

# Introduction

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Deductive reasoning and making inferences are an integral part of our daily communication. We use critical thinking in multiple ways every day. We reason whenever information is presented to us. The ability to use this kind of thinking is frequently impaired in someone who has language or thinking difficulties. Communication, decision making, and problem solving can become very confusing or overwhelming if these skills are impaired. Many factors can hinder the ability to use deductive reasoning, such as:

- Difficulty understanding language or concepts due to aphasia.
- Difficulty using convergent and divergent language skills.
- Difficulty mentally holding and manipulating information so one can come to a logical conclusion.
- Impulsivity causing action before receiving and analyzing all pertinent information.
- Becoming overwhelmed with mentally-held information and new input.

The exercises in *Just for Adults: Deductions* were developed to address verbal/written deductive reasoning and inferencing followed by figural and object deduction. These skills are the foundation for many language and thought processes and for activities of daily functioning. The exercises in this book can be done in multiple ways.

- Have the clients read items silently and complete them independently.
- Have the clients read task items aloud and write the response. In general, performance improves when a person has multi-modality input (i.e., hearing it while reading it).
- Read the items to the client and have the client give responses verbally.

Mental manipulation and deduction are more complex thinking skills so be sure to give your client ample time to reason and think before responding. It is important to remember that the clients who will use these exercises are very concrete thinkers and will tend to have divergent reasoning patterns that link information tangentially. The items have been written to assist in re-establishing convergent thinking, but at times your client may need cues to aid with convergence.

The exercises in this book teach processes needed for successful deductive reasoning, decision making, and determining actions. All tasks are worded in a manner and set up on the pages in specific ways to assist clients in developing the processes needed for these critical thinking skills. When doing the tasks, it is more important to monitor the client's manner of processing rather than if the specific target answer is correctly determined. If the client is considering all of the salient information, using convergent reasoning, and is exhibiting all of the necessary thinking components when doing an exercise, then the task is successful, whether or not the exact target answer is determined. When a certain process seems to be missing from a client's line of reasoning, that is what should be cued in order to assist the client in re-establishing these basic foundational skills.

On page 6, you will find a screening tool that is not to be used as a test but rather as a way to observe a client's use of strategies and reasoning patterns. Some questions to think about while observing how the client completes the screening include:

1. Does the client need to use verbal rehearsal to aid comprehension?
2. Is the client impulsive, and does his impulsivity lead to errors?
3. Does the client read too much into the task and become confused?
4. Is the client aware of his error responses?
5. Does the client ask for clarification when having difficulty or does he just keep going, whether the item is understood or not?
6. Does the client miss salient information?
7. Is the client able to think convergently and divergently?
8. Does the client have trouble shifting from one task to the next?

Use the information gleaned during your observations to help the client re-establish effective strategies while doing the exercises in this book.

These guidelines will help you present the activities in this book.

- The goals of the exercises are to improve a client's ability to reason, make inferences, and then come to a conclusion. There are multiple answers for many of the exercise items. Be flexible with presentation and accept answers that differ from your viewpoint if the client can give a logical explanation. The answers in the Answer Key are provided as a reference and are not intended to be all inclusive.
- The exercises are not for testing purposes. Try to make them as enjoyable as possible. Talking about the specific task items, particularly when correcting error responses, will help to improve the client's ability for achieving the goals. Do not get into debates if the client is unable to see another viewpoint for a response. Just move on to the next item.

I hope you and your clients find these exercises enjoyable and beneficial.

Kathy