

*USING PUBLIC FEEDBACK TO INCREASE CONTRIBUTIONS TO  
A MULTIPURPOSE SENIOR CENTER*

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Multipurpose senior centers are expanding their services to meet the demands of a growing population. Unfortunately, federal agencies have not matched this expansion with monetary support. Many senior centers hold fund-raisers to supplement their budgets, but the impact of these projects is rarely evaluated. This study assessed the effectiveness of a public posting strategy designed to increase donations to an ongoing fund-raiser for a multipurpose senior center. The fund-raiser, "Coupons for Caring," consisted of senior volunteers clipping grocery coupons from newspapers, sorting them, and attaching them to their respective products in local grocery stores. Grocery store customers were given the option of donating the coupons to the senior center or redeeming them when they purchased the products to which the coupons were attached. In the experimental condition, signs were posted that included visual and written instructions, feedback on the value of coupons donated by customers the previous week, and feedback on the overall amount of money donated to the senior center. The signs were posted near each cashier stand and at the front entrances of the grocery stores in a multiple baseline across grocery stores. The percentage of coupons donated to the senior center increased at each store after the signs were posted.

DESCRIPTORS: behavioral gerontology, collaboration, community interventions, prompting, public posting

In the past 30 years the number of multipurpose senior centers operating in the United States has increased dramatically. Only 450 centers existed nationwide in 1965 (Lowy, 1985); by 1990 nearly 13,000 senior centers were in operation (Krout, 1990). These centers offer a wide variety of services to older adults including transportation, congregate and home-delivered meals, exercise programs, arts and crafts classes, and legal services (Gelfand, Bechill, & Chester, 1991). Krout (1990) estimated that as many as 15% of the older adult population, over 5 million persons, participate in senior center programs every year. Current population projections, however, suggest that in the next 30 to

40 years the number of older adults living in community settings will double (Hess, 1991). Thus, the need for multipurpose senior centers and other community services for older adults is expected to increase.

Unfortunately, federal funding for senior centers has actually decreased by 30% (Krout, 1990). Consequently, many senior centers have undertaken fund-raisers to support themselves. These activities often require a great deal of time and effort (Warner, 1992), but typically raise only enough money to fund a small portion of the services offered by senior centers (Krout, 1985).

In the current study, public feedback was used to help increase donations to an ongoing fund-raiser at a multipurpose senior center. Previous research has shown that public feedback on performance can be an effective strategy for changing group behavior. Publicly posted signs have been used in hospitals to improve staff performance (Greene, Willis, Levy, & Bailey, 1978; Hutchinson, Jarman, & Bailey, 1980; Panyan, Boozer, & Morris, 1970; Quilitch, 1975), in

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stores to reduce shoplifting (Carter, Hansson, Holmberg, & Melin, 1979; Carter, Holmstrom, Simpanen, & Melin, 1988; McNees, Egli, Marshall, Schnelle, & Risley, 1976), in schools to decrease student disruptions (Holland & McLaughlin, 1982; Staub, 1990), and on highways to reduce speeding (Van Houten & Nau, 1981, 1983; Van Houten, Nau, & Marini, 1980; Van Houten et al., 1985). Thus, it appears that public feedback on donations to a multipurpose senior center might similarly affect the probability of community members making donations.

## METHOD

### *Participants and Setting*

Douglas County Senior Services (DCSS), a senior center in a midwestern city of 60,000, conducted a fund-raiser known as "Coupons for Caring." This fund-raising strategy involved senior center volunteers, who clipped coupons from newspapers and magazines, sorted the coupons into product categories (e.g., breakfast cereals, dairy, frozen items), stamped each coupon "DCSS" (in 1 mm by 2 mm block letters using a rubber stamp and black ink), and subsequently placed these coupons on products in local grocery stores. When store patrons purchased products with DCSS coupons on them at the cashier stand, they were given the option of either donating the coupons to the senior center or redeeming the coupons as a discount on their own grocery purchase.

After the Coupons for Caring project had been conducted for approximately 14 months, senior center staff and grocery store managers associated with the project expressed concern that the level of benefit from the fund-raiser to the center was not optimal. It appeared that many, if not most, of the coupons were being redeemed by customers instead of being donated to the senior center.

Participants in the study were customers of three grocery stores participating in the Coupons for Caring project. Store 1 was a small

neighborhood store located in a middle-income neighborhood. It occupied 1,025 m<sup>2</sup> of floor space and had five checkout lines. Store 2, a discount grocery store (i.e., grocery items were displayed in the cardboard cases in which they had been delivered) located in a middle-income neighborhood, was a 4,000 m<sup>2</sup> store with nine checkout lines. Store 3 was a 1,600 m<sup>2</sup> store with eight checkout lines. It was located in a middle-income residential area, near public housing for senior citizens. Cashiers at all three stores were instructed to ask each customer presenting a coupon marked "DCSS" if he or she would like to donate it to the senior center or redeem the coupon. If the customer elected to donate the coupon to the senior center, it was placed in a small cardboard box, marked "DCSS Coupons," below the cash register and was collected at the end of each shift by the manager. However, if the customer elected to redeem the coupon, the cashier would deduct the face value of the coupon from the customer's bill and place the coupon in the cash register. Cashiers were never instructed to ask customers if they would like to donate coupons that they had brought to the store (those not marked DCSS).

Donated coupons and redeemed coupons were maintained in separate files in the manager's office. At the end of each month, the store manager totaled the value of all donated coupons and sent them to a coupon clearinghouse for reimbursement. Upon receiving reimbursement, the store manager wrote a check to the senior center for the value of coupons donated to DCSS. Other than these checks, participating stores provided no information to the senior center about the number or value of coupons that were either donated or redeemed by customers.

### *Target Behaviors, Measurement, and Reliability*

*Measurement.* Each week, the first author went to the manager's office at each participating grocery store and computed the value of all coupons donated to DCSS at the cashier stands.

Next, he went through all of the redeemed coupons (these included both coupons that customers had brought to the store and DCSS coupons that had been redeemed by customers) and computed the value of coupons stamped DCSS that had been redeemed by customers. The value of redeemed coupons that were not stamped DCSS was not computed. To compute the percentage of coupons donated to the senior center, the value of DCSS coupons donated was divided by the sum of the value of all DCSS coupons donated and redeemed; that quotient was multiplied by 100%.

*Reliability.* Total reliability on the value of coupons donated and redeemed was measured for each of the three grocery stores at least once during each condition of the study. A second observer independently recorded the value of donated and redeemed coupons and computed the percentage of coupons donated. Reliability was calculated by counting the number of coupons recorded in each value category (e.g., 25-cent coupons, 50-cent coupons, etc.) by each observer. These totals were compared for both observers. The number of agreements (e.g., both observers recorded the same number of coupons in a value category) was divided by the total number of value categories identified by either observer. Reliability ranged from 90% to 100%, with a mean of 98%.

#### *Procedure and Design*

*Baseline.* In the baseline condition, the first author collected weekly data on the value of DCSS coupons donated and the percentage of DCSS coupons donated to the senior center. The fund-raiser operated as it had for the previous 14 months.

*Posting.* After calculating the value of coupons donated by customers each week, the experimenter posted signs with instructions and feedback. The signs were 216 mm by 279 mm and were posted in each cashier checkout lane, near the cashier and approximately 1.5 m high (see Figure 1). A large sign, measuring 457 mm by 610 mm, was also posted at each grocery

store entry. Each Thursday, new small signs with feedback about the previous week's donations were printed on brightly colored paper and were posted at each store. The color used for the small signs was changed each week (e.g., bright yellow, green, red, pink, orange, yellow, green, etc.). The large sign at each store entry was also printed on bright color cardstock. The amount of the previous week's donations was updated each Thursday, and the city-wide total donations were updated monthly.

*Experimental design.* A multiple baseline across grocery stores was used to evaluate the impact of the public feedback and education procedures (Baer, Wolf, & Risley, 1968).

## RESULTS

### *Percentage of Coupons Donated*

The dashed lines in Figure 2 show the percentage of DCSS coupons used by store patrons that were donated to the senior center. At Store 1, a mean of 44% of all DCSS coupons used by customers were donated (range, 35% to 49%) to the center in the 8 weeks before signs were posted. During the 21 weeks that signs were posted at Store 1, a mean of 57% of the DCSS coupons used were donated (range, 41% to 67%). At Store 2, a mean of 13% of coupons were donated (range, 4% to 22%) in the 12-week baseline condition. During the 17 weeks that signs were posted, a mean of 29% of coupons were donated (range, 12% to 42%). At Store 3, a mean of 41% of coupons were donated (range, 33% to 53%) to the center in the 21 baseline weeks. During the 8 weeks that signs were posted, a mean of 46% of coupons were donated (range, 35% to 58%). Thus, the overall percentage of DCSS coupons used by store customers that were actually donated to the center increased during the intervention condition in all three grocery stores.

### *Value of Coupons Donated*

The solid lines of Figure 2 show the value of DCSS coupons donated to the senior center by

# Please Help Douglas County Senior Services

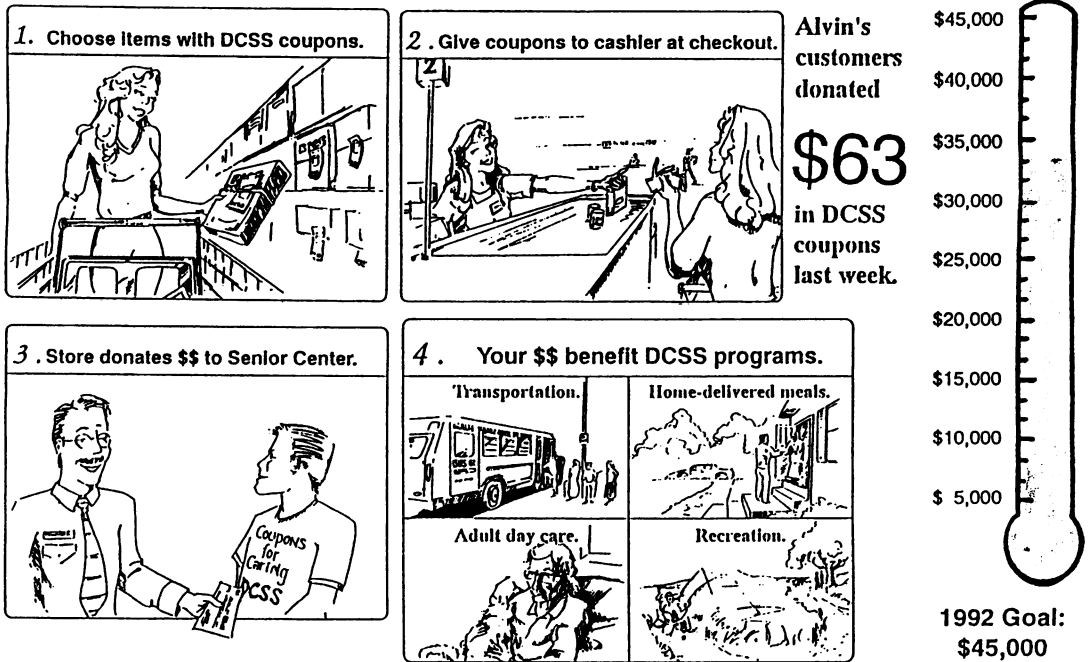


Figure 1. Example of the sign used to provide public feedback on contributions. Each sign included visual and written instructions, weekly feedback on contributions by store patrons, and year-to-date feedback for the city-wide contributions to the Coupons for Caring program.

store patrons each week. The weekly mean value of donated coupons during baseline and intervention, respectively, increased from \$28 (range, \$15 to \$39) to \$36 (range, \$9 to \$65) for Store 1 and from \$31 (range, \$2 to \$72) to \$44 (range, \$14 to \$97) for Store 2. At Store 3, the mean value decreased from \$61 (range, \$12 to \$138) to \$46 (range, \$31 to \$74) during intervention. Thus, the average value of coupons donated to the senior center increased during the intervention condition at two stores and decreased at the third. The weekly mean value of DCSS coupons that customers used themselves declined with the intervention at all three stores, from \$40 (range, \$16 to \$60) to \$30 (range, \$15 to \$43) at Store 1, from \$195 (range, \$63 to \$375) to \$107 (range, \$43 to \$225) at Store 2, and from \$93 (range, \$32 to \$197) to \$61 (range, \$31 to \$112) at Store 3.

## DISCUSSION

Although highly variable from week to week, the mean percentage of coupons donated by customers to the senior center and the value of those coupons increased following the intervention. These modest increases, which represented money that the senior center would not otherwise have received, must be weighed against the cost of conducting the fund-raiser. During the 29-week study, senior center volunteers spent approximately 550 hours banding coupons to products in the three targeted grocery stores. Other volunteers also invested their time clipping, stamping, and sorting coupons so that they could be banded. Thus, independent of the experimenters' time involved in evaluating the fund-raising activities, conducting the Coupons for Caring program required a great deal of volunteer time.

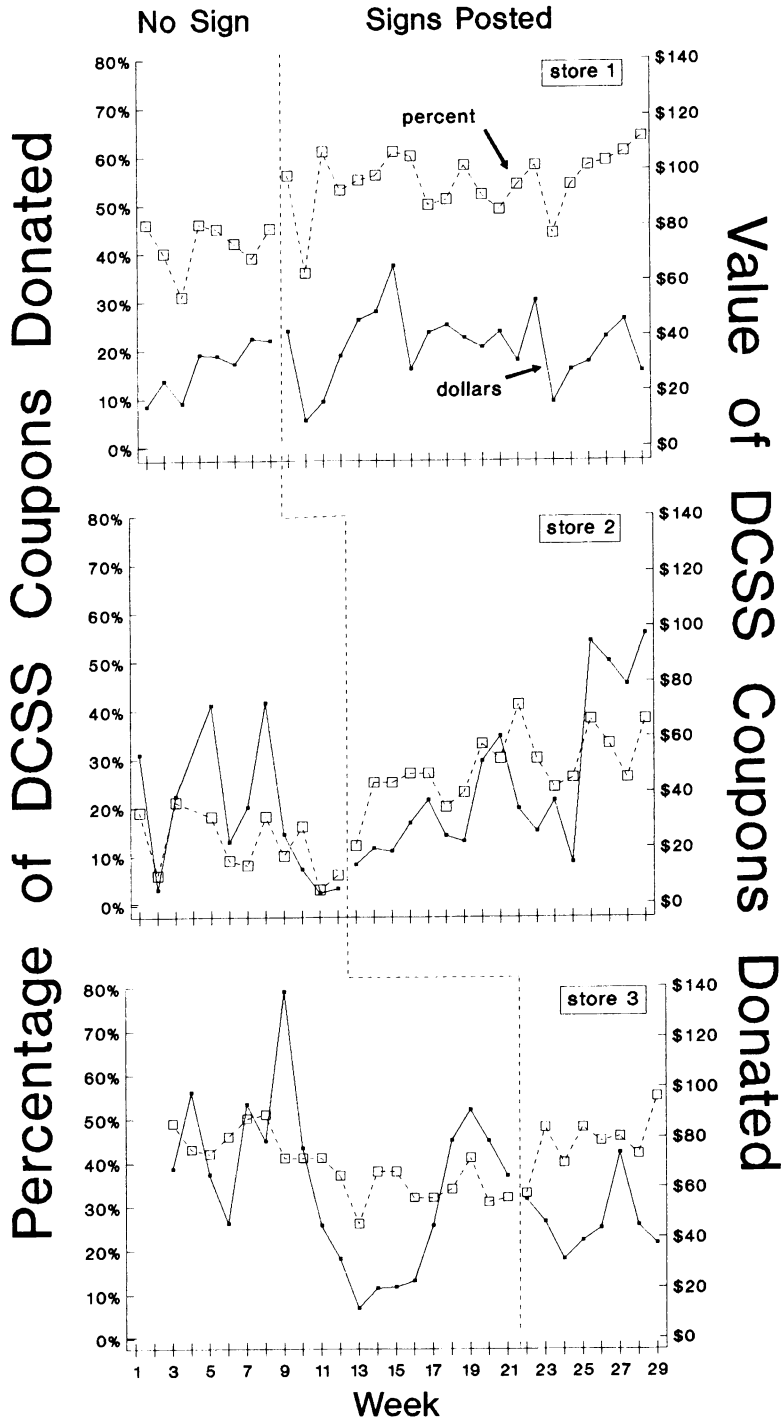


Figure 2. Dashed lines with open boxes for data points represent the percentage of DCSS-marked coupons used by store patrons each week that were donated to the senior center. The solid lines with closed dots for data points represent the value of DCSS-marked coupons donated by store patrons each week.

It is important to note an important distinction between the present study and all of the public feedback studies previously cited. In the studies designed to reduce speeding on highways (e.g., Van Houten et al., 1985), the public feedback reminded drivers of potential negative consequences (i.e., a speeding ticket) associated with speeding. Similarly, signs used to reduce shoplifting (e.g., McNees et al., 1976) served as a reminder of potential consequences of stealing (i.e., prosecution). In this study, the goal was to increase an altruistic behavior. Failure to perform this behavior posed no negative consequences for the individual. In fact, performance of the desired behavior (making a donation to the senior center) had an immediate financial cost. This difference may help to explain why the public feedback procedures were somewhat less effective in this situation than in previous interventions.

Some cashiers may also have been more consistent than others in explaining the purpose of the fund-raiser or prompting customers to donate DCSS coupons. It is important to remember that customers always had the option to redeem the coupons themselves. In some cases, the cashier might not have asked the customer whether he or she wished to donate the coupons.

After the study had been completed, DCSS staff and volunteers were given information on coupon donation percentages. They subsequently shifted the amount of time that volunteers spent banding coupons at the least productive store and reinvested that time banding at stores with a higher donation rate. In addition, at the conclusion of this experiment, the public feedback component of the intervention was changed from weekly posting to monthly posting, eliminating the most labor-intensive aspect of the project. Thus, the study demonstrated the importance of data collection in evaluating the effectiveness of fund-raising efforts for a human service agency. As agencies such as senior centers assume responsibility for greater percentages of their operating budgets,

such evaluations may play a critical role in ensuring that crucial human services are not discontinued.

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