



Daily Activity Scheduling & Skill Training

for Adults with Acquired Brain Injuries

A Summary of Research, 2011–2017

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KEY FINDINGS AT A GLANCE

37%→92%

Activities On-Time
after manager training

47% drop

Negative Behaviours
following routine improvement

41%→77%

Client Independence
in daily living skills

Background

Adults with acquired brain injuries (ABI) living in specialized residential group homes require highly structured, individually tailored daily routines to make meaningful rehabilitation gains. These routines are typically delivered by front-line staff under the guidance of a range of consulting professionals — psychologists, speech-language pathologists, occupational therapists, and behaviour therapists, among others.

A longstanding frustration for these consultants is the **Program Implementation Problem (PIP)**: carefully designed treatment plans go under-delivered. An SLP program scheduled daily may be run only twice per week; a structured activity planned for 2:00 pm gets replaced with television. This six-year body of research — conducted from 2011 to 2017 — set out to document the scope of this problem and then rigorously test solutions.

Part I: Defining the Problem (2011–2013)

The first phase of the project measured how consistently daily activity schedules (DAS) were actually being followed, and why they were not. McMaster University student observers tracked whether planned activities occurred within 30 minutes of their scheduled times, across 33–37 residents in 6 group homes over three years.

What the data showed

| Measure | Finding | Significance |
|---|-----------------|--------------------------------------|
| Activities completed on time | 37% average | Ranged 34–45% over 3 years |
| Passive activity substitution (planned) | 8% | — |
| Passive activity substitution (actual) | 38% | Nearly 5× planned rate |
| Manager time supervising on floor | 28 min/day avg. | 40% of days: zero supervision |

Of particular concern was the stability of these poor results. Senior management implemented a structured 10-week improvement plan in 2011, yet follow-up data showed **no meaningful change** in on-time rates over the three-year period. Staff most commonly cited client refusal (19% of missed activities) or poor scheduling design as reasons for deviating from planned activities.

Part II: Researching a Solution — Manager Training (2013–2015)

Given that the core problem appeared to be inadequate supervisory presence and staff guidance, a specialized pilot intervention was launched at one group home. Named **Project Teach Me**, it paired a Behaviour Therapist with the House Manager in a structured coaching model aimed at getting supervisors actively on the floor — prompting, coaching, and problem-solving with staff during daily routines.

The HM/BT team targeted over 80% of shift time spent on-floor supervising DAS activities. This goal was reached within 3 months, and maintained. The impact on daily scheduling was substantial:

| Outcome Measure | Baseline | After Training |
|---|----------------|-------------------------------|
| Activities implemented on time | 40% | 92% |
| Activities completed in correct sequence | Low | Substantially improved |
| Activities completed within 2 hrs of schedule | Low | Substantially improved |
| Manager/BT time on floor | <30 min/day | >80% of shift |
| Negative client behaviours (daily rate) | Baseline level | ↓ 47% |

Staff attitudes shifted alongside practice. When surveyed after 6+ months of the program, **64% of staff** rated the overall program as providing "moderate" or "very much" benefit — a marked improvement from the more skeptical early responses.

Replication Across All Group Homes

The pilot results were then replicated across all remaining group homes and the Transitional Living Supports (TLS) apartment program. Results were consistent: on-time DAS implementation rose from an average of **47% to 92%** across the five additional group homes, with minimal variability during the active supervision phase. The TLS program achieved 79% — slightly lower, as expected given its less structured apartment-living context.

The quality of written activity schedules also improved markedly. Rated across 10 dimensions for 23 clients in 7 settings, mean DAS quality scores rose from **51% to 92%**. The lowest pre-training scores were for **schedule specificity (16%)**, **activity variety (30%)**, and **inclusion of teaching activities (50%)** — all of which improved significantly after training.

Part III: Ripple Effects — Behaviour Support Plan Implementation

A natural question was whether improved DAS implementation would carry over to other clinical programs. Behaviour Support Plans (BSPs) — structured plans that guide how staff prevent, respond to, and address challenging behaviours — were examined across 30 plans in 6 homes (5 DAS-trained vs. 25 not trained).

| BSP Component Type | DAS-Trained Home | Non-Trained Homes |
|---------------------------------------|------------------|-------------------|
| Proactive/positive components (avg.) | 92% | 44% |
| Reactive/crisis management components | ~70% | ~70% |

Notably, reactive crisis procedures (how to manage a behaviour in the moment) were implemented at similar rates in both groups — around 70%. This suggests staff are generally competent in responding to crises, but **structured daily prevention and skill-building requires the kind of supervisory infrastructure that DAS training provides.**

Part IV: Building Client Skills Through Educative Routines (2015–2017)

With daily routines now running consistently, attention turned to the quality of how those routines were carried out. Many daily tasks — brushing teeth, preparing meals, cleaning — were being completed **for** clients rather than **with** them, an approach called a "custodial routine." The Educative Routines (ER) project retrained staff to treat these everyday activities as opportunities for structured skill development.

Two senior staff were trained as ER Coaches and then trained all 54 front-line staff across 6 group homes, covering 56 skills for 32 adults. Skills were drawn from meal preparation, cleaning, and budgeting. Progress was assessed from baseline videotapes compared to recordings taken 4–8 weeks after training.

| Outcome | Before Training | After Training |
|--|-----------------|----------------|
| Client independence in skill subtasks | 41% | 77% |
| Staff use of correct teaching techniques | 61% | 91% |
| Staff doing tasks for the client (custodial) | 34% | 3% |

Part V: Intensive Skill Training — ABA Practicum

For 3–4 consecutive years, all Case Facilitators participated in a 20-week ABA practicum led by Dr. Linder. In groups of 15–20, participants applied structured teaching techniques with individual clients across three hourly sessions per week, presenting progress weekly via case presentations.

| Outcome | Before Practicum | After Practicum |
|------------------------------------|------------------|-------------------------|
| Staff ABA knowledge (20-item test) | 56% correct | 74% correct |
| Client skill independence | 49% | 91% |
| Skill training goals achieved | — | 84% of goals met |
| Average trials to reach goal | — | 108 trials / 8 sessions |

Skills generalized well to new situations and were retained over time — strong indicators of durable learning rather than temporary performance gains.

Summary and Conclusions

This program of research demonstrates a clear, replicable pathway from consistent daily routines to meaningful client outcomes in ABI residential care.

When house managers were trained and supported to supervise staff on the floor during daily activities, scheduling consistency rose from roughly 1-in-3 activities on time to more than 9-in-10. That structural improvement reduced challenging behaviours, improved the quality of how care was planned and delivered, and — critically — created the conditions for meaningful skill teaching.

Clients who had been doing fewer than half their daily living skills independently were doing nearly 8 in 10 after staff received structured coaching. Staff who had been completing tasks for their clients in 34% of opportunities were doing so in only 3% after training. These are not marginal gains — they represent a fundamental shift in the rehabilitation culture of the homes studied.