San Gabriel / Pomona
Regional Center

GUIDELINES FOR FUNCTIONAL BEHAVIORAL ASSESSMENT AND INTERVENTION PLAN FORMAT AND CONTENTS

Introduction

Behavioral interventions for persons with developmental disabilities are intended to provide the greatest opportunity for a life of dignity, individuality, productivity, and autonomy. Procedures include those that increase positive, adaptive behaviors and those that reduce maladaptive behaviors. Generally, the two complement each other and occur simultaneously. Procedures also entail varying degrees of intrusiveness. In accordance with Sub-Chapter 8 of Title 17, treatment programs must utilize the least restrictive procedure that will be effective in changing behavior. Whenever possible, positive behavior-enhancing procedures are to be used.

Depending on the services being proposed and on the behavioral challenges being addressed, there may be differences in the level of analysis needed. As such, some sections as described in these guidelines may be deleted or collapsed when an in-depth analysis is not warranted.

Additionally, these guidelines should be individualized based on the type and level of service being provided. For example, an assessment for an individual receiving Level 4-I residential services or 1:1 behavioral program support will be more in-depth than one for an individual receiving 1:3 behavioral day services or for a child who needs toilet training and whose parents need behavioral consultation and training in their home.

At the end of this document there is a brief checklist of all of the components necessary for a complete behavioral assessment. This checklist is intended to be used as a guide to determine completeness of behavioral assessment reports and behavior intervention plans.

Overview

A behavior assessment is a process for gathering information to build effective intervention plans. A behavior assessment goes beyond the definition of undesirable behavior. It aims instead at understanding the structure and function of behavior so that we can develop effective alternatives to behavior challenges and programs to teach them. Effective behavioral support should not just help reduce or eliminate a problem behavior. It should also change the opportunities a person has to learn new skills, to access meaningful activities, and to participate more fully in the community. In other words, behavioral interventions should positively affect a person's life quality as well as reduce the problem behaviors.

When behavioral interventions are provided in the context of services to individuals with developmental disabilities, the focus of intervention becomes as much the families or staff as the individual receiving services. The goal of any behavioral intervention is to make families or staff more effective agents when teaching and interacting with clients. Thus, behavioral assessments and treatment plans as described below focus on gathering the type of information most useful to family members and staff for this purpose. The suggested format that follows should not be taken literally. Reports do not need to be lengthy but they must be

comprehensive and complete. However, all relevant and important variables need to be included in each report.

Section I: **CONSUMER IDENTIFYING INFORMATION**

Include name of consumer, date of birth, age, gender, address, UCI number, primary language spoken, referring Service Coordinator, regional center, current diagnosis, date of report, and name of consultant. Regarding the diagnosis, use DSM-IV criteria that are used in the client's referral packet. If available and applicable, specify level of retardation. When reporting the current diagnosis, note the year in which the diagnosis was made (e.g., 1997 psychological report). All the information, observations, and facts stated need to be accurate and up-to-date.

Section II: **REFERRAL INFORMATION**

The source of referral should be included (e.g., regional center and Service Coordinator). Also list referral behaviors. If discrepancies exist in referral behaviors across key social agents, please note this. For example, the regional center may indicate certain behavior problems that led to a referral to a Behavior Management Day Program, but the residential provider or family are interviewed, other behavior problems may be reported or the behavior for concern may have resolved. If referral behaviors or targets for change cannot be agreed upon prior to intervention, this will impact on the ability to evaluate progress over time. Additionally, describe current reasons for seeking services from your agency. Why is it a problem now? Typically, the problem has been present for a while. What has happened to escalate it to a problem level? Has there been a specific crisis or precipitating factors that have led the regional center to seek services at this time. Any current and potential negative consequences, such as threat of safety, physical damage, and placement in a more restrictive setting should be mentioned as well.

Section III: **DESCRIPTION OF ASSESSMENT PROCESS**

Assessment activities should include interviews, records reviews, and direct observations. For interviews include dates, settings, and the individuals interviewed. For records review include what records were reviewed (e.g., 1997 psychological report, 2001 IPP). For direct observation include dates and settings in which direct observations were carried out. Other assessment activities should also be indicated here, such as interactions with the client, probes, or other tools used (e.g., Motivational Assessment Scale).

Section IV: **BACKGROUND INFORMATION**

Several subsections might be used to address important background information:

A: Client strengths and deficits: The client's strengths and deficits should be described including, but not limited to: cognitive and language skills, academic skills, and abilities in the self-help, daily living, community use, safety awareness, social, emotional, and motor domains.

B: Living situation and family history: Describe the history of living arrangements and how the person was doing and why he or she was discharged. Also describe the person's current living situation (e.g., family home, adult residential facility Level 4-I, single or double room, etc.) and how the person is doing. If the person does not live at home with family, describe family involvement and the nature of family relationships.

C: School/day program placement and history: Please describe the history of school and/or day program placements, including dates, places, and how the person was doing and why he or she was discharged, if applicable. Also describe the person's current school or day services situation and how the person is doing.

D: Medical conditions and medications: Describe the person's general health, any conditions for which the person currently receives treatment, hearing, vision, any previous major illnesses or operations, history of seizure activity and whether controlled, any adaptive physical devices used and why. If applicable, list all medications, including purpose, dosages, and schedules. Any genetic syndrome associated with mental retardation, if applicable, should also be listed.

E: Language and culture: Please describe cultural issues that may either facilitate or impede progress (e.g., gender issues, language barriers, cultural beliefs that should be considered when developing intervention plans).

F: Previous or Current Interventions Used: List any previous or current behavioral interventions implemented specifically to address the targeted behavior problem and describe their successes and challenges. Include any other interventions used to address the problem behavior (or related problems) and their effectiveness or lack of effectiveness (e.g., psychiatric hospitalizations, inpatient referrals, counseling, medication).

Section V: **REINFORCER SURVEY**

Describe here any potential reinforcers that could be used to change the consequences of the target behavior. Describe the method(s) used to determine possible reinforcers (e.g., reinforcer survey, direct observation, preference assessment). When conducting a reinforcer survey, look for things the person seeks unaided. Directly test preferences if possible. Also look at the outcome of the functional assessment. For example, if a person consistently exhibits difficult behaviors in order to escape from situations, free time with no demands may be a highly preferred consequence. Consider using natural reinforcers first.

A list should be provided of potential positive reinforcers including: tangible, social, activity, edible, generalized (e.g., money) and exchangeable (e.g., tokens) reinforcers. If the list of reinforcers is short or there is difficulty in identifying potential reinforcers, consider making suggestions for how to assess further for potential reinforcers. The use of natural reinforcers is preferred.

Sections VI through VIII should be completed for each target behavior.

Section VI: **FUNCTIONAL ASSESSMENT**

A functional assessment should be conducted for each target behavior. The purpose of functional assessment is to increase the effectiveness of intervention plans. A complete functional assessment should include the following three phases: Description Phase, Interpretation Phase, and Verification Phase.

The Description Phase includes an operational description of the problem behavior, its history, and the antecedents, consequences, and environmental variables that might affect it.

The Interpretation Phase synthesizes the information from the Description Phase and specific hypothesis statements about the function (i.e., maintaining consequences) of the behavior are developed.

The Verification Phase includes the design of intervention plans that are based on the functional assessment and a description of the data collection measures that will be used to evaluate whether the plan is having an impact on the target behavior. The Verification Phase helps determine if the hypothesis statements developed in the Interpretation Phase were accurate.

Description Phase

A: Description of the Problem Behaviors

Operational definition: Include a label or a title for the behavior and a brief description of the topography (physical characteristics) of the target behavior (e.g., What does it look like, sound like, smell like?). The key is to provide a descriptive picture of the behavior so anyone observing would know whether they saw the behavior occur or not. It is helpful to provide an example when possible (e.g., if defining verbal aggression, give an example of what the person actually says). For example, hitting is defined as striking another person with a closed fist with a force that the blow is clearly audible at a distance of 5 feet and results in the person's body being deflected in a direction away from the blow; or the person who is the recipient of the hitting reports pain, discomfort, or injury.

Onset/Offset: Describe the onset and offset criteria for counting an occurrence of the target behavior. This is for recording purposes to ensure that all staff are counting occurrences in a consistent manner. For example, an episode of kicking begins with the first contact of the foot to the body of another and ends when the behavior has been absent for five minutes.

Course of Behavior: Briefly describe how a typical episode of the target behavior unfolds and then comes to an end. Describe the presence of associated behaviors that are not the actual target behavior, but that reliably precede or follow the target behavior in the course of an episode. For example, the target behavior may be physical aggression; but prior to becoming aggressive, the person may begin pacing, pulling

his bottom lip, and avoiding eye contact. These associated behaviors are not the target behavior, but they are part of a chain that reliably precedes the target behavior. Then, after becoming aggressive, the person may begin to cry and apologize, which may reliably signal that the episode is coming to an end.

B: History: This involves stating the original onset of the behavior challenge, how long it has been a problem for the person (e.g., lifelong problem, started about 6 months ago), and recent changes in the behavior (e.g., increases or decreases in frequency or severity). Any events that may have contributed to a worsening of the problem should be described as well (e.g., the death of a significant other). State whether it is episodic (e.g., occurring at some times of year, week, more than others).

C: Antecedents: Describe the events that occur immediately before an occurrence of the target behavior. When describing antecedents include the activities, times of day, locations, people, tasks, social demands, and environmental events that indicate a high or low likelihood that the target behavior will occur (e.g., sitting in the living room watching TV with three other consumers and no staff present).

If known, describe the setting events that may predict when the target behavior is more or less likely to occur. Setting events may occur hours, days, or weeks prior to the occurrence of a target behavior; they are not immediate events. Setting events might include mood, psychiatric status, medical or physical problems, sleep cycles, absence of medication, eating routines and diet, or emotional events. For example, the immediate antecedent for physical aggression may be a request to complete a difficult task; but the person may be more likely to engage in physical aggression when the request is given after a sleepless night.

D: Consequences: This refers to events that occur immediately after the target behavior. Describe how other people react to the behavior. This may include reactions that are unplanned (e.g., peers move away and are frightened) and planned reactions (e.g., staff implement formal intervention strategy). Describe the effect of these reactions on the person's behavior (e.g., a change in the person's posture, position in the room, verbal behavior). Specific reactions or strategies used, and their effectiveness should also be delineated. In summary, describe the events that are maintaining the targeted behavior (e.g., positive reinforcement, negative reinforcement).

E: Environmental/Ecological Analysis: This section should describe the mismatches between the person's needs and characteristics and the current environment and how the mismatches might impact on the target behavior.

Please describe the nature of the physical environment and how it might impact on the behavior. This includes factors such as number of people in the person's environment, space, noise, temperature, sudden changes in the environment. Also consider the security of the environment and what physical alterations have been made to the environment (e.g., locks on cabinets or refrigerator, fences around property, alarms on doors).
Further describe the programmatic environment and how it might impact on the behavior. This includes factors such as availability of reinforcers, materials, and meaningful

activities. Also, the amount and type of structure in the person's daily routine, if there are schedules or visual aides available, and the variety of and access to activities and settings throughout the day. Other areas to consider are; opportunities for choice during the day, access to the community, instructional strategies used, and level of family or staff supervision provided.

Finally, describe the social or interpersonal environment and how it might impact on the behavior. Consider factors such as opportunity for and quality of social interaction with others, including individuals without disabilities, expectations of others, and the philosophy of those around the person, staffing patterns and interactions.

It is also helpful to determine under what conditions the behavior never occurs, as this can help to identify where changes in programming or environment may serve to reduce or eliminate the target behavior. For example, if it is determined that an individual with self-injurious behavior remains calm and without self-injury when in a calm, quiet atmosphere while performing arts and crafts or puzzles, providing more opportunities for these preferred activities can serve to prevent the target behavior of self-injury.

Based on observations and interviews, impressions of family or staff resources and constraints, including potential ability and willingness to make necessary changes (e.g., scheduling, environmental, and/ or social interactions) when interacting with the individual should be included. Further describe the constraints on time, energy, and emotions. Stated differently, there should be an informal estimate of family or staff ability to implement behavioral suggestions with the individual to influence a change in the target behavior. Is there any evidence that they will be able to set limits and follow through? Have they reliably kept data in the past?

Interpretation Phase

F: Analysis of Meaning/Hypotheses: Based on the information gathered in your functional assessment, state the hypotheses regarding what is currently maintaining the target behavior. Describe what function(s) the behavior appears to serve for the person. The possible functions might include communication, initiation/maintenance of social interactions, stress reduction, increase/decrease sensory input, escape/avoidance of unpleasant events in the environment.

Carr & Wilder (1998) describe this process as follows:

> After many occurrences of the behavior have been collected, the next step is to look for patterns in the data. You might be able to find a time pattern; for example, the behavior usually occurs around 11:00 a.m. The next step would be to examine what is happening in the person’s environment during this time period. Beyond time patterns, the primary areas of focus when analyzing descriptive assessment data are antecedents and consequences. For instance, the problem behavior might frequently occur after a request has been made of the individual. This might imply an escape function for the problem behavior. (p.11-12).

Verification Phase

Section VII: **DIRECT OBSERVATION DATA**

State the strength of the target behavior in terms of its frequency, duration, latency, and/or severity. Reports of the current strength of the behavior should be based on actual data collection procedures that have been implemented (e.g., event recording, time sampling). Describe the data collection procedures used. Only with accurate baseline data can progress be reliably measured.

Keep data collection procedures in place to evaluate progress during the intervention period (i.e., verification phase). Do not provide estimates based on family or staff verbal report. These ongoing data will help to determine whether continued intervention services are needed. In addition to staff data collection, conduct reliability or fidelity checks to assess staff accuracy and to identify behaviors that might be precipitating, reinforcing and maintaining the target behavior.

Direct observation of the behavior is a mandatory component in the functional assessment process (i.e., an assigned person should objectively record ongoing behavior). Event recording and time sampling are examples of direct observational recording methods.

Procedures (e.g., daily tallies) and forms (e.g., daily or weekly data summary form) to be used for data collection need to be specified. Graphing of the progress in reducing or increasing target behaviors over time can provide a visual indicator or behavioral change. By monitoring progress on a regular basis (e.g., weekly, monthly), the need to continue or to revise an intervention plan can be determined. Reliability checks, (i.e., interobserver checks or procedural/fidelity checks) to ensure that data and observations are accurate, need to be described as well.

Section VIII: **INTERVENTION STRATEGIES**

A: Behavioral goals are the objectives that you want to accomplish by the end of the intervention/verification phase. Objectives should reflect specific data measures that reference either behavior reduction or skill acquisition. They need to be stated in measurable and observable terms and changes targeted during intervention need to be stated in comparison to baseline levels. For example, teaching PECS to communicate rather than hitting would be an instrumental goal, which would help the person meet the ultimate goals of eliminating physical aggression at home and having an effective means of communicating.

B: Environmental/Ecological Strategies: Intervention strategies need to take into account environmental variables. The manipulation of environmental variables frequently reduces the need for direct clinical intervention. Changes in setting events or immediate antecedent events may also prevent the occurrence of behavior challenges. Antecedent control strategies refer to physical, programmatic, or interpersonal environments. The removal of an immediate event that sets the occasion for the occurrence of a target behavior, the removal of setting events such as crowding or noises, or the

implementation of a visual schedule or other written/pictorial devices, are all examples of antecedent control strategies.

For example, if a functional assessment identifies that an individual's aggression is escape-motivated and is primarily exhibited when difficult or repetitive tasks are presented B intervention might include removing difficult tasks from the curriculum, shortening the sessions, interspersing difficult tasks with more enjoyable and easier tasks, or changing the materials or instructional presentation so that the tasks incorporate more preferred items. Furthermore, if the individual's aggression is more likely on days when he has not slept well the night before, his schedule may be arranged so that difficult tasks are presented in the morning rather than in the afternoon when he may be more tired.

C: Replacement Behavior/ Skills Training: Emphasis should be placed on the teaching of replacement behavior. Given the functional analysis, specific behaviors should be taught that provide the person with a more appropriate and effective way of achieving the same function served by the target behavior. Teaching strategies to be used for replacement behaviors should be clearly described (e.g., backward chaining, discrete trials) along with the use of prompts and a schedule for fading.

The instruction in behaviors/skills that function as alternatives to target behaviors, may involve teaching communication skills (e.g., through pictures), social skills (e.g., through social stories), coping skills, and simply general skills in self-help, daily living, academic, or community domains. For example, if the functional analysis of a person=s self-injurious behavior indicates that it serves an escape function, then a specific skill should be taught that provides the person with a more appropriate way of escaping an unpleasant situation (e.g., a break card, a sign, a phrase).

D: Direct Intervention: Additionally, structured reinforcement programs (e.g., differential reinforcement of zero (Ø) rates of behavior - DRO, differential reinforcement of alternative/ appropriate behavior, stimulus control) should form an integral part of a comprehensive behavior intervention plan.

In order to ensure clinically appropriate implementation, a number of variables need to be addressed clearly.
These variables include:
* what target behavior(s) are to be selected
* choice of an appropriate time interval for reinforcement based on initial and ongoing data counts
* selection and fading of reinforcers
* selection of any variation of the main reinforcement program to be use (e.g., differential reinforcement of other behavior based on progressive schedule as a variation to DRO)

E: Reactive Strategies/Emergency Procedures: Specific strategies should be made for managing the target behavior when it does occur. Recommendations for responding when the target behavior occurs should be closely linked to the findings of the functional assessment. Reactive strategies should involve the least restrictive methods possible, while maintaining safety (e.g., active listening, cued relaxation, stimulus change before

geographic or physical containment). A primary focus should be how to react early in the chain so the behavior does not escalate further (e.g, respond to the pacing before it escalates to physical aggression).

Emergency procedures, such as physical restraint or containment should be used only as temporary, short-term interventions with the immediate and primary aim of preventing harm. Emergency procedures are not to be used as punishment. If a consumer strikes out, but poses no further threat, emergency procedures should not be implemented. Please refer to Title 17 regulations regarding the use of a physical restraint and reporting requirements (Sub-Chapter 5, Section 50515).

F: Generalization/ Maintenance/ Relapse Prevention Plan: Present a plan for generalization and maintenance to ensure that intervention strategies will extend into the future. Generalization should extend across settings, persons, and activities by, for example, fading to intermittent schedules and natural reinforcers, raising criteria for obtaining reinforcement, and teaching a new skill or behavior across settings, persons, and activities. State how the newly developed skills will be maintained in the natural environment to assure long-term success.

Targeted behaviors frequently reappear regardless of how effective the initial intervention plans were in decreasing or eliminating them. Although relapse prevention is built into the maintenance efforts listed above, the reappearance of the targeted behavior should be anticipated. Consumers, their staff, and significant others should be prepared for relapse and not be discouraged or feel that their intervention efforts have been ineffective. The reappearance of a target behavior does not mean that an intervention plan must be reinstated either. However, consideration should be given to how you will prevent a lapse (i.e., one occurrence of the targeted behavior) from becoming a relapse (i.e., a return to the full-blown pattern of the target behavior).

Section IX: **SUMMARY AND RECOMMENDATIONS**

The number of service hours or staffing ratio recommendations should be specified here. If the number of service hours or the staffing ratio recommended represents an intensive intervention model, this should be reflected in the overall treatment plan. A clarifying statement should also be made in this section regarding the current need and reasons for intensive intervention at this time. Explain why additional resources are being requested, if they are, and indicate how long they will be needed and what behavioral criteria will be used for decreasing and eventually eliminating them.

Recommendations for assessments by other disciplines and services should also be presented here if applicable (e.g., updated psychological evaluation, psychiatric evaluation, medical evaluation).

All reports must be signed by a licensed or certified professional from the vendor agency (e.g., Licensed Psychologist, Licensed Marriage and Family Therapist, Licensed Clinical Social Worker, Board Certified Behavior Analyst).

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References Used in the Development of these Guidelines

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Other Resources

Books

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Journals

American Journal on Mental Retardation

Mental Retardation

JASH (Journal of the Association for Persons with Severe Handicaps)

Journal of Positive Behavior Interventions

Journal of Applied Behavior Analysis

Journal of Developmental and Physical Disabilities

Journal of Autism and Developmental Disorders

Web Sites

American Association on Mental Retardation - www.aamr.org

American Psychological Association - Division 33 (MR/DD) -

www.apa.org/division/div33/homepage.html

Association for Behavior Analysis - www.wmich/psy/aba

Behavior Analysis Certification Board B www.bacb.com

California Association for Behavior Analysis B www.calaba.org

Cambridge Center for Behavioral Studies - www.behavior.org

National Information Center for Children and Youth with Disabilities B www.nichcy.org

The Association for Persons with Severe Handicaps -
www.tash.org