)</td>
<td>61.31 (13)</td>
<td>46.63 (19)</td>
<td>43.18 (11)</td>
</tr>
</tbody>
</table>

Note. Numbers in parentheses represents n.
Appendix A

Teachers' Acceptability Ratings of Arbitrary Versus Functional Reinforcers

Debriefing Statement
“Teachers’ Acceptability Ratings of Arbitrary Versus Functional Reinforcers”

Introductory Statement

My name is ___________________________ and I am researching various ways to help students who have learning and emotional problems. Today, I will be asking each of you to provide me with important information about classroom interventions. Please read the informed consent page of your packet. If you agree to participate, please read the problem vignette and respond to the questions.

Debriefing Statement

“Thank you for participating in this study. The purpose of this research is to identify the kind of interventions teachers find most acceptable for use in their classrooms. Today, each of you rated an intervention that included one of three different types of reinforcers and we will be comparing your ratings to determine which type of reinforcer was rated the highest. This information is important to school psychologists, who often work with teachers to design special programs for children with learning or behavior problems.”
Appendix B

Teacher Informed Consent To Participate
Teacher Informed Consent to Participate in 
Eastern Illinois University Research Project

Project Title: _____________________________________________

Investigator: _____________________________________________

You are being asked to help the research team discover ways to help students with learning and emotional problems. This project will attempt to identify what types of classroom interventions teachers prefer to use.

PROCEDURES: If you participate in this study, you will be asked to read a vignette that describes a hypothetical classroom behavior problem and a suggested treatment strategy. You will then be asked to complete a rating form, some demographic information, and two questions that assess your opinions of the treatment.

POTENTIAL RISK OR DISCOMFORT: There is no potential risk involved in participation in this project.

BENEFITS: All ratings will be combined to determine relationships between types of interventions and teacher perceptions. Findings may help the research team determine how school-based consultants can work collaboratively with classroom teachers in solving common discipline problems.

RIGHT TO REFUSE PARTICIPATION: You do not have to take part in this study. You may return a blank form if you do not wish to participate.

RIGHT TO INQUIRE: If you have any questions about this study, you may write to the supervisor of this project, Kevin M. Jones, Department of Psychology, Eastern Illinois University, Charleston, IL 61920 or call him at (217) 581-2128.

RESEARCH STANDARDS: This page will be detached from your ratings and the research team will not be able to link your name with any of the completed rating forms.

INFORMED CONSENT STATEMENT:

I have read this form and the possible risks and benefits have been adequately described to me. I agree to participate in this study.

_________________________________________  ____________
Participant’s Signature                       Date
Appendix C

Intervention Rating Profile-15

(Martens et al., 1985)
INTERVENTION RATING PROFILE-15

Please circle the number (1 - 6) that best describes your agreement or disagreement with each of the following statements about the intervention developed for the problem behavior.

1. This is an acceptable intervention for the child's problem behavior.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

2. Most teachers would find this intervention appropriate for other behavior problems as well as the one identified.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

3. This intervention should prove effective in changing the child's problem behavior.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

4. I would suggest the use of this intervention to other teachers.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

5. The child's behavior problem is severe enough to warrant the use of this intervention.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

6. Most teachers would find this intervention suitable for the behavior problem identified.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

7. I would be willing to use this intervention in the classroom setting.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

8. This intervention would not result in negative side-effects for the child.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

9. This intervention would be appropriate for a variety of children.
   Strongly Disagree 1 2 3 4 5 6 Strongly Agree

10. This intervention is consistent with those I have used in classroom settings.
    Strongly Disagree 1 2 3 4 5 6 Strongly Agree

11. The intervention is a fair way to handle the child's problem behavior.
    Strongly Disagree 1 2 3 4 5 6 Strongly Agree

12. This intervention is reasonable for the behavior problem identified.
    Strongly Disagree 1 2 3 4 5 6 Strongly Agree

13. I like the procedures used in this intervention.
    Strongly Disagree 1 2 3 4 5 6 Strongly Agree

14. This intervention is a good way to handle this child's behavior problem.
    Strongly Disagree 1 2 3 4 5 6 Strongly Agree

15. Overall, this intervention would be beneficial for the child.
    Strongly Disagree 1 2 3 4 5 6 Strongly Agree
Appendix D

Teacher Background Information Form

Intervention Assessment
TEACHER BACKGROUND INFORMATION FORM

Directions: Please provide the following information. Your responses will be anonymous. Please do not put your name on this sheet.

Sex: Male _______ Female _______

Highest Degree Earned: ________________________________________

Number of years employed as a teacher: _______

Grade level currently teaching: _______

INTERVENTION ASSESSMENT

Referring to the previous intervention plan, how likely would you be to use the recommended treatment for a similar problem in your classroom (Circle One)?

Not At All    Not Likely    Not Sure    Likely    Very Likely

Why or why not?
Appendix E

Vignette 1 TPA-1

Peer Attention
Jesse is a third grader with average academic skills who is very disruptive during reading class. The primary problem is that Jesse often gets out of his seat. The school psychologist has observed Jesse during three instructional periods. These observations revealed that Jesse gets out of his seat without permission an average of once every ten minutes. Approximately 90% of the time, while out of his seat one of the other students talks to, laughs at, or teases Jesse.

The school psychologist suggests the following strategy for increasing the amount of time Jesse remains in his seat:

1. During reading class, classmates are instructed to ignore all children when they are out of their seat. For every ten minute period that Jesse remains in his seat, a checkmark is placed on the board.

2. At the end of the class, each earned checkmark earns one minute of free time with a classmate.
Appendix F

Vignette 2 TTA -1

Teacher Attention
Jesse is a third grader with average academic skills who is very disruptive during reading class. The primary problem is that Jesse often gets out of his seat. The school psychologist has observed Jesse during three instructional periods. These observations revealed that Jesse gets out of his seat without permission an average of once every ten minutes. Approximately 90% of the time, while out of his seat one of the other students talks to, laughs at, or teases Jesse.

The school psychologist suggests the following strategy for increasing the amount of time Jesse remains in his seat:

1. During reading class, the teacher ignores Jesse when he is out of his seat. For every ten minute period that Jesse remains in his seat, a checkmark is placed on the board.

2. At the end of the class, each checkmark earns one minute of free time with the teacher.
Appendix G
Vignette 3 TGR-1
Tangible
Jesse is a third grader with average academic skills who is very disruptive during reading class. The primary problem is that Jesse often gets out of his seat. The school psychologist has observed Jesse during three instructional periods. These observations revealed that Jesse gets out of his seat without permission an average of once every ten minutes. Approximately 90% of the time, while out of his seat one of the other students talks to, laughs at, or teases Jesse.

The school psychologist suggests the following strategy for increasing the amount of time Jesse remains in his seat:

1. During reading class, for every ten minute period that Jesse remains in his seat, a checkmark is placed on the board.

2. At the end of the class, each checkmark earns one selection from a class "grab bag."