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CASE REPORT: Intervention Evaluation of Trial-Based Functional Analyses in School

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Abstract

While functional analysis is widely viewed as the gold standard assessment technique to determine the function, or purpose, of a challenging behaviour, a number of barriers exist to conducting such assessments in natural settings such as classrooms. The trial-based functional analysis (TBFA) is a promising modification which embeds assessment trials throughout on-going daily activities in the natural environment. TBFAs may be more conducive to natural settings as they minimize risk by ending trial segments after a single occurrence of the target behavior, increase ecological validity, and minimize disruptions to the daily schedule. Researchers have systematically evaluated the utility of trial-based functional analyses (TBFA) on the development of effective, function-based interventions. The purpose of the current study was to contribute to this growing body of evidence by conducting two TBFAs for a student with autism spectrum disorder in a publicly funded school setting and evaluating the effects of a function-based intervention informed by the TBFA results. A demand fading protocol (the removal of all instructions, followed by their gradual reintroduction) was implemented to address the escape-maintained challenging behaviour (behaviours used to get out of an undesired activity). Data indicated increased engagement with academic stimuli and decreases in challenging behaviour as a result. The generalization of these results with novel staff and novel tasks was also demonstrated. These results support the utility and feasibility of TBFAs to assess behavioural function and the resulting ABA approaches to reduce challenging and disruptive behaviour in publicly funded school settings.

Functional analysis (FA) as an effective means of identifying functions of challenging behaviours is well-documented in the literature (e.g., Hanley, Iwata, & McCord, 2003; Iwata & Dozier, 2008). By identifying the maintaining variables of challenging behaviours (e.g., access to attention, escape from demands, tangible items/activities, sensory stimulation), effective, function-based interventions can be utilized rather than ineffective, default technologies (Mace, 1994). A function-based intervention would incorporate the maintaining variable (or reinforcer for the challenging behaviour) by reducing the "motivation" to access the identified reinforcer, minimizing access to that reinforcer contingent on the challenging behaviour, and/or teaching an alternative way to access that reinforcer. The traditional FA methodology involves repeated and extended (e.g., 5- to 15-minute conditions) exposure to the hypothesized maintaining variables in a highly controlled setting.

However, due to a number of potential barriers limiting the use of traditional FAs in schools (e.g., assessment duration, assumed risk, specialized environmental conditions) (e.g., Bloom, Iwata, Fritz, Roscoe, & Carreau, 2011), several researchers (e.g., Bloom et al., 2011; Sigafoos & Saggers, 1995) have demonstrated the use of a modified version, the trial-based functional analysis (TBFA) (see Rispoli, Ninci, Neely, & Zaini, 2014 for a review). During a TBFA, participants are repeatedly exposed to brief control (i.e., abolishing operations for the putative reinforcer in effect) and test (i.e., establishing operation for the putative reinforcer in effect) conditions in the natural setting from which conclusions about the function can be drawn (e.g., Austin et al., 2015; Bloom et al., 2011). For instance, in order to test attention as the potential reinforcer of challenging behaviour, the control condition would consist of free access to attention (no establishing operation to evoke the behaviour if maintained by attention) and the test condition would consist of diverted attention so as to evoke the behaviour if attention is the reinforcer (see Table 1 for more details). TBFAs may be more conducive to natural settings as they mitigate risk by ending trial segments after a single occurrence of the target behaviour and minimize disruptions to the daily routine as trials are embedded into ongoing daily activities. Furthermore, conducting the assessment in the setting of interest may have the added benefit of capitalizing on context-specific idiosyncratic variables and, therefore, enhancing the ecological validity of the results.

Another promising modification in the FA literature involves the use of latency-based measures (e.g., Thomason-Sassi, Iwata, Neidert, & Roscoe, 2011) which can be indicative of rate of responding. Latency FAs look at how long after a segment begins (i.e., an establishing operation is put in effect [e.g., attention diverted, demands placed]), the challenging behaviour occurs as opposed to how many times a behaviour occurs in a set amount of time. A shorter latency between the start of a segment and the occurrence of the challenging behaviour may be indicative of a higher rate of behaviour in a more traditional assessment. Using latency as a measure mitigates risk by ending conditions after a single occurrence of the target behaviour while maintaining the validity of results.

Researchers in school settings have also begun to evaluate the utility of TBFAs on informing function-based interventions such as functional communication training (e.g., Lambert, Bloom, & Irvin, 2012), non-contingent reinforcement (e.g., offering preferred activities throughout the day independent of whether a target behaviour occurred) (Bloom et al., 2013), and differential reinforcement of other behaviour (DRO) procedures (e.g., delivering a reinforcer after the absence of a target behaviour) (Austin, Groves, Reynish, & Francis, 2015). Further opportunities exist to closely examine the utility of TBFAs on the development of additional interventions that effectively decrease challenging behaviours and provide students opportunities for success in schools. In this study, demand fading was identified as a function-based intervention as it is characterized by minimizing then slowly re-introducing demands so as to remove the "motivation" to engage in a challenging behaviour to avoid demands. Furthermore, escape from demands and access to tangible reinforcers were available for task completion providing an alternative means to access these reinforcers. This study replicates and extends previous research by using results of two TBFAs (on swearing and head banging) with latency as a secondary measure to allow for a more in-depth analysis. Results were then used by the intervention team to inform the selection of demand fading as a function-based intervention for escape-maintained behaviour to decrease a child's challenging behaviours and increase engagement with school tasks. The assessment of the generality of intervention effects also extends this valuable line of research.

Method

Overview

In general, consultants, educators, and the family collaborated on an assessment and intervention process guided by the key principles of applied behaviour analysis (ABA) (see Figure 1). First, baseline data were collected to identify the extent to which challenging behaviour interrupted the participant's learning (e.g., completing zero academic demands). Next, functional behaviour assessments, including questionnaires and observations, were conducted to develop hypotheses about why the challen-

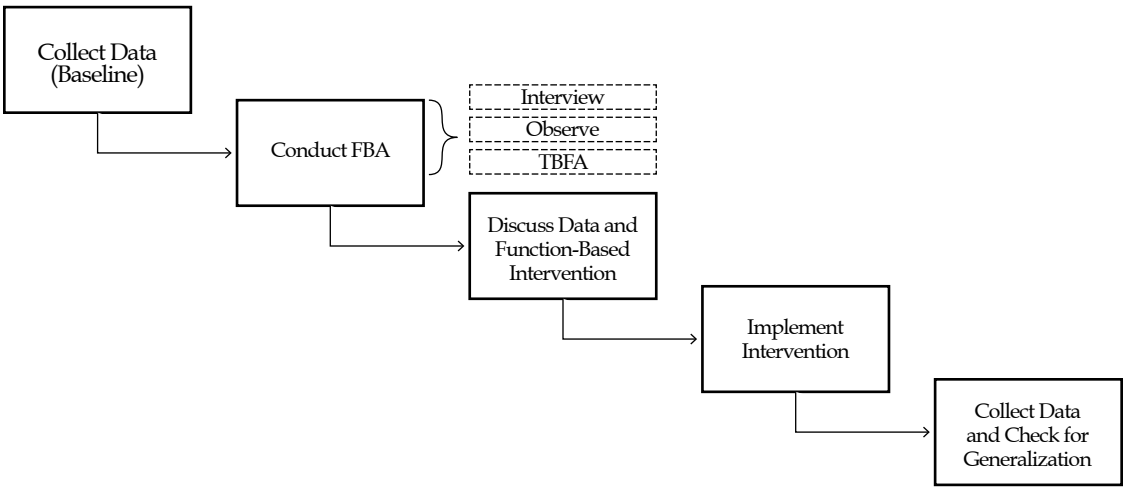

Figure 1. Flow chart outlining the general assessment and intervention process

ging behaviours occurred (i.e., function) and to set up conditions of a more direct assessment (i.e., TBFA). During the TBFA, consultants and educators tested their hypotheses by exposing the participant to several trials that were interspersed throughout the school day. Each trial consisted of a 1-minute control segment where the potential reinforcer was freely available (e.g., access to teacher attention) immediately followed by a 3-minute test segment where the potential reinforcer was removed (e.g., attention removed; see Table 1 for an outline of each condition). If the participant engaged in the target behaviour during the control segment, staff initiated the test segment. If the target behaviour occurred during the test segment, the potential reinforcer (e.g., attention) was provided and the segment was terminated. During both the control and test segments, staff recorded the occurrence or non-occurrence of the target behaviour. Staff also recorded that latency in seconds (i.e., how many seconds from the beginning of the trial to the occurrence) to the target behaviour. The intervention team then analyzed and discussed the data which were presented as the percentage of trials during which the target behaviour occurred across each hypothesized function (i.e., condition) and latencies. Based on the results of this assessment, the intervention team developed and implemented a function-based intervention to decrease the challenging behaviours and teach appropriate replacement behaviours. Generalization across novel tasks and staff was also assessed.

Participant

The participant, "Liam, pseudonym" was a 9-year-old, male student diagnosed with autism spectrum disorder (ASD) receiving consultation-based Connections for Students (CFS) services while transitioning from a community-based, intensive behavioural intervention (IBI) classroom to a publicly funded special education classroom in Ontario. As identified by the Verbal Behaviour Milestones Assessment and Placement Program (VB-MAPP; Sundberg, 2008), Liam had met 91% of milestones, with barriers of behaviour problems, instructional control, and sensory defensiveness. Standardized cognitive and adaptive assessments completed approximately 6 months prior to participation in the study indicated a mild delayed nonverbal IQ (1st percentile) and moderately delayed verbal IQ (< 1st percentile) on the Stanford-Binet Intelligence Scale (5th Edition) as well as a low adaptive behaviour score (1st percentile) on the Vineland Adaptive Behavior Scales (2nd Edition). Informed consent to conduct the assessment and intervention as well as to present and publish the data was obtained from Liam's parents and the school approved the research project and its dissemination.

Setting and Materials

TBFA sessions were conducted in Liam's classroom (~30'x20'), gymnasiums, hallway, and library. School staff included one teacher and

four educational assistants (staff) shared across six students with Liam requiring one-to-one support to manage his challenging behaviours. Some baseline and all intervention sessions were conducted in Liam's individual workspace (~5' × 7') that was segregated from his peers by a physical boundary enclosed on three sides. Academic worksheets and task materials developed by the teacher based on the Ontario academic curriculum and reinforcers were also used.

Dependent Variables and Measurement

As termed by the school team and parent, *swearing* was defined as Liam vocally saying profanities, discussing nudity, or inquiring if he could harm others. *Head banging* was defined as Liam hitting his head on an object (e.g., basketball), surface (e.g., wall), person, or himself (e.g., knee to his head) which may produce an audible noise and may leave an abrasion or contusion.

During the TBFA, authors collected data on the occurrence of the challenging behaviour. The percentage of trials that Liam engaged in head banging or swearing was then calculated for each of the conditions by dividing the total number of trials during which challenging behaviour occurred by the total number of trials conducted for the condition and multiplying by 100. Based on the utility of latency measures in Thomason-Sassi et al. (2011), the first author also collected data on the latency to challenging behaviour. By recording the number of seconds from the start of the segment to the initiation of challenging behaviour, response latencies were then visually analyzed to identify if particular conditions/idiosyncratic variables (e.g., task difficulty, location in school) were associated with longer/shorter latencies.

During baseline and intervention phases, but not during the TBFA, the consultant and/or staff collected data on Liam's completion of a specified number of worksheet tasks (e.g., writing name, writing name and answering 1 question) with or without prompts. Staff provided prompts for task completion if Liam requested this (i.e., manded) "help" and/or if Liam did not respond with the correct answer. If Liam complied with prompts within 10 seconds, this was considered completing tasks and if Liam refused to comply with the task after 10 seconds (e.g., "No!" "Can I go to the small gym?") and/or engaged in challenging behaviour, the trial ended. For each trial, staff recorded the number of tasks on the worksheet that Liam completed as well as the occurrence of challenging behaviour.

Trial-Based Functional Analysis

Functional Behaviour Assessment (FBA). Prior to conducting the TBFAs, the intervention team reviewed the results of indirect and descriptive FBAs to help inform experimental conditions. The Questions About Behavioral Function (QABF; Matson & Vollmer, 1995) questionnaire was completed separately by the consultant with three school staff (one teacher, two educational assistants) as informants which generated hypothesized functions including attention, tangible, non-social stimulation, and escape. Although descriptive data have not always demonstrated concordance with FAs for certain behaviours (e.g., Thompson & Iwata, 2007) but have demonstrated adequate concordance for other behaviours (e.g., Borrero, England, Sarcia, & Woods, 2016), the consultant also collected Antecedent-Behaviour-Consequence (ABC) data to potentially narrow the number of hypothesized functions. While the results of the ABC data were inconclusive, they did provide specific information to develop idiosyncratic escape, tangible, and attention experimental conditions within the classroom and school setting (see below).

Methods. Two separate TBFAs based on methods and recommendations from previous research (e.g., Austin et al. 2015; Bloom et al., 2011; Thomason-Sassi et al., 2011) were conducted for swearing and head banging. As in Austin et al., each trial consisted of a control segment during which the potential reinforcer was freely available, followed by a test segment during which the potential reinforcer was removed. If the challenging behaviour occurred during the control segment, no programmed consequence was provided and the test segment was initiated. Based on the recommendation from Bloom et al., the TBFA conditions were divided into a 1-minute control segment followed by a 3-minute test segment to expose the student to the possible establishing operation for longer

durations to potentially improve accuracy (e.g., discrimination of the contingencies). A summary of the antecedent and consequent procedures of each trial type can be found in Table 1.

During each condition, the consultant provided no programmed consequences for other challenging behaviour or appropriate behaviour. The authors led the assessment and staff participated as a "therapist" and/or observed during trials. To minimize disruption and maximize the validity of the results, trials were interspersed throughout the day as naturally occurring opportunities presented themselves with relevant antecedent variables in effect (e.g., task demand trials during typical work time, tangible trials as Liam showed interest). The TBFAs were completed in approximately 4 hours (swearing) and 3.5 hours (head banging) across 1 day each within the same week.

The authors conducted 10 trials of each condition and analyzed whether further trials would be required to confidently interpret the results. This intermediate analysis was conducted because the team's FBA results suggested that challenging behaviour was potentially sensitive to all contingencies and, specifically, multiple escape contingencies. For example, staff may have hypothesized "attention-seeking" as the function because staff were always near Liam and frequently provided vocal verbal reprimands (attention). However, the authors pointed out that (a) staff always being near

Table 1. TBFA Trial Procedures by Trial Type

	Attention	*Escape*	*Tangible*
Antecedent Conditions	*Control*: Constant attention in the form of eye contact, occasional comments, and compliance with requests for attention *Test*: Attention removed ("I have to work" or "I'm busy") and turning away from participant	*Control*: No demand placed or instructional materials presented *Test*: (a) Task demands (head banging, swearing) (b) Instructions to engage in a group activity (head banging), or (c) Social demands (e.g., consultant-initiated conversation about neutral topic (swearing)	*Control*:Preferred items (e.g., basketball, iPad®, maps) as identified by a preference assessment *Test*: Preferred item removed ("My turn" or "All done")
Consequence Conditions	*Control*: No programmed consequences to the challenging behaviour, test segment initiated *Test*: Contingent on the target behaviour, the consultant immediately provided verbal attention (e.g., "Careful!," "I won't speak with you if you say those words") and ended the trial.	*Control*: No programmed consequences to the challenging behaviour, test segment initiated *Test*: Contingent on the target behavior, the consultant immediately removed materials and demands (e.g., "Ok, you don't have to work." "You need a break"), moved away from participant, and ended the trial.	*Control*: No programmed consequences to the challenging behaviour, test segment initiated *Test*: Contingent on the target behavior, the consultant immediately returned the item (e.g., "Sorry, you weren't done") and ended the trial.

Liam could also be a conditioned aversive stimulus (escape), (b) reprimands delay task demands (escape), (c) there was no engagement in collateral "attention-seeking" behaviour such as making eye contact and looking for a "reaction" to comments, and (c) Liam was observed to frequently mand for attention with a more appropriate topography (i.e., form, or what the behaviour looks like). Therefore, this allowed the contributed hypotheses of each team member to be directly tested and the analysis would not need to be extended unnecessarily. Therefore, 20 trials were conducted for escape task demands (head banging, swearing), escape group demands (head banging), tangible (swearing, head banging) and 10 trials were conducted for attention (head banging, swearing), escape social demands (swearing).

Attention. During the control segment, the consultant was seated near Liam and provided constant attention in the form of eye contact, occasional comments, and compliance with mands for attention. During the test segment, the consultant removed attention by saying, "I have to work" or "I'm busy" and turning away from Liam. Contingent upon the target behaviour, the consultant immediately provided verbal attention (e.g., "Careful!," "I won't speak with you if you say those words.") and ended the trial.

Escape. During the control segment, Liam was seated without access to materials and the consultant was nearby but provided no demands and no attention. During the various test segments, the consultant provided (a) task demands (head banging, swearing), (b) instructions to engage in a group activity (head banging), or (c) social demands (e.g., consultant-initiated conversation about neutral topic; swearing). Contingent upon the target behaviour, the consultant immediately removed materials and demands (e.g., "Ok, you don't have to work." "You need a break."), moved away from Liam, and ended the trial.

Tangible. During the control segment, Liam was provided with preferred items (e.g., basketball, iPad®, maps) as identified by a preference assessment (i.e., interview conducted by consultant with the staff and parent) and the consultant was nearby but provided no demands and no attention. During the test segment, the consultant removed the preferred item and said, "My turn" or "All done." Contingent upon the target behaviour, the consultant immediately returned the item, said, "Sorry, you weren't done.," and ended the trial.

Function-Based Intervention Evaluation

Baseline. During scheduled independent tasks, school staff or consultants provided Liam with task materials (e.g., final version of the worksheet with full response requirement, pencil, eraser) and instructions. Consequences for completing the task would have included access to preferred items (tangible) identified through a preference assessment (e.g., maps, iPad®) and a 3-minute escape from further demands (i.e., worksheets). As was typically occurring in the classroom, failure to meet criterion resulted in the end of the trial whereby staff redirected Liam to another task (i.e., short delay of or escape from demands and/or access to preferred tangibles).

Demand fading. After analyzing the results of the TBFA and baseline data, the team determined criteria for each level or "step" of a demand fading intervention for independent tasks by initially removing then gradually increasing the response requirement (e.g., # represents the number of tasks on worksheets) (e.g., Pace, Iwata, Cowdery, Andree, & McIntyre, 1993). For example, step 1 required Liam to write his name on the worksheet (Name), step 2 required Liam to write his name and complete 1 question on the worksheet (Name + 1), up to step # requiring Liam to write his name and complete # questions on the worksheet (NAME + #). During the intervention phase, the consultant or school staff conducted up to three, 10-minute sessions of several trials (mean = 12.2, range = 7–17) each week. Function-based consequences for meeting the target criterion step included access to tangible reinforcers (similar to baseline) and escape from further demands (3 minutes). Failure to meet criterion, resulted in the end of the trial and (a) a 3-second inter-trial interval or (b) the end of the daily session. After meeting the criterion across three consecutive trials, the target criterion was to increase to the next criterion step. After three consecutive demand fading trials in which the target criterion was not met, the target criterion was decreased to the previous step.

Generalization probes. Throughout the intervention and follow-up phases, the consultant or staff collected data during generalization probes which consisted of the consultant or a novel staff instructing Liam to complete novel, yet equally challenging tasks at the final criterion level (i.e., NAME + 5). Generalization probes were conducted approximately every 5 sessions to determine at which point in the intervention phase Liam may have acquired the skill at the final criterion level. As in baseline, no additional instructions, prompts, or reinforcement were provided.

Interobserver Agreement and Procedural Integrity

During the two TBFAs, two independent observers collected data on the occurrence of challenging behaviour during 70% and 82% of trials for the swearing and head banging TBFAs, respectively, with 95% and 97% interobserver agreement. During the intervention evaluation, two independent observers collected data on task completion during 15% of trials with 100% interobserver agreement.

Procedural integrity for the TBFA was determined similar to Austin et al. (2015) whereby observers recorded whether a correct or incorrect consequence (i.e., failed trial; error of commission or omission) was provided contingent on the target behaviour. Procedural integrity was calculated by dividing the number of correct trials (i.e., trials with the correct consequence) by the total number of trials (i.e., correct trials plus failed trials) and multiplying by 100 to generate a percentage. Procedural integrity was 91% and 96% for the swearing and head banging TBFAs, respectively.

Due to limitations imposed by some school boards and teachers' unions regarding staff evaluation, it may be difficult for a consultant to assess school staff behaviour, including procedural integrity, while maintaining professional boundaries. However, through collaboration, a procedural integrity checklist was created and formal procedural integrity was assessed by the consultant during 7.5% of intervention trials with 100% procedural integrity. Informal procedural integrity was assessed by school staff with weekly anecdotal reports of high procedural integrity.

Results

Data for two TBFAs are displayed in Figure 2 on the following page where the top panels display the percentage of trials in which Liam engaged in the target behaviour and the bottom panels display the latency to the target behaviour. Liam engaged in head banging most frequently during the test trials of escape from independent tasks (80.0% of trials), escape from social interaction (80.0% of trials), and access to tangibles (75.0% of trials). Visual analysis of the latencies to head banging helped identify variables that more significantly influenced behaviour. Short latencies (i.e., intervention team chose fewer than 20 seconds) to head banging occurred during 68.8% of escape from independent task test trials (triangles) with 81.9% of these occurring during challenging tasks or tasks requiring error correction (open triangles). Short latencies to head banging also occurred during 60.0% of tangible test trials and only 43.8% of escape from social interaction test trials. Liam engaged in swearing most frequently during the test trials of escape from independent tasks (80.0% of trials) and access to tangibles (70.0% of trials). Additionally, short latencies (i.e., fewer than 20 seconds) to swearing occurred during 56.2% of tangible test trials and 21.4% of escape from independent tasks test trials. Overall, analysis of the TBFA results indicated that both swearing and head banging were most sensitive to contingencies of escape from independent demands and access to tangible reinforcers (i.e., preferred items or activities).

Overall results of the demand fading intervention (see Figure 3 on page 63) indicate Liam gradually increased on-task behaviour in the absence of challenging behaviour and met the target criterion during 75.6% (25 of 33) of target trials. The generalization phase indicated that Liam engaged with the novel tasks with novel staff during 57.1% (8 of 14) of trials compared to a baseline of 0% of trials.

Discussion

Consistent with previous research (e.g., Austin, et al.; Lambert et al.) the results of the current study suggest the utility of conducting TBFAs on the development of function-based interventions in school settings. The use of the typ-

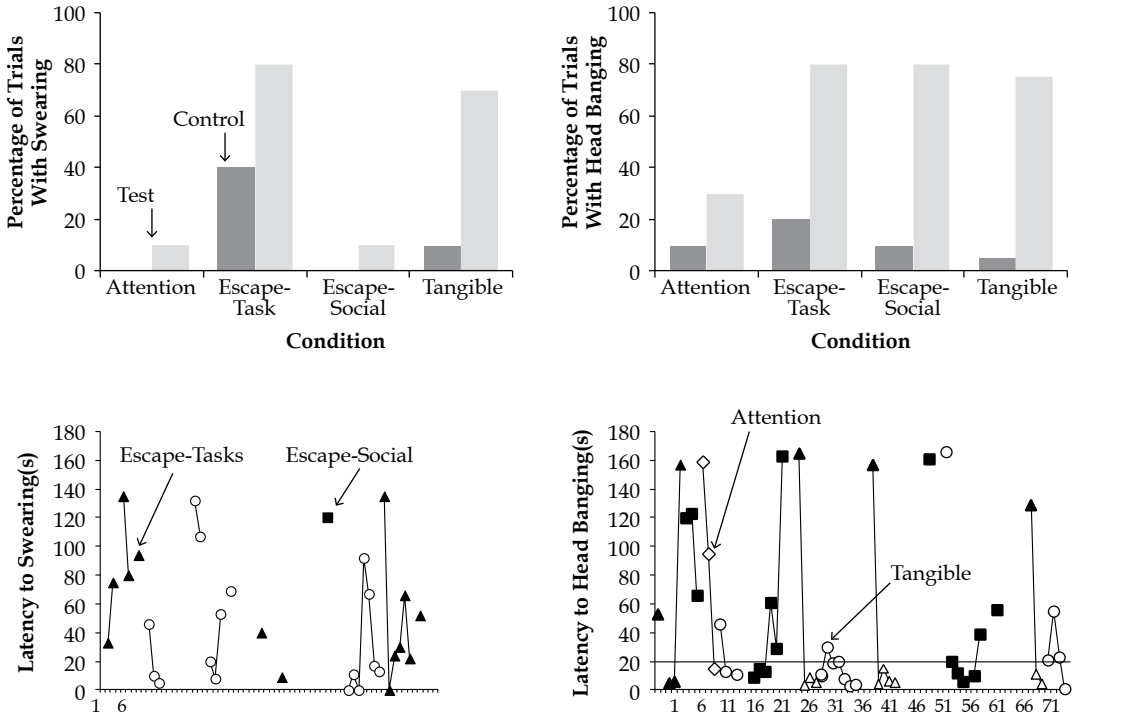

Figure 2. Percentage of trials with challenging behaviour (upper panels) and latency to challenging behaviour (lower panels) during TBFA. In the top panels, the higher proportion of test trials (black bars)with challenging behaviour during escape and tangible conditions indicates that escape from demands and access to tangibles are maintaining variables. In the bottom panels, triangles indicate latency to challenging behaviour (i.e., how quickly Liam started to engage in the behaviour) during escape from task demand trials (closed triangles indicate mastered tasks, open triangles indicate challenging independent tasks), squares indicate latency to challenging behaviour during escape from social demand trials, diamonds indicate latency to challenging behaviour during attention trials, and circles indicate latency to challenging behaviour during tangible trials. Shorter latencies to challenging behaviour (i.e., datapoints below the criterion line) in the tangible (circle) and escape from independent demands (triangle) conditions indicate that the behaviour is particularly sensitive to these contingencies.

ical summary results in addition to the latency results (e.g., Thomason-Sassi et al.) allowed the intervention team to determine that Liam's head banging and swearing were most sensitive to contingencies involving escape from challenging tasks as well as access to tangibles. The intervention team replicated and extended previous treatment evaluation research by using the results of the TBFAs to identify yet another function-based intervention (i.e., demand fading). This study also extended previous research by including generalization probes and a demonstration of experimental control through the use of a changing-criterion design. Additionally, by conducting the assessment in the same setting as the intervention and using materials and instructors from that setting, the ecological validity of the assessment results was enhanced. It is likely that the probability of the challenging behaviour contacting novel reinforcement contingencies is, therefore, minimized.

While the team collaboratively overcame barriers to assessing procedural integrity, the limited number of *formal* assessments is a limitation. Future research in schools should continue to examine ways of collaboratively and more thoroughly assessing procedural integrity of the TBFA (e.g., appropriate set up of discriminative stimuli, motivating operations, consequences) and interventions to convincingly demonstrate experimental control and identify support

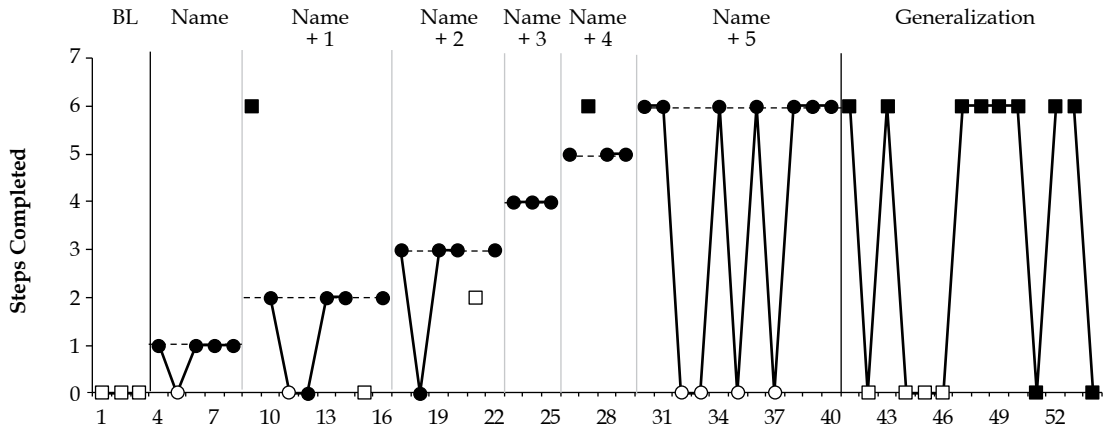

Figure 3. Criterion steps met across baseline, demand fading, and generalization phases. Squares indicate novel tasks, circles indicate training tasks. Open markers indicate presence of swearing and/or head banging. The broken horizontal line denotes the goal criterion in each phase. In the baseline phase, no identified task steps were completed. Throughout the demand fading intervention, responding gradually increased to match the increasing goal criterion – i.e., phase 1 (Name): write name; phase 2 (Name + 1): write name and compete 1 question; phase 3 (Name + 2): write name and complete 2 questions); up to phase 6 (Name + 5): write name and complete 5 questions, followed by phase 7 (generalization): write name and complete 2 questions using novel worksheets/with novel staff. In the final goal phase, and in later generalization probes, responding was variable but significantly improved from baseline levels.

needs (e.g., training, consultation). Another limitation is that some trials were conducted by a trained consultant instead of solely a classroom staff. Future research might examine school staff's implementation of effective, function-based interventions informed by TBFAs and the degree to which additional school staff training is required. Although a 20-second latency criterion was selected in the current study, future researchers should also consider examining the parameters for selecting a latency criteria when analyzing and interpreting FA data. The authors acknowledge that expanding the length of the test segment, in relation to the control segment, may increase the risk of a false positive response when conducting a lengthier test condition compared to the control condition. However, the success of the intervention suggests that the TBFA results are valid and future research is needed to assess the concordance between assessments utilizing equal versus unequal segments lengths.

Recent research has also highlighted the utility of conducting non-standard test conditions and additional analyses (e.g., synthesized) as well as identifying idiosyncratic and contextual variables that maintain specific behaviours (e.g., Hanley, Vanselow, & Hanratty, 2014; Lloyd et al., 2014). For example, research has suggested that many individuals with disabilities are highly sensitive to escape contingencies (i.e., social-negative reinforcement) with additional contingencies (e.g., social-positive) also contributing to multiple control (Asmus et al., 2004). The results of the two TBFAs and intervention evaluation conducted in the current study may provide additional evidence to support the findings of the influence of specific contingencies (e.g., escape from task demands, from error correction, from social demands), multiple contingencies (e.g., tangible as well as escape), and/or combined contingencies (e.g., escape-to-tangible). Future researchers may wish to examine the development of such escape-to-tangible-maintained challenging behaviours which may be influenced by previous instructional histories (e.g., during the course of discrete trial training in IBI, the child's behaviour is reinforced by "breaks" comprised of both escape from demands *and* access to tangibles).

Key Messages From This Article

People with disabilities. In schools, you deserve staff who take the time to understand your behaviour and teach you new, better ways to have your needs met.

Professionals. Through collaboration, functional analysis and function-based interventions can be powerful tools in all of the settings in which we support our clients, including schools.

Policymakers. Policies should promote the use of evidence-based best practices in assessment and intervention as they can effectively and safely be implemented in a school setting.

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