Training Staff to Avoid Problem Behavior Related to Restricting Access to Preferred Activities

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Abstract Some training programs for staff working with individuals with intellectual disabilities fail to equip staff with the practical skills necessary to prevent behavioral episodes. The current research describes the results of a staff training program that, following traditional didactic training, used a card game followed by role-play training to increase staff competence in managing problem behavior. The card game and role-play training was based on behavioral episodes that had occurred previously in the research setting. Post-training observations showed that treatment integrity of trained staff improved.

Keywords Intellectual disabilities · Problem behavior · Role-play · Staff training · Standardized scenarios

Treatment relapse refers to the recurrence of problem behavior following apparently successful treatment (Pritchard et al. 2014). One reason for treatment relapse due to poor treatment

integrity is that staff have not been effectively taught how to prevent problem behavior occurring. MacDonald and McGill (2013) reviewed the literature on training staff to effectively manage problem behavior and reported that several studies only evaluated changes in staff knowledge, attributions, and emotional responses, noting that improvements in these variables are unlikely to affect staff practice. By contrast, Courtemanche et al. (2014) evaluated a comprehensive program to teach behavior management skills during frequently occurring staff-client interactions. The program was comprised of role-playing, in-vivo training, performance feedback, monetary reinforcement, and avoidance of training sessions contingent on accurate implementation of behavior management plans. Harchik and Campbell (1998) also recommended that role-play and in vivo modelling of behavior management strategies are more likely to develop actual behavior management skills in staff. However, as Ricciardi (2005) noted, these practices are not easily implemented in applied settings because it is not always possible to predict when and where the target competency needs to be demonstrated (e.g., in class, residence, community). Instead, Ricciardi recommended role-play training across a series of standardized scenarios (i.e., scenarios based on actual incidents of problem behavior), but to our knowledge, this training approach has not been evaluated.

A common event that can motivate problem behavior to occur is restricting a client's access to a preferred activity. Mace et al. (2011) and Pritchard et al. (2011) demonstrated that severe aggressive and disruptive behavior could be avoided if staff used one of two specific verbal responses to clients' requests for access to computers. The current study describes the results of a training program that taught staff to role-play competency in the two specific responses identified by Mace et al. and Pritchard et al. After each role-play, the trainers provided praise or corrective feedback (Parsons et al.

- Traditional training programs do not always provide staff with the practical skills they need to prevent problem behavior occurring.
- Direct care staff were trained to use two verbal responses in response to clients requesting access to activities that could not be provided.
- Role-playing standardized scenarios based on actual incidents of problem behavior may help provide staff with the necessary skills to prevent problem behavior occurring.
- Trained staff did better following training than staff in a control group who had received traditional training.

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2012), The role-playing of the scenarios gave multiple opportunities for performance feedback, the benefits of which have been previously reported to improve treatment integrity (Strohmeier et al. 2012).

Results for part 1 of the study are shown in Figs. 1 and 2. Figure 1 presents the average percentage of naturally occurring requests for restricted activities (RRAs) that staff in the training group responded to with either an alternative choice (AC), saying yes and providing a contingency (YC), distracting a client (NED), and the total number of client RRAs during the three pre-training baseline and three post-training observations. Prior to training, AC and YC responses to RRAs were consistently low ($M=18.0\%$). By contrast, NED responses were consistently high averaging 82.0% . During in situ observations following staff training, the ordinal relation between AC/YC and NED reversed. AC or YC responses increased to an average of 72.0% , whereas the mean NED decreased to 28.0% . All staff showed increases in observed AC/YC, with an average improvement of 60.8% . However, 2 of the ten staff only improved by 3 and 9 %. Likewise, the average decrease in observed NED following training was 60.4% , although two staff only reduced NEDs by 8 and 9 %. One-tailed dependent t tests comparing AC/YC responses before and after training showed a significant increase ($t=5.455$, $df=9$, $p=0.0002$). The same t tests performed on NED responses showed a significant decrease ($t=-5.452$, $df=9$, $p=0.0002$). By contrast, prior to and after training, there were no appreciable changes in the number of client RRAs (120 pre-training versus 109 post-training), suggesting that the changes in staff responses was not a function of lower levels of RRAs in the post-training observation period.

This was a field-based study conducted in a residential school, so training and pre-training and post-training observations were necessarily staggered across time. This permitted a multiple baseline design evaluation of the effects of training on four of the ten participants (Fig. 2). In each case, AC/YC responses are low and NED are high during observations prior

to training. Following training, there is an immediate change in trainee responses to client RRAs, and in all cases, the ordinal position of AC/YC and NED reversed following training.

Part 2 results compared the training and control groups on the number of incident reports in which trained and control staffs were directly involved in episodes of serious problem behavior related to restricting a resident's access to a preferred activity. The two groups were compared for the period prior to staff training using a two-tailed independent t test. The pre-test means of the training group and the control group were 0.51 and 0.53 incidents per month, respectively, and were not statistically different ($t=0.11$, $df=18$, $p=0.91$). Lack of differences at pre-training warranted a comparison of the groups during the post-training period. The mean of the training group dropped to 0.17 incidents per month representing a 67 % reduction. By contrast, incident reports per month for the control group did not change in the training period ($M=0.52$). The post-training differences were statistically significant using a one-tailed independent t test ($t=2.88$, $df=18$, $p=0.005$).

The quality of each trainee's role-play was ranked on a scale from 1 to 5 in five performance areas (see Table 1). The mean score for the ten trainees was 4.6 (range, 4.0 to 4.9). Two trainers independently rated each trainee's role play performance on all occasions. Exact agreement on rankings averaged 71 %. Mean agreement ± 1 rank was 95 %.

At the end of the study, the trainees were given a 20-item questionnaire adapted from Toogood (2008). Staff rated each item on a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree. All trainees agreed or strongly agreed that they enjoyed the training experience, that they felt they were more able to prevent problem behavior escalating, and that their level of confidence had improved. However, these findings should be viewed with caution as staff reports can sometimes be unreliable (Strohmeier et al. 2012).

The current research suggests that staff were better at preventing low-rate severe problem behavior when they have to restrict their clients' access to activities after they had been

Fig. 1 Mean percentage of requests for restricted activities (RRA) responded to by providing an alternative choice (AC) or saying yes and providing a contingency (YC), and the total number of client RRAs observed ($N=10$ staff who participated in training)

Fig. 2 Percentage of requests for restricted activities (RRA) responded to by providing an alternative choice (AC), saying yes and providing a contingency (YC), and saying ‘no,’ providing an explanation, or distracting a client from the request (NED) across in situ observations prior to and following staff training for four participants

trained to use two specific verbal responses. For eight of the ten trainees, the training produced immediate and marked changes in their responses to RRAs. In addition, trainees were involved in 67 % fewer behavioral incidents related to restricting access to desired activities, while their peers who only received didactic training showed no improvement. The use of role-play of standardized scenarios based on actual behavioral episodes may therefore be an effective, and time-saving, adjunct to behavioral skills training and is worthy of further investigation.

Table 1 Role-play score sheet

Behavior	1	2	3	4	5
Use of the correct YC/AC response					
Appear calm and adopt a non-confrontational manner					
Limit talk to a minimum and use easy to understand words					
No explanation/negotiation and ignore problem behavior					
Respond appropriately when the client makes a safe choice					

Key:

1. More instruction needed
2. More practice needed
3. Minimal correction needed—some work needed to meet target goals
4. Targets achieved—good example to team members
5. Exceeds expectations—excellent example to team members

Method

Twenty direct care staff employed at a residential special school were randomly selected to participate in the study as part of a school-wide training program. Participants ages ranged from 25 to 62 years ($M=36$) and their experience ranged from 0 to 18 years ($M=4$). Ten were randomly assigned to the training group and ten served as the control group for part 2 of the study. Part 1 of the study evaluated the effects of training on staff responses to student requests for restricted activities during actual in situ observations. Effects for the ten participants who received training were evaluated using a pretest-posttest only group design. However, effects were demonstrated experimentally with a multiple baseline design for a subset of four of the ten participants during the in situ observations. The experimental design for part 2 was a randomized pretest-posttest control group design. This design evaluated the effects of training on the number of incidents of severe behavior problems related to staff restricting access to a preferred activity prior to and after staff training.

The target behaviors for part 1 were (a) *staff providing an alternative choice (AC)* following a client's request for a restricted activity. For example, when a client requested access to a computer game, staff could say, "Mr. P is using the computer now, but we can play football outside or do some drawing together. Which would you like to do?"; (b) *staff saying 'yes' with a contingency (YC)* following a client's request for a restricted activity. For example, following a request for the

computer game, staff could say, “Sure you can, just as soon as you finish cleaning your room.”; (c) *staff saying ‘no,’ providing an explanation, or distracting the client (NED)*; and (d) *client requests for restricted activities (RRA)*. One or two trained observers collected data on the target behaviors using a count within 1-min interval recording procedure. Interobserver agreement could only be collected on 10 % of the observations due to operational constraints, but calculated on a point-by-point basis, averaged 97 % (range, 83 to 100 %).

In part 1 of the study, staff were observed in the residential units as they interacted with the clients. Three observation periods of 30-min duration in which at least one instance of a client’s RRA occurred comprised the baseline phase. When an RRA was observed, data were collected on the staff person’s response. As shown by Mace et al. (2011) and Pritchard et al. (2011), the preferred staff response to a client’s RRA was either AC or YC. An NED response to a client’s RRA has been shown to be associated with escalations in problem behavior.

Staff working at the school are required to complete accurate reports following behavioral incidents. These reports were reviewed for part 2 of the study to identify incidents in which trained and control staff were directly involved in incidents of serious problem behavior that were related to restricting access to a client’s request for an activity. The dependent measure of interest was the number of behavioral incidents that were related to staff restricting a client’s access to a preferred activity for each staff person who participated in the study. These records were converted to incidents per month measure to allow comparison across varying pre- and post-training periods.

Staff were trained in groups of three or four in a single 6-h session. The training consisted of four parts. First, the senior author gave a 1.5 to 2.0-h PowerPoint™ presentation that reviewed how restricting access to preferred activities can motivate problem behavior. The presentation then discussed three alternative ways to deny access to preferred activities, namely AC, YC, and NED. Second, immediately following the PowerPoint™ presentation, a ten-question multiple-choice quiz was administered to assess comprehension of the material covered. The quiz was then scored showing a mean 82 % correct response rate (range, 70 to 90 %). Third, from an analysis of actual incident reports at the school, 30 standardized scenarios were identified that led to episodes of serious problem behavior when staff restricted access to preferred activities (e.g., computer games, food items, inappropriate DVDs,

off-site activities). These standardized scenarios were printed on laminated playing cards that served as the basis for a question-and-answer card game lasting approximately 1 h. For example, the trainee was asked: “J is watching a music channel and B asks if he can watch Eastenders. What would you say?” If the trainee answered with an appropriate AC or YC response, the trainers enthusiastically acknowledged the correct response. If there was an NED response to the question, the trainers provided corrective feedback. Fourth, staff responses to ten of the scenarios were role-played by the trainees, with one of the trainers taking on the role of the client presenting problem behavior.

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