Self-Regulation, Stress Reduction, and Positive Psychology The Bridge to Successful Inclusion

IACC Services Workshop

Enhancing Supports for People with Autism and Their Families: Community Integration and the Changing Delivery System

> September 15, 2011 June Groden, Ph.D. The Groden Center, Inc., Providence, RI

Groden Center Network Service Components

Four Corporations

- 1. Groden Center, Inc.
 - Day Treatment and School
 - Parent programs
 - Academics
 - Respite
 - Community Outreach
 - Residential
 - Group homes
 - Foster family
 - Supportive living
 - Independent living
- 2. Kingston Hill Academy, Inc. Charter School

Groden Center Network Service Components

- 3. Cove, Inc. (Rhode Island Adult)
- 4. Halcyon, Inc. (Massachusetts Adult)

Day Programs

- Vocational Training
- Assessment
- Community Placement
- Support
 - Job Coach

Natural Supports

Enterprises – examples:

- The Ladle
- Window Washing
- Business Center
- Greenhouse and related plant services
- Recycling

Residential

The Bridge to Successful Inclusion

One of our interests from the beginning of our program was to focus on programs that promote self-control in the individuals we support. We've become well known for our work in developing relaxation, picture rehearsal, and other imagerybased and scripted programs.

This philosophy of positive programming has now been extended to include topics under the rubric of positive psychology.

- 1. Stress reduction and self-regulation
- 2. Positive psychology

Our population: Autism and other pervasive developmental disabilities with severe and challenging behaviors

Stress Reduction & Self-Regulation

The most overlooked problem in the population with autism spectrum disorder and developmental disabilities is stress and anxiety.

Stress Definition

The physiological reaction of the body to life situations which can be both happy events or unhappy events. For example: Divorce, Death, Marriage, Promotion; both Painful experiences and Pleasurable (eustress) experiences can create stress. However, recent research has been reasonably consistent in showing that the association with psychiatric illness is usually confined to unpleasant or undesirable events.

Hans Selye

Demand placed on the individual that disturbs homeostasis and requires an adjustment on the part of the individual.

Joseph Cautela

Characteristics of Autism Related to Stress

- **Communication**: inability to express feelings, handle frustrations, take other's perspective
- Socialization: ambiguous cues, rules, gestures, and solitary life
- **Sensory**: visual, auditory, tactile
- **Physical Factors**: seizures, infections
- Executive Function: lack of this goal-directed, futureoriented cognitive ability affects planning, organization, flexibility, self-monitoring, inhibition
- Hardiness: lack of accepting challenge, having commitment and control

Multi-Modal Assessment

Functional assessment Direct observation

Scales and interviews

Physiological measures

Functional Assessment

UNDERSTANDING CHALLENGING BEHAVIOR

Groden, G., Stevenson, S., & Groden, J. (1996). **Understanding challenging behavior: A step-by-step behavior analysis guide**. Providence, RI: Groden Center, Inc.

Number 1

Detailed Behavior Report (DBR)

CLIENT	John	STAFF Lisa
PROGRAM	Adolescent 2	HOW RECORDED: Continuous Sample

Purpose: This form is used to record objective information regarding the target behavior, its antecedents and its consequences.

BEHAVIOR	B E	Target Behavior (Describe in detail)	Aggression: hit Bob Roberts (staff) fairly strongly on the chest with both fists and was about to hit him again.						
	A	Severity Rating	5(severe)(4) 3 2 1(mild) DURATION 1 - 3 seconds						
	I	Precursors-body state,thoughts, emotions,verbals	Tense – stiffened body; tight lips						
		G Schedule	DATE 3/14/92 DAY Saturday TIME 4:00 p.m.						
		n Location	Residence living room, in front of TV, on couch						
		e r a Activity l	TYPE: Watching TV - favorite game show LENGTH ENGAGED: 30 min. MASTERED Yes/No CHOICE Yes/No MOVEMENT: High Low RELEVANCY TO CLIENT: High Low						

Scales and Interviews

THE STRESS SURVEY SCHEDULE FOR PERSONS WITH AUTISM AND DEVELOPMENTAL DISABILITIES The Groden Center, Inc.

Groden, J., Diller, A., Bausman, M., Velicer, W., Norman, G., & Cautela, J. (2001). **The Development of a Stress Survey Schedule for Persons with Autism and Other Developmental Disabilities**. Journal of Autism and Developmental Disorders, 31(2), 207-217.

Goodwin, M., Groden, J., Velicer, W., & Diller, A. (2007). Validating the Stress Survey Schedule for Persons with Autism and Other Developmental Disabilities, 22 (3), 183-189.

				Seve	re		
Please rate the intensity of the stress		Moderate to severe					
reaction to the following events by		Mode	erate]		
filling in the appropriate circle:	Mild to Mode		erate				
	None to	mild					
1. Receiving a present			1	2	3	4	3
2. Having personal objects or materials out of	order		1	2	3	4	3
3. Waiting to talk about desired topic			1	2	3	4	3
4. Having a change in schedule or plans			1	2	3	4	3
5. Being in the vicinity of noise or disruption	by others			2	3	4	3
6. Waiting for preferred events				2	3	4	5
7. Having a cold	·····				3-	4	5
8. Being touched				2	3	4	(5)
9. Having personal objects or materials missin	1g			2	3	4	5
10. Having a change in task to a new task with	new direction	ıs		2	3	4	5

Stress Survey Components

<u>Component 1</u> Ritual Related Stress

<u>Component 2</u> Social/Environmental Interactions

<u>Component 3</u> Food Related Activity

<u>Component 4</u> Sensory/Personal Contact <u>Component 5</u> Pleasant Events

<u>Component 6</u> Anticipation/Uncertainty

<u>Component 7</u> Changes and Social Threats

<u>Component 8</u> Unpleasant Events

Physiological Measure Why Study Heart Rate?

- There are a number of observable stress-indicators, including breathing rate, blood pressure, heart rate, and hormones.
- Heart rate seems to be the best stress indicator for individuals with autism--most robust measure of arousal
- It gives us another measure of stress
 - Overt Behavior
 - Covert Psychological Behavior
 - Covert Physiological Responding
- Objective measure--due to communication deficits
- More precise, non-invasive, well-tolerated instrumentation

Heart Rate Results

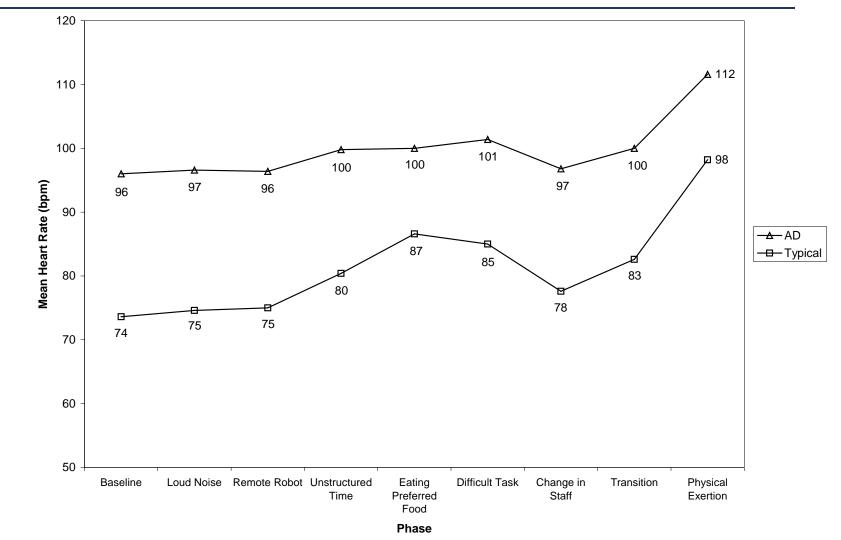
Groden, J., Goodwin, M.S., Lipsitt, L.P., Hofmann, S.G., Baron, M.G., Groden, G., Velicer, W., & Plummer, B. (2005). Assessing cardiovascular responses to stressors in individuals with autism spectrum disorders. Focus on Autism and Other Developmental Disabilities, 20 (4), 244-252.

Subject	Order	Baseline	Baseline	Physical	Unstruct	Receiving	Change in	Losing at a
		Heart	Heart	Exertion	-ured	Tangible	Staff	Game
		Rate	Rate		Time	Reinforcement		
		М	SD					
P1	1	111.9	3.7	\checkmark	\checkmark			
P2	3	107.0	3.3	\checkmark	*			*
P3	2	81.3	4.4	\checkmark	\checkmark	\checkmark	*	
P4	3	80.9	6.1	\checkmark	\checkmark	\checkmark		
P5	2	80.2	4.8	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
P6	1	84.6	4.3	\checkmark				
P7	2	81.7	4.0	\checkmark				*
P8	1	80.5	3.7	\checkmark		\checkmark		
P9	3	78.3	5.8	\checkmark				
P10	2	68.1	2.7	\checkmark	\checkmark	\checkmark		\checkmark

✓ Heart rate during this task was significantly greater than heart rate at baseline.

* Heart rate during this task was significantly less than heart rate at baseline.

Average Mean Heart Rate Level by Phase for ASD and Typical Group



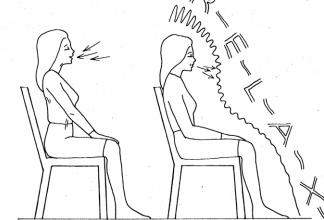
Goodwin, MS, Groden, J, Velicer, WF, Lipsitt, LP, Baron, MG, Hofmann, SG, & Groden, G (2006). Cardiovascular arousal in individuals with autism.

Focus on Autism and Other Developmental Disabilities, 21, 100-123.

COPING STRATEGIES

Relaxation

By deliberately tensing and relaxing their muscles, children and adults learn to discriminate the presence of muscle tension. They are taught to perform a relaxation response whenever their muscles tense or before, during, or after a stressful event. Relaxation enables the individual to remain in control in stressful situations and is incompatible with most maladaptive behaviors.



VIDEO

Picture Rehearsal

Definition:

A procedure in which the clinician verbally presents a carefully developed script, accompanied by pictures. The learner uses the pictures as cues to repeat the scene in daily rehearsals.

Target population:

- children
- people with special needs
- people who report difficulty forming mental images
- people with obsessive thoughts that interfere with more abstract imagery-based procedures

VIDEO

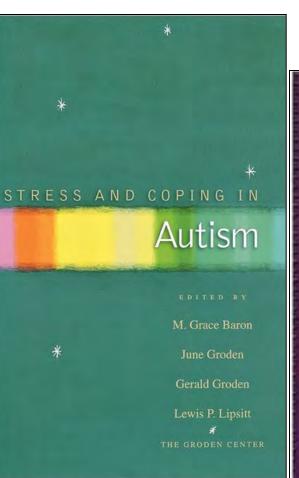
Coping with Stress Through **PICTURE REHEARSAL**:

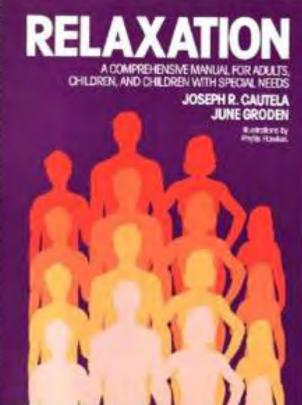
A How-to Manual for Working with Individuals with Autism and Developmental Disabilities

> June Groden, Ph.D. Patricia LeVasseur, M.Ed. Amy Diller, M.S. Joseph Cautela, Ph.D.



Illustrations by Eric Southworth





Stress Prevention Pyramid

PREVENTION

of maladaptive responses to stress, facilitating the promotion of good behavioral and physical health

Development and mplementation of **PROACTIVE COPING STRATEGIES**

Used before stress occurs. Examples are relaxation, picture rehearsal, assertion and environmental changes.

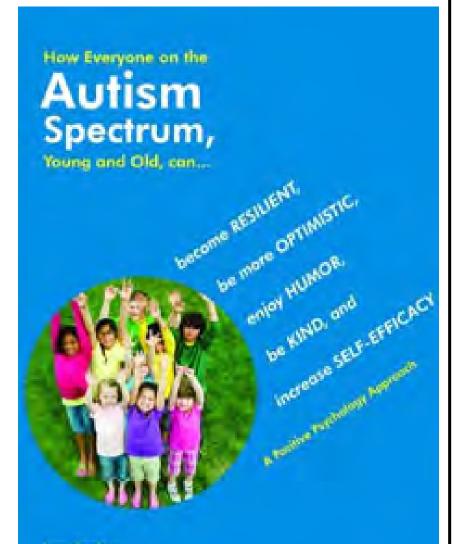
IDENTIFICATION OF STRESSORS

Antecedents or precursors to stress. Examples from the Stress Survey are: changes, anticipation, being told no.

MULTIMODAL STRESS ASSESSMENTS

Which include: observations (e.g., DBR), pencil and paper tests, interviews (e.g., Stress Survey Schedule), and physiological measures (e.g., heart rate)

Applying Positive Psychology to Autism



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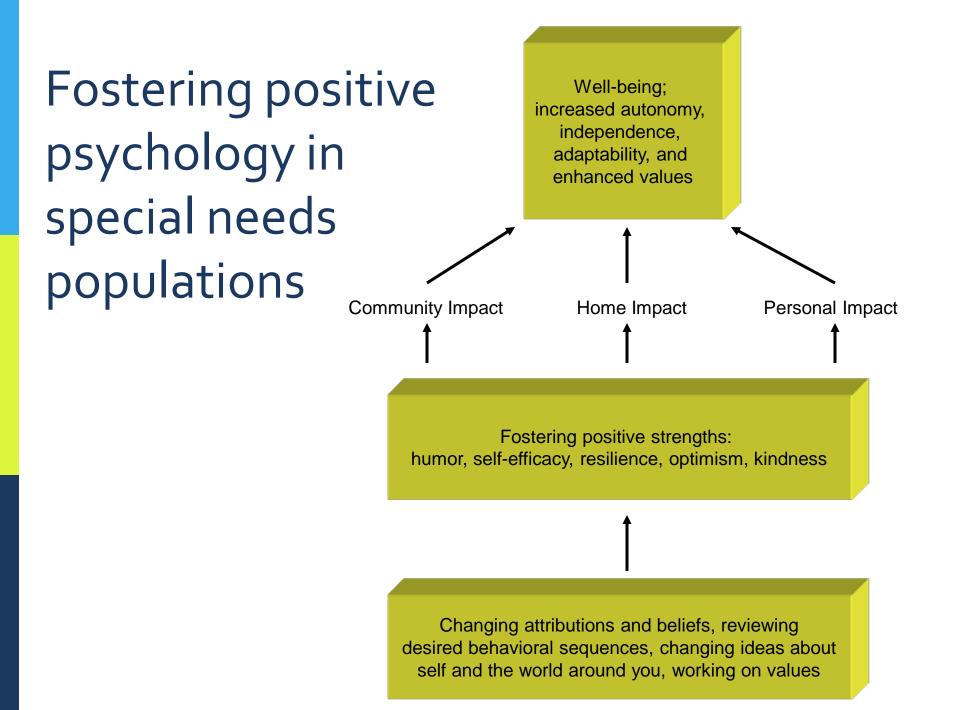


Definition of Positive Psychology

Positive psychology is: "an umbrella term for the study of positive emotions, positive character traits, and enabling institutions." Seligman, Steen, Park, & Peterson (2005)

Positive psychology begins to: "catalyze a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities." Seligman & Csikszentmihalyi (2000)

Many positive psychology traits relate to prevention, as they serve to buffer the damaging effects of experience, personal challenges, and mental illness.



Resilience in Autism



Resilience Definition

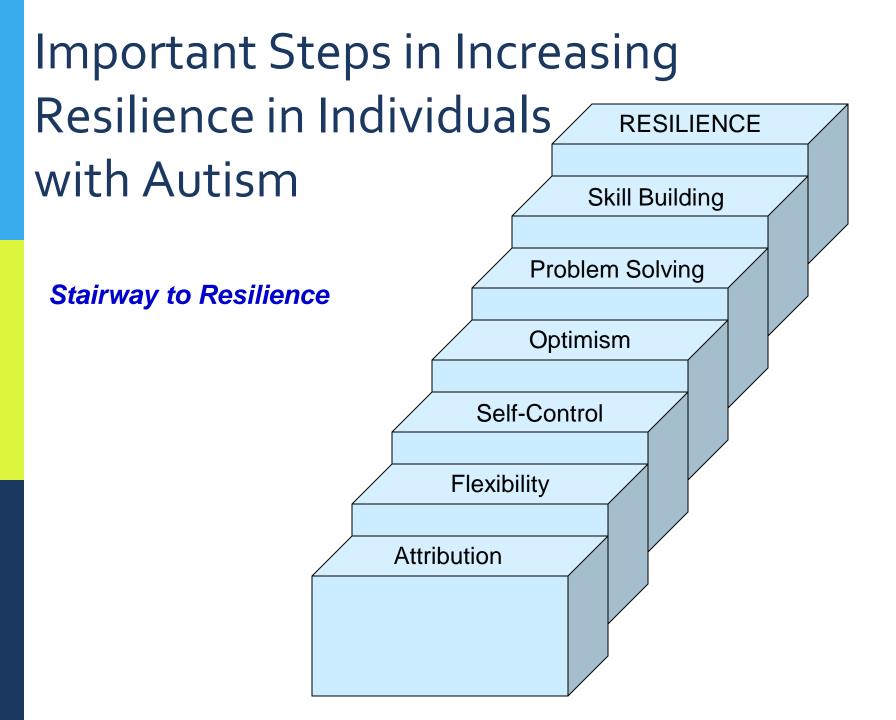
Ann Masten defines resilience as:

"The process of, capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances"

(Masten, Best and Garmezy 1990)

Resilience Definition

Brooks and Goldstein (2002), in their book on *Raising Resilient Children*, offer this definition: Resilience is the capacity to cope and feel competent. The resilient child deals more effectively with stress and pressure, responds effectively to challenges, "bounces back" from adversity and trauma, and develops clear and realistic goals. This child would also deal better with social situations and enjoy more social acceptance.



Important Steps in Increasing Resilience in Individuals with Autism

ATTRIBUTION

Interpretations of situations, and how we interpret our experiences. Our goal is to change negative attributions and provide positive attributions which would build Resilience.

Using Self-Control

For persons with autism and other developmental disabilities, it is not enough to learn self-controlling responses to reduce stress. Learning to *use* self-controlling responses in various life contexts is necessary to effective coping (Lazarus, 1993).

<u>Use</u> Relaxation

- Identify stressors
- Incorporate relaxation into IEP
 - <u>Teacher-cued</u> <u>reinforce</u> the relaxation response
 - <u>Self-cue</u> <u>reinforce</u> the relaxation response

Important Steps in Increasing Resilience in Individuals with Autism

PROBLEM SOLVING Creating Opportunities for Resilience

Problem solving is a mental process that involves discovering, analyzing and solving problems. The ultimate goal of problem solving is to overcome obstacles and find a solution that best resolves the issue (Reed, 2000).

Important Steps in Increasing Resilience in Individuals with Autism

PROBLEM SOLVING

Consists of:

- Flexibility
- Reflection on emotions and behaviors
- Ability to try different solutions
- Social thinking; effect on others
- Choice making
- Understanding and expressing likes and dislikes
- Healthy expectations
- Goal directed
- Hardiness having commitment, taking challenges and being in control

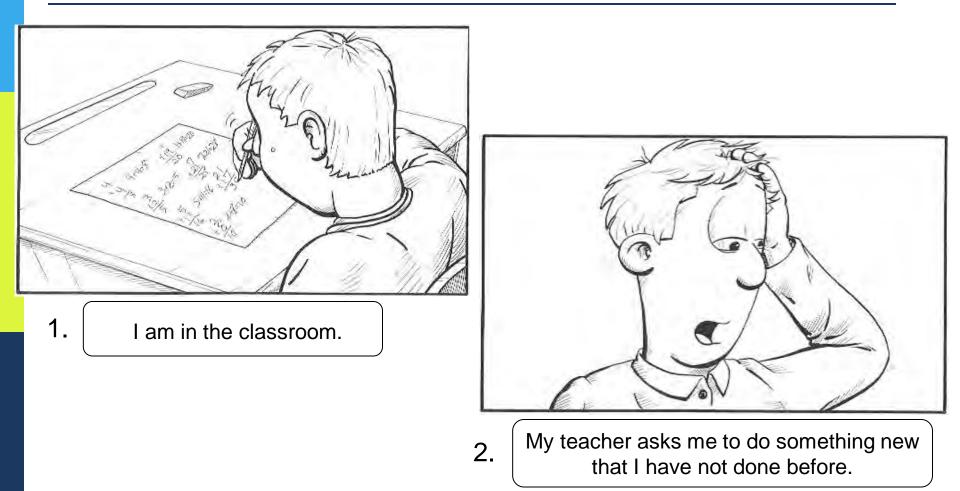
Activities to promote

resilience

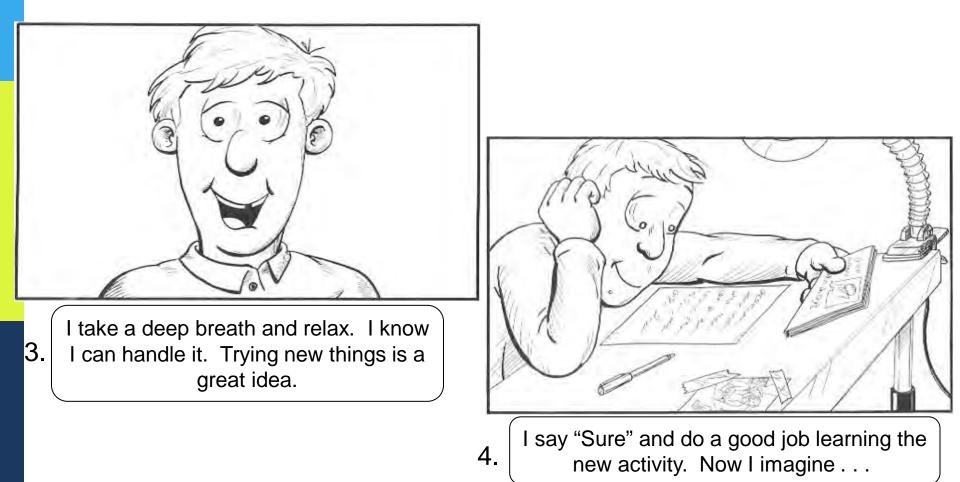
Activities to Increase Resilience

- Focusing on
 - Attribution
 - Flexibility/Choices
 - Self-Control
 - Problem-Solving
 - Skill Building/Islands of Competence

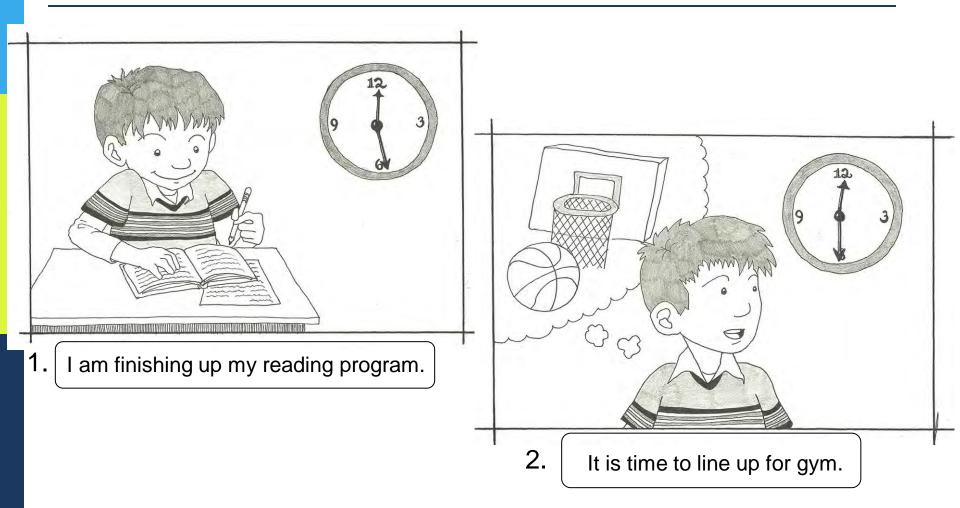
Attribution



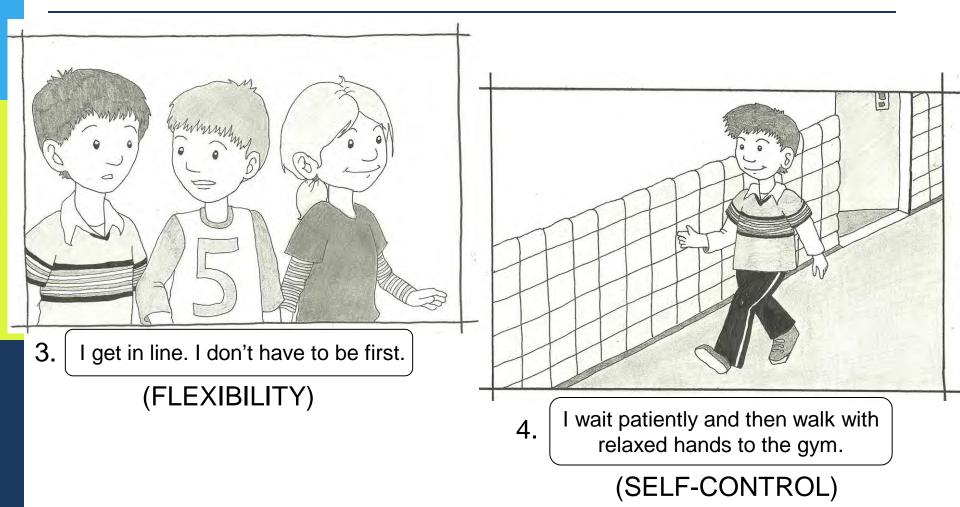
Attribution, cont'd



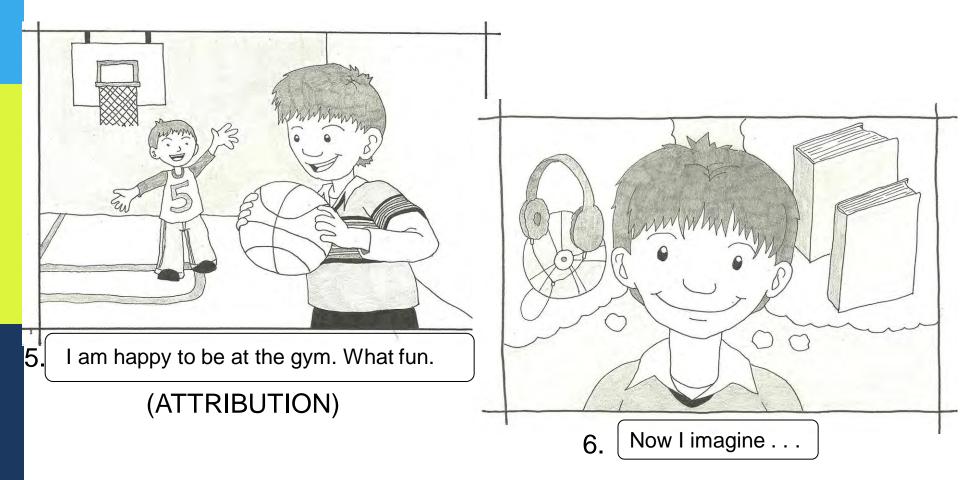
Anticipation Using Flexibility, Self-Control And Attribution



Anticipation Using Flexibility, Self-Control And Attribution



Anticipation Using Flexibility, Self-Control And Attribution



Problem Solving Activity

Choose an assignment or activity that the student cannot complete with asking for assistance. Examples of simple tasks are:

- Ask student to perform a writing assignment, but do not offer a pencil
- Offer a box of crayons that cannot be opened
- Serve food items without appropriate utensils
- Give student an empty jug to fill cups with water
- Ask student to retrieve an item from a locked cabinet
- Ask for an item from a shelf too high for student to reach
- Give student another student's personal item "by mistake"

Learning About Preferences and Being Able to Communicate Likes and Dislikes (To Make Choices and Problem Solve)

Category	Likes	Dislikes

Leisure Time



Using the computer



Reading a book



Making a puzzle



Watching TV



Listening to music



Creating art project



Molding playdough

Chores



Emptying dishwasher



Sweeping



Putting away towels



Doing laundry



Gardening



Taking care of pets



Grocery Shopping

Physical Activities



Swimming



Bicycling



Playground Activities



Gym Activities

Building An Island Of Competence

Build upon "islands of competence" (i.e., special interests). Identify and nurture special abilities and talents. "Islands of competence" are special abilities and talents that individuals with autism might have, even when facing difficulties in other areas of functioning. Build upon capabilities that can be appreciated by others.

My Own World The Photography Project

An example of building 'Islands of Competence'

Debra Romano Gerren Martin

Students at The Groden Center

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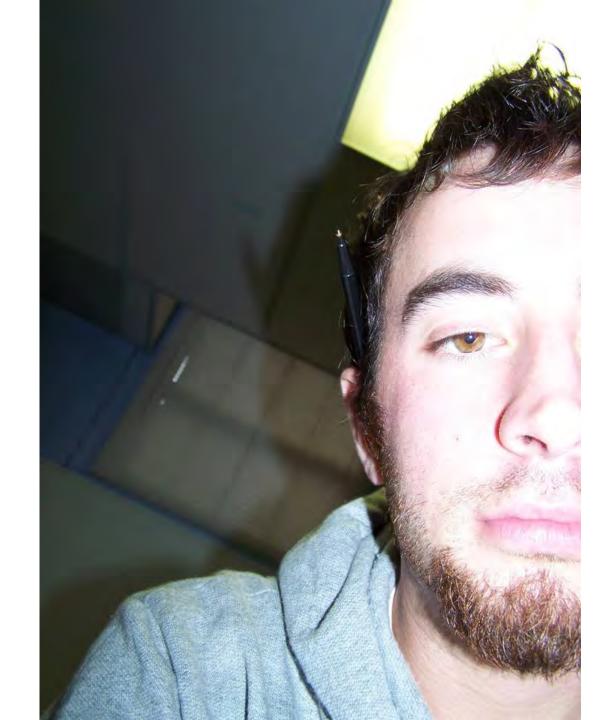
Tommy K. (adult)

My Own World Description

Students with autism are taught how to use digital cameras, computer printing processes, matting, framing and photographic display.













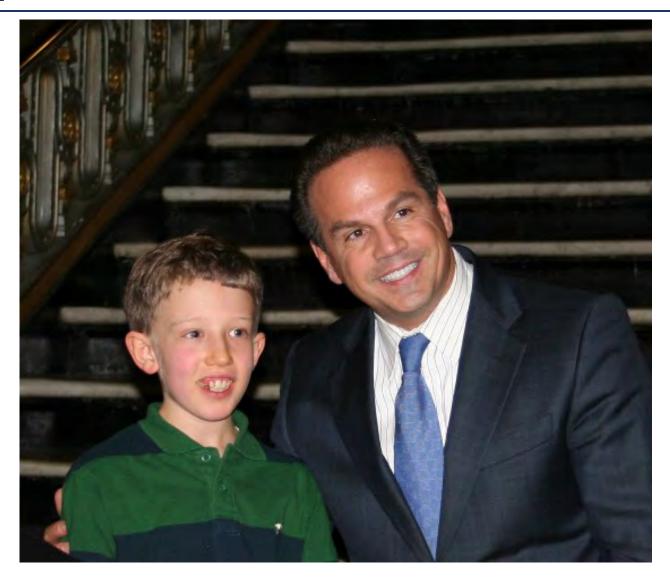
Brice L. age 17

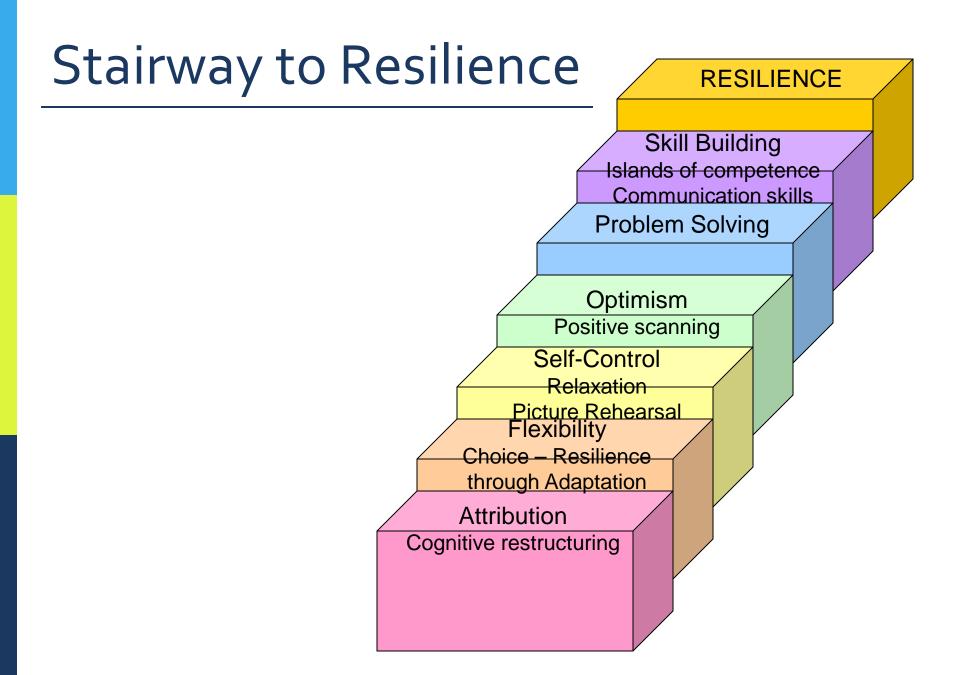
Rebecca P., Age 13

Rhode Island Flower & Garden Show



Mayor Cicciline Presents Awards





Resilience in Industry

- 48 agencies varying in size reduced \$24 million 2011-2012
- The Cove Center was cut \$350,000 two years ago;
 \$744,000 in July 2011; and \$830,000 as of Oct. 2011 which will bring this year's reduction to \$1.5 million
- Groden Center school programs
 - DCYF discontinued our \$1 million contract which cancelled our Saturday program and our After School program. We are currently working to maintain the After School program
 - Children's residential and foster family was cut \$500,000
 - Other cuts in all our programs

The Groden Center, Inc.

86 Mt. Hope Ave. Providence, RI 02906 Tel: (401) 274-6310 Fax: (401) 421-3280

www.grodencenter.org

jgroden@grodencenter.org