BRIEF INTERVENTIONS : BEHAVIOR MODIFICATION

BI-PED PROJECT (BRIEF INTERVENTIONS: PEDIATRICS)
Emotional Health Committee Maryland Chapter American Academy of Pediatrics

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RATIONALE

Behavior modification is a useful tool for parents in helping their children to change an undesired behavior or to start a desired behavior. It is often helpful:

- for common behavioral problems
- when usual discipline is not working
- when parents and children are in frequent power struggles

When evaluating children with behavior problems, it is helpful to think about the A,B and C’s of the behavior: Antecedent – what is triggering or going on prior to the behavior? Behavior - what behavior is actually occurring? and Consequences – what consequence is currently being applied following the behavior?

Behavior modification is an intervention that is based on the premise that the manner in which people in a child’s environment attend to a given behavior either strengthens or weakens that behavior. Positive behaviors can be reinforced by using pleasant rewards (positive reinforcement). Negative behavior such as whining can be diminished by ignoring it or limiting attention paid to it. Negative behavior can also be reduced by implementing a negative consequence following the behavior (punishment).

The following discussion will focus on how to use positive reinforcers to strengthen desired behaviors.
DESIGNING AND INITIATING THE PLAN

- **Step 1** – Define the *target behavior*—does the parent wish to *stop* an undesirable behavior or *start* a desirable behavior? Ask parents the *specific behavior* they would most like to see changed. Examples of behaviors they might want stopped are fighting, talking back, or getting out of bed at bedtime. Help parents to identify the behavior that they want in place of the undesired one(s). These *desired* behaviors should be stated *clearly* and *positively* (e.g. “getting along with others” instead of fighting, “speaking politely” instead of talking back, “staying in bed”). On the other hand, parents may wish to see a new behavior started such as making the bed, sitting down to homework or putting toys away.

- **Step 2** – Ask parents *how frequently* the undesirable behavior occurs or how frequently they wish a new desired behavior to occur. For example, fighting with a sibling may be occurring 3-4 times per day. The behavior plan would aim in turn to strive for cooperative behavior with a sibling 3-4 times per day. A new starting behavior such as making the bed needs to occur only once daily. The goal is to decrease the frequency of the problem behavior and eventually eliminate it altogether or increase the frequency of a new starting behavior.

- **Step 3** – Help parents to decide on the method of *charting or tracking* the desired behavior. Sticker charts for younger children and point lists or calendars for older children are appropriate.

- **Step 4** – Help parents to decide *how often they will observe for the desired behavior*. The *intervals for observing and recording* the behavior are related to the frequency that the behavior is occurring. For example, when using a chart for going to bed at night, the behavior would be observed and recorded only at night. On a chart for following parents’ daily directives or cooperating with a sibling, the desired behavior would be observed throughout the day.

- **Step 5** – Decide what *type of reinforcers* will be implemented for the desired behavior. *Praise* should always be given. Stickers, points, checks, etc. are good immediate reinforcers.
These immediate reinforcers can in turn add up to a secondary reinforcer (tangible reward) at the end of the day or week in order to provide additional motivation. The tangible reward should be something the child would want but doesn’t usually get, and something that doesn’t cost a lot of money or time. Dollar toys, extra play time, a treat or playing a game with a parent are examples for younger children. Extra privileges or extra allowance can be used for older children.

Secondary tangible reinforcers are not always necessary. Sometimes the charting and praise/stickers/checks are sufficient to get the child back on track, especially with younger children.

Children can be allowed to come up with ideas for tangible rewards but parents should have the final say.

- Step 6 – Help parents to decide how often the child will receive stickers or points and how many stickers/points are required to receive a tangible reward. This is called the interval for reinforcement. The interval for reinforcing younger children should be shorter than for older children because of the difference in ability to hold goals in memory. For example, a young child can receive a small tangible reward every day for meeting the goal of getting dressed on time. An older child might receive a reward at the end of the week for doing chores. Reinforcers should be made relatively easy to earn at the beginning of the plan so that the child “buys in” and experiences success. As the behavior improves, the child should have to earn more stickers or points to receive the tangible reward.

The clinician and parent should present the plan to the child, clearly and with enthusiasm. Sometimes the child can help devise the plan, but the major decisions are made by the parents with the guidance of the clinician. Both the child and the parents need to be motivated to make change in order for the plan to work.

The child gradually learns to change unwanted behavior or adopt a desired behavior that is new for them. It is frequently necessary to fine tune the plan. The interval of reinforcing/rewarding may need adjustment. For example, if the child is unable to successfully earn 5 stickers, the plan may need to be modified so that earning 3 stickers leads to a tangible reward. Sometimes the reinforcer needs to be
changed to keep the child motivated. When the behavior improves and the appropriate behavior becomes “habit”, the plan can be phased out. Improvement is typically seen within 2-3 weeks and often the plan can be phased out in 5-6 weeks.
EXAMPLES

Example 1 – Behavior: 4 y/o fighting with peers at preschool and with 2 y/o sibling at home
♦ Step 1: Target behavior is to play cooperatively with peers and sibling (keeping hand and feet to self)
♦ Step 2: Frequency of behavior – 2-3 times a day
♦ Step 3: Charting – will use a sticker chart
♦ Step 4: Interval for observing and recording –
  AM at school (9-12)
  PM at school (12-3)
  PM at home (3 on)
♦ Step 5 and 6: Reinforcers and interval for reinforcement: the immediate reinforcer is one sticker for each interval free of fighting; if the child receives 2 out of 3 possible stickers per day, the child receives a tangible reward of an edible treat at the end of the day.

Tommy’s sticker chart

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9 – 12 AM</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>12 – 3 PM</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 PM - bedtime</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Treat Treat Treat Treat Treat Treat

(Tommy gets a treat for earning 2 out of 3 stickers each day)
Example 2 – Behavior: 9 y/o to start making bed and eating a good dinner every day

♦ Step 1: Target behaviors are making the bed and eating a good dinner daily

♦ Step 2: Frequency of behavior – she currently performs both behaviors 4 out of 7 days; desired frequency is daily

♦ Step 3: Charting – will use a sticker chart

♦ Interval for observing and recording – once daily

♦ Step 5 and 6: Reinforcers and interval for reinforcement: she gets one sticker for performing each of the behaviors targeted (can earn 2 stickers per day). If she earns 8 stickers during the week, she receives a tangible reward of going out for dessert on Friday. The reward should be made easy at first and harder as she succeeds. (e.g. eventually she must earn 10 stickers for dessert on Friday, then 12 stickers for dessert, etc.)

Susie’s Sticker Chart

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Make my bed</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Eat a good dinner</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

(Susie needs eight stickers for dessert on Friday but eventually will need more stickers to earn dessert.)
Example 3
– Behavior: 6 y/o – crying and resistance to going to school

♦ Step 1: Target behaviors include going to school cooperatively by getting on the bus, going to the school entrance and going into the classroom
♦ Step 2: Frequency of behavior – every school day
♦ Step 3: Charting – checks on a chart
♦ Step 4: Interval for observing and recording–she receives a check daily for each of three behaviors: getting on the bus, walking into school from the bus, walking into the classroom (all done cooperatively without a fuss)
♦ Step 5 and 6: Reinforcers and interval for reinforcement: For every 4 checks throughout the week, she gets a gold sticker. For two gold stickers she gets a tangible reward of a dollar toy. This is made harder as she progresses.

**The workup of school avoidance revealed no special circumstances. Dynamics of school avoidance were discussed with parents. School personnel were brought on board to assist in supporting the child as she entered school from the bus and went into the classroom.

Molly’s Going to School

<table>
<thead>
<tr>
<th>Go to school Without fuss</th>
<th>Mon.</th>
<th>Tues.</th>
<th>Wed.</th>
<th>Thurs.</th>
<th>Fri.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get on the bus</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go to school door</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go into classroom</td>
<td></td>
<td>X Gold sticker</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

(Molly gets a toy from the grab bag for two gold stickers. As she progresses, the number can be extended to 5 or 6 checks in order to receive a gold sticker.)
SUMMARY

- The best plan is a simple one, clearly explained, with encouragement from the parents and clinician. Follow up can frequently be made by phone.
- Sometimes a behavior modification reward plan needs to be coupled with negative consequences for inappropriate behaviors (see discipline module) in order to be more effective.
- Certain problems may need further discussion with the parent/s such as:
  - Parents not following through (may be overwhelmed, misunderstand goals, be too angry at child)
  - Child too negative to work for incentives (further evaluation and/or referral may be needed)
  - Confusion or conflict among caretakers regarding the plan
  - Reward schedule too difficult for child to achieve and needs adjustment / reinforcers no longer effective and need new ones

When to Refer: The practitioner should refer to the child and family to a mental health consultant under the following circumstances:

- Child or parent has significant psychopathology
- Significant marital discord
- Patient or parents request a referral
- Poor response to primary care mental health interventions
- Primary care clinician is uncomfortable managing the case

REFERENCES


1, 2, 3 Magic, Thomas Phelan, (3rd edition), Parent Magic Inc.,