

Preventing Home Accidents

Objective: To teach students to identify potential in-home hazards

Setting and Materials

Setting: community-based apartment with living room, bedroom, kitchen, and bathroom

Materials:

1. In living room: sofa, two chairs, a table, TV, and stereo
2. In bedroom: single bed, dressing table, bedside table, and closet
3. In kitchen: sink, counters, stove, refrigerator, microwave oven, cleaning materials stored in a box under the sink, mop, broom, pail, kitchen utensils, and a clock
4. In bathroom: bathtub shower unit, sink, mirror, and toilet
5. Additional items: paper towels, grease, trash can, paper napkins, smoke detector, drinking glasses, dustpan, ashtray with cigarette butts, curtains, space heater, newspaper, vacuum cleaner with cord that wraps around handle, bar soap, soap dish, hair dryer, medicine bottles without clear labels, outdated medicines, and bathroom mat
6. Pencils and copies of checklists

Content Taught

Students were taught to identify potential safety hazards listed below in the kitchen, living room, bedroom, and bathroom.

Kitchen

- A. Grease on stove top.
 1. Get paper towels and appropriate cleaner from materials box under sink.
 2. With towels and cleaner, wipe grease from stove until no grease can be seen.
 3. Throw paper towels in trash and return cleaner to materials box.
- B. Paper napkins on stove top.
 1. Remove paper from stove top.
 2. Place paper in trash.
- C. Smoke detector beside stove.
 1. Remove smoke detector from cooking area.
 2. Get paper towel from materials box under sink.
 3. Wipe dust from smoke detector until no dust is visible.
 4. Press test button to make sure smoke detector is working.
 5. Place smoke detector near ceiling at least 15 ft from stove.
- D. Trash can beside stove.
 1. Place trash can at least 5 ft away from stove.
- E. Drinking glasses at edge of kitchen counter.
 1. Place glasses at least 1 ft from edge of counter.

- F. Broken glass on floor.
1. Get broom and dustpan from broom closet.
 2. Sweep glass into dustpan until dustpan is full.
 3. Empty dustpan into trash.
 4. Repeat until no glass can be seen on floor.
- G. Cleaner (poison) beside food in cabinet.
1. Place cleaners at least 5 ft away from food.
 2. Place cleaners that are not in their proper containers in the trash.

Living Room

- A. Ashtray full of cigarette butts and paper on table.
1. Lift ashtray with paper and cigarette butts, making sure nothing falls from ashtray.
 2. Take ashtray into kitchen.
 3. Pour water into ashtray until paper and cigarette butts are soaked.
 4. Empty all contents of ashtray into trash.
 5. Rinse ashtray with water.
 6. Dry ashtray with paper towel.
 7. Return ashtray to table.
- B. Half-smoked cigarette on edge of table.
1. Pick up cigarette by the butt.
 2. Take cigarette into kitchen.
 3. Pour water on cigarette until it is soaked.
 4. Put cigarette in trash.
- C. TV beside curtains.
1. Unplug TV.
 2. Place TV at least 3 ft from all other furniture and walls.
- D. Space heater beside curtains.
3. Unplug space heater.
 4. Wait until space heater is cool enough to touch.
 5. Place space heater at least 3 ft from all curtains, furniture, and walls.
- E. Trash can full of paper beside space heater.
1. Place trash can at least 5 ft away from space heater.
- F. Newspaper on floor.
1. Place paper in trash can.
- G. Vacuum cleaner in middle of room with cord strewn across floor.
1. Place vacuum cleaner by a wall.
 2. Wrap cord completely around handles on vacuum cleaner.

Bedroom

- A. Space heater beside bed.
1. Unplug space heater.
 2. Wait until space heater is cool enough to touch.
 3. Place space heater at least 3 ft from all furniture and walls.
- B. Ashtray full of cigarette butts and paper on table.
1. Lift ashtray with paper and cigarette butts, making sure nothing falls from ashtray.
 2. Take ashtray into kitchen.
 3. Pour water into ashtray until paper and cigarette butts are soaked.
 4. Empty all contents of ashtray into trash.

5. Rinse ashtray with water.
6. Dry ashtray with paper towel.
7. Return ashtray to table.
- C. Half-smoked cigarette on edge of table.
 1. Pick up cigarette by the butt.
 2. Take cigarette into kitchen.
 3. Pour water on cigarette until it is soaked.
 4. Put cigarette in trash.
- D. Newspaper on floor.
 1. Place paper in trash can.
- E. Drinking glass at edge of table.
 1. Place glass at least 1 ft from edge of table.
- F. Broken glass on floor.
 1. Get broom and dustpan from broom closet.
 2. Sweep glass into dustpan until dustpan is full.
 3. Empty dustpan into trash.
 4. Repeat until no glass can be seen on floor.
- G. Vacuum cleaner in middle of room with cord strewn across floor.
 1. Place vacuum cleaner by a wall.
 2. Wrap cord completely around handles on vacuum cleaner.

Bathroom

- A. Bar of soap in bathtub.
 1. Pick up soap from bathtub floor.
 2. Place soap in soap dish by sink.
- B. Hair dryer in bathroom.
 1. Make sure hands are dry.
 2. Unplug hair dryer.
 3. Remove hair dryer from bathroom.
- C. Medicines without clear labels.
 1. Place medicines in trash.
- D. Outdated medicines in medicine cabinet.
 1. Place medicines in trash.
- E. Bathtub safety mat on floor of bathroom.
 1. Pick up mat from bathroom floor.
 2. Place safety mat on bottom of bathtub.

Teaching Procedures

Preassessment

1. Before students enter the room, alter the environment as described below in at least one room (i.e., living room, bedroom, bathroom, or kitchen) to simulate the targeted hazards.
 - In the kitchen, place cold grease on the stove top, paper napkins on the stove top, a trash can containing paper 1 ft from the stove, a smoke detector 1 ft from the stove, two plastic drinking glasses at the edge of the kitchen counter, pieces of broken plastic glass on the kitchen floor, and two soda bottles labeled “poison” beside food under the sink.

- In the living room, place an ashtray filled with paper and cigarette butts on the coffee table, a half-smoked extinguished cigarette at the edge of the coffee table, a TV touching the curtains, an unplugged space heater 1 ft from the curtains, a trash can containing paper 1 ft from the space heater, pieces of newspaper scattered on the floor, and a vacuum cleaner plugged in with its cord strewn across the floor.
 - In the bedroom, place an unplugged space heater 1 ft from the bed, an ashtray full of cigarette butts and paper on the bed table, a half-smoked extinguished cigarette at the edge of the bed table, pieces of newspaper strewn over the floor, a plastic drinking glass on the edge of the bed table, pieces of broken plastic glass on the bedroom floor, and a vacuum cleaner plugged in with its cord strewn across the floor
 - In the bathroom, place a bar of soap on the bathtub floor, medicine containers without clear labels in the medicine cabinet, outdated medicines (labels on the container are expired and unsafe to use) in the medicine cabinet, and a bathtub safety mat on the bathroom floor.
2. Say, “Let’s see how well you can find and fix the potential hazards in this room. When you have finished, leave the room and then tell me when you have finished.”
 3. Leave the room and allow the student to find and correct the potential hazards working at their own pace.
 4. Return to the room once the student exits and use the outcome checklist to see how the student did. If the student identified and corrected less than 50% of the hazards, continue working with the student using the four written checklists.

Written Checklist Training

5. Prior to each training session, alter the room to simulate hazards without creating actual serious risks for participants (see preassessment above).
6. Hand the student the written checklists below and ask them to read them orally to ensure that they can read the text. If they make errors reading the checklists and it would alter their performance, be sure to correct the errors and have the student repeat the information correctly.

Checklists of Hazardous Items in Four Rooms

Kitchen

- A. Grease on stove top.
- B. Paper napkins on stove top.
- C. Smoke detector beside stove.
- D. Trash can beside stove.
- E. Drinking glasses at edge of kitchen counter.
- F. Broken glass on floor.
- G. Cleaner (poison) beside food in cabinet.

Living Room

- A. Ashtray full of cigarette butts and paper on table.
- B. Half-smoked cigarette on edge of table.
- C. TV beside curtains.

- D. Space heater beside curtains.
- E. Trash can full of paper beside space heater.
- F. Newspaper on floor.
- G. Vacuum cleaner in middle of room with cord strewn across floor.

Bedroom

- A. Space heater beside bed.
- B. Ashtray full of cigarette butts and paper on table.
- C. Half-smoked cigarette on edge of table.
- D. Newspaper on floor.
- E. Drinking glass at edge of table.
- F. Broken glass on floor.
- G. Vacuum cleaner in middle of room with cord strewn across floor.

Bathroom

- A. Bar of soap in bathtub.
- B. Hair dryer in bathroom.
- C. Medicines without clear labels.
- D. Outdated medicines in medicine cabinet.
- E. Bathtub safety mat on floor of bathroom.

7. Tell the student, “Read a step. Do what it says, and then check off the step you do with a pencil.”
8. If the student fails to check off the items corrected at the end of each trial give them a reminder such as, “It seems that you did not check off each step. Please check off the steps as you go along.”
9. When you have returned to the room, use the outcome checklist (see evaluation) and provide feedback to the student on each item of the checklist sequentially. For example, if the student did not wipe all the grease off the stove, give nonspecific feedback such as, “You did not clean the stove top adequately. There is grease on the stove top.”
10. Give the student praise if they correct the hazard independently.
11. If the student still has problems identifying potential hazards at 100% criteria, give them a written individualized task analysis.

Individualized Task Analysis Training

12. Prior to each training session, alter the room to simulate hazards without creating actual serious risks for participants (see preassessment).
13. Explain the individualized task analysis to the student. For example, say, “You performed these items correctly (point to correctly performed steps). The checklist items with the numbered steps underneath are the items where you made errors (point to these specific errors). You can use these guidelines to perform the tasks with no errors.”

Example of Individualized Task Analysis for the Living Room

- A. Ashtray full of cigarette butts and paper on table.
 1. Lift ashtray with paper and cigarette butts, making sure nothing falls from ashtray.

2. Take ashtray into kitchen.
 3. Pour water into ashtray until paper and cigarette butts are soaked.
 4. Empty all contents of ashtray into trash can.
 5. Rinse ashtray with water.
 6. Dry ashtray with paper towel.
 7. Return ashtray to table.
- B. Half-smoked cigarette on edge of table.
C. TV beside curtains.
D. Trash can beside space heater.
E. Space heater beside furniture.
F. Newspaper on floor.
G. Vacuum cleaner in middle of room with cord strewn across floor.

14. Ask the participant to read the individualized task analysis orally and correct in the same way you did with the checklist training.
15. Ask the student to fix the hazards using the individualized task analysis and check off steps they feel they have completed.
16. Leave the room while the student identifies potential hazards and allow them to work at their own pace.
17. Once the student exits the room and brings their individualized task analysis back to you, enter the room and see how they did using your outcome checklist (see evaluation).
18. Deliver praise to the student if they complete the step correctly. If it is incorrect, give the student specific corrective feedback. For example, if the ashtray was full of cigarette butts and paper, you might say, “You did not clean the ashtray adequately. There are cigarette butts and paper in the ashtray. You need to take the ashtray to the kitchen without spilling it. Put the ashtray under the faucet and pour water into it until the paper and cigarette butts are completely soaked. Then empty the ashtray into the trash, rinse it, dry it, and replace it on the table in the living room.”
19. Continue using the individualized task analysis checklist until the student demonstrates mastery of the content and revise as needed.

Evaluation

Each student should master the outcome checklist and/or individual task analysis for each room with 100% over three consecutive trials.

Outcome Checklists for Hazards in Four Rooms

Kitchen

- A. Grease removed from stove top and in trash.
- B. Paper napkins removed from stove top and in trash.
- C. Smoke detector placed at least 15 ft from stove.
- D. Trash can placed at least 3 ft from stove.
- E. Drinking glasses at least 1 ft from edge of kitchen counter.
- F. All broken glass removed from floor and in trash.
- G. Cleaner and food beside it are in trash.

Living Room

- A. Cigarette butts and paper are soaked with water and in trash.
- B. Half-smoked cigarette is soaked with water and in trash.
- C. TV is at least 3 ft from all furniture and walls.
- D. Space heater is at least 3 ft from all furniture and walls.
- E. Trash can is at least 3 ft from space heater.
- F. Newspaper is in trash.
- G. Vacuum cleaner is unplugged and placed beside a wall with the cord completely wrapped around the handles.

Bedroom

- A. Space heater is at least 3 ft from all furniture and walls.
- B. Cigarette butts and paper are soaked with water and in trash.
- C. Half-smoked cigarette is soaked with water and in trash.
- D. Newspaper is in trash.
- E. Drinking glass is at least 1 ft from edge of table.
- F. All broken glass is removed from floor and in trash.
- G. Vacuum cleaner is unplugged and placed beside a wall with the cord completely wrapped around the handles.

Bathroom

- A. Bar of soap is removed from bathtub floor and placed in soap container beside sink.
- B. Hair dryer is removed from bathroom.
- C. Medicine containers without clear labels are in trash.
- D. Outdated medicines are in trash.
- E. Bathtub safety mat is placed correctly in bathtub.

Lesson Plan Based on:

O'Reilly, M. F., Green, G., & Braunling-McMorrow, D. (1990). Self-administered written prompts to teach home accident prevention skills to adults with brain injuries. *Journal of Applied Behavior Analysis*, 23, 431-446.