The Ziggurat Model

A Framework for Designing Comprehensive Interventions for Individuals with High-Functioning Autism and Asperger Syndrome

Ruth Aspy, Ph.D., and Barry G. Grossman, Ph.D.

Foreword by
Gary B. Mesibov, Ph.D.

Revolutionary techniques that parents and professionals alike can put into practice with ease...

“A practical and helpful book that provides a comprehensive approach to intervention for more able individuals with autism and Asperger Syndrome. The book is enhanced by use of cases and diagrams and has a practical orientation. It will be of great benefit to professionals and parents alike...

— Fred R. Volkmar, M.D., Director, Child Study Center, Irving B. Harris Professor of Child Psychiatry, Pediatrics and Psychology, Yale University School of Medicine; Chief, Child Psychiatry, Children’s Hospital at Yale New Haven

“In the past ten years, I have seen three materials that I believe have the potential to advance the progress of children and youth with ASD. One is the Ziggurat model. Aspy and Grossman understand AS/HFA in a way that most people do not. They have created a simple-to-use, yet comprehensive model to ensure that children’s needs are met throughout the school day. The Ziggurat program is innovative, based on best practices and focused on the child’s needs. I wish that I would have created this model. It is simply brilliant...

— Brenda Smith Myles, Ph.D., University of Kansas, Internationally known presenter and writer on issues related to autism spectrum disorders

“With the Ziggurat Model of Intervention, Drs. Aspy and Grossman have synthesized the research on program planning and functional behavior assessment into a useful and user-friendly decision model leading to the development of truly comprehensive, functionally determined educational and behavior support plans. Highly recommended.

— Peter F. Gerhardt, Ed.D., President, Organization for Autism Research

“Comprehensive and well-researched, but also understandable and accessible, the ZM addresses the multifaceted needs of children with AS and HFA in the school setting. Its very premise is that while there are commonalities, the characteristics of autism impact every student differently. This program is ingenious in that it creates an individualized plan and a framework in which to implement it. It is a well-oiled mechanism that smooths the wrinkles out of the school day for every child. In addition, as a parent it’s exciting for me to think of the multitude of ways we can further use the information we gain about our kids through, for example, using the UCC (Underlying Characteristics Checklist). The ZM is not merely a support system, but a celebration of what is unique about our kids on the spectrum and a springboard for their future...

— Kristi Sakai, Mother of three children with Asperger Syndrome and author of Finding Our Way: Practical Solutions for Creating a Supportive Home and Community for the Asperger Syndrome Family

RUTH ASPY, Ph.D., is a licensed psychologist and author. She specializes in assessment and intervention for individuals with autism spectrum disorders. Dr. Aspy is co-creator of the Ziggurat Model and speaks nationally on this and other topics. She has experience in both clinical and school settings.

BARRY G. GROSSMAN, Ph.D., is a licensed psychologist who specializes in assessment and intervention for individuals with autism spectrum disorders. He provides assessment and consultation services in the public schools as well as staff development. Dr. Grossman is an author and speaks nationally. He co-created the Ziggurat Model, which has been adopted at district- and statewide levels.
“I love this book! In this much-anticipated publication, Aspy and Grossman have done an exceptional job at providing a user-friendly process and framework for designing comprehensive interventions for individuals with autism spectrum disorders. It is a must-have reference for all educators, clinicians, and parents who work and live with children with ASD.”

– Amy E. Bixler, M.S., Educational autism administrator, Ohio Center for Autism and Low Incidence (OCALI)

“Ruth and Barry have finally done what so many of us have tried to do for years. The Ziggurat Model is truly a framework for understanding how autism affects a given individual, and for planning interventions that follow from that understanding. What’s more, it does so without diminishing the contributions of so many others in the field who have contributed to our current knowledge. The Ziggurat Model is easy to understand, practical, and could potentially impact the education and support of thousands of people on the autism spectrum.”

– Daniel Davidson, Ph.D., Northern Arizona University

“I found this book to be extremely thorough and comprehensive. There are many applications for a text like this. I personally would like to buy about 10 copies and hand them out to all of my child’s special and general education teachers, but I also believe that other team members (psychologists, therapists, and parents) can benefit from this comprehensive resource. The book does an excellent job of painting a picture that will help many “see” autism and understand that a comprehensive plan can make a huge difference. I’ve had the privilege of working with the authors and know that their comprehensive view and strategies have helped my child.”

– Doris Fisk, Registered nurse and parent
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It is a pleasure for me to introduce this impressive work by Ruth Aspy and Barry Grossman. The authors present their Ziggurat Model as unique, a claim made by many authors about their work, but not usually fully realized. In this case, however, I think the authors do not overstate their case, having created something original, thoughtful, practical, and, indeed, unique.

I don’t think I have ever written a foreword for a book before without personally knowing the authors, but I was drawn to this work for several reasons. First, when you read this book, you are quickly convinced that the authors really know children and how they think and learn, especially children with disabilities. Second, the authors have clearly broadened their clinical knowledge by reading a lot of relevant literature and assimilating it impressively. Third, the authors have a creative way of integrating what they know, what they have read, and what others have done in presenting a genuinely creative and unique synthesis. Finally, the authors have the practitioner in mind and offer ideas that will be readily applicable and very helpful.

In addition to these many assets, I like the way the authors understand that the ultimate skill in working with children with disabilities is in the process of developing the interventions. They neither oversimplify by suggesting that cookbook strategies or simple techniques will work, nor do they make the process of teaching students with autism spectrum disorders so complicated that few readers will be able to trudge through their book and find anything that they can understand well enough to apply. Instead, they have dealt with ASD in all of its complexity but have generated a process that is neither too simple-minded to work nor too complex to apply. Their excellent balance is a great asset, along with their thorough understanding of their subject matter and their creativity in assimilating a variety of approaches.
Although I have not personally met Ruth Aspy or Barry Grossman, I have developed great respect for their knowledge and clinical instincts for educating students with ASD. Reading their book makes me really want to meet them because they obviously understand this field and have some unique and creative ideas for developing successful intervention programs. I think that a wide range of parents and professionals will also want to meet these talented authors after reading this book to share more of their knowledge and to express their appreciation for this excellent contribution to the field.

– Gary B. Mesibov, Ph.D.
Professor and Director of Division TEACCH
Introduction

The Ziggurat Model is unique. While it is easy to find volumes of information describing specific interventions, it is difficult to find information on how to develop an intervention plan. This book presents a process and framework for designing comprehensive intervention plans for individuals of all ages with autism spectrum disorders.

As psychologists, we are often asked questions such as, “How can I get my child to stop interrupting conversations?” or “How do I know which intervention to use?” These questions imply that there is a single response that could resolve a specific concern and that a given strategy is appropriate for everyone with an autism spectrum disorder. It is no surprise that parents and professionals feel confused because tried-and-true behavior techniques do not work. Further, they become frustrated because well-established interventions do not result in long-term gains. We believe that it is shortsighted to assume that a pervasive disorder can be effectively treated with any single approach. What we have discovered is that even evidence-based interventions fail if the stage is not properly set through the use of multiple interventions targeted specifically for an individual. A “piecemeal” approach will, at best, provide temporary or partial improvement. Furthermore, interventions must address characteristics of autism that underlie the visible behavior.

The Ziggurat Model is designed to address true needs or underlying deficits that result in social, emotional, and behavioral concerns. As such, it is designed to help parents, teachers, speech pathologists, psychologists, occupational therapists, counselors, school administrators, autism consultants, and others to design in-depth, individualized interventions that work with this population.
COMPONENTS OF THE ZIGGURAT MODEL

The Intervention Ziggurat is the centerpiece of the Ziggurat Model. It contains five levels in a hierarchal structure. Each level represents an area that must be addressed in order for an intervention plan to be comprehensive. Further, each level contributes to the effectiveness of the other levels. Building from the foundation of the Ziggurat, these levels are:

- Sensory Differences and Biological Needs
- Reinforcement
- Structure and Visual/Tactile Supports
- Task Demands
- Skills to Teach

If needs on each level of the Ziggurat are not addressed, the intervention will not be as effective and skills will not develop. As skills increase, less intensive interventions will be required on the lower levels of the Ziggurat because the teaching of new skills allows for growth and makes a permanent difference for the person on the spectrum.

The underlying needs and characteristics related to autism must be addressed – this is a key premise of the Ziggurat Model. The Ziggurat Model includes two assessment tools – the Underlying Characteristics Checklist (UCC) and the ABC-Iceberg (ABC-I) – designed to identify these underlying factors. The UCC is a descriptive instrument that can be completed by multiple respondents and provides a “snapshot” of how autism is expressed for an individual in the following areas: Social, Restricted Patterns of Behavior, Interests and Activities, Communication, Sensory Differences, Cognitive Differences, Motor, and Emotional Vulnerability. The ABC-I incorporates a traditional functional behavior assessment and helps to illustrate patterns of behavior.

The Ziggurat Worksheet, a guide for the intervention planning process, is also detailed throughout the book. Use of the Ziggurat Worksheet ensures that an intervention is comprehensive. In brief, a complete intervention plan addresses all five levels of the Ziggurat, the underlying needs identified through the use of the UCC, and provides for intervention at three points – antecedent, behavior, and consequence.
STRENGTHS OF THE ZIGGURAT MODEL

The Ziggurat Model was designed to simplify a complex process. Parents and professionals will find the framework of the Ziggurat Model to be a guide in developing more thorough and effective interventions.

The Ziggurat Model is a valuable resource for public school professionals who must remain in compliance with federal and state guidelines. Specifically, recent trends in special education law emphasize the use of scientifically based research approaches along with a focus on Response to Intervention (RTI). Additionally, there is a strong push for incorporating positive behavioral interventions and supports (PBIS) based on a functional behavioral assessment. The Ziggurat Model is consistent with these practices.

First, this book outlines evidence-based interventions on each of the five levels of the Ziggurat. Additionally, the ABC-I tool incorporates a functional behavioral assessment that facilitates development of an individually designed intervention. The Ziggurat Model also emphasizes a proactive, positive approach by requiring reinforcement and antecedent-based interventions. Ongoing assessment allows for changes to the intervention plan at each level gauged on progress.

Finally, the Ziggurat Model promotes collaboration and communication among parents and professionals. The assessment tools are designed to incorporate the perspectives of multiple team members while ensuring that they work from the same reference point – the individual’s underlying characteristics of autism. The Ziggurat Worksheet promotes collaboration by helping parents and professionals to understand their part in the larger intervention picture. Thus, through the use of the Ziggurat Model, the whole truly is greater than the sum of its parts.

This capacity to facilitate collaboration lends the Ziggurat Model to be an effective consultation tool. The model may be used throughout the consultation process (e.g., identification of concerns, assessment, development of intervention, monitoring and assessing progress) and can also be used to help evaluate an existing evaluation plan.

While the Ziggurat Model is designed to address the needs of all individuals with autism spectrum disorders, this book is written explicitly for the higher functioning population. The UCC, case scenarios,¹ and many interventions were developed with their unique needs in mind.

¹ The numerous case scenarios were created for the purpose of illustration and education. All individuals described in the scenarios are fictitious and based on our experience and imagination. Any similarity to real individuals is coincidental.
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