



Case Report

AUTISM

A BREAKTHROUGH FOR THE JOURNEY AHEAD

HOW A MOM IS USING THE LISTENING PROGRAM TO HELP PREPARE HER SON WITH AUTISM FOR THE SOCIAL AND ACADEMIC CHALLENGES OF MIDDLE SCHOOL.

“My son was diagnosed with autism at age 2. He has been undergoing many treatments and therapies for his diagnosis for the past several years. My son began The Listening Program® just before his 13th birthday. At the time he began the program, my primary goals for him were for him to be able to stay more focused and increase his social skills, to help him thrive in middle school. I wanted to see my son be able to do well in school and have the desire and the skills to make new friends.

I also wanted to provide him tools to help him succeed as middle school became more challenging. My hope was that he would be able to stay in main-stream classrooms and not have to be pulled out into special education classes for the whole day. Our journey with autism had been a long one, and I was ready for my son to be able to take that next step towards more mature and independent development, both academically and socially.

I was ready for a new breakthrough. The Listening Program gave Nicholas a new breakthrough. Within just a couple of months, I saw my son grow in ways I was hoping for. I saw attention improvements and so did his swim teacher and his aide at school. His conversation skills soared. He became more aware of others and asked more questions about people and about life. His aide at

school said, “Whatever you’re doing, keep doing it!” On a camping trip with family and friends, all were amazed at his social interaction and how he “led the pack” around the campfire, telling campfire stories. His sound sensitivity improved, and he didn’t have to cover his ears like he had before.

What I enjoyed seeing the most, was that he started stepping away from his computer more, to spend time with family. He asked to play board games with us and would seek out his siblings to do things. I’m so happy to say that during the summer, it was the first time ever that he did not ask to go home during our summer family vacation, and that warmed my heart. My son was enjoying more of the world and more of the people in his life.

As a parent who has used many different types of interventions to help my son over several years of his life, I can truly say that The Listening Program has brought about positive changes for him, and I have seen the improvements happen within a short period of time. It is easy to do, and easy to implement into an already existing protocol. That was exactly what our family needed for our son. I love seeing the improvements in Nicholas, and I plan to continue The Listening Program, to keep working toward the goals I have for him to thrive in his middle school, and beyond.”

“

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Nicholas’ Mother

NICHOLAS



ABOUT NICHOLAS

Case Submitted: 2020

Providers: Angela Woodward and Allen T. Lewis, MD
Sancta Familia Center for Integrative Medicine

Client: Nicholas, 13 year-old male

Clinical Diagnosis: Autism

Report Includes: TLP Monitoring/Tracking from:
6/7/18 – 8/30/18

OVERVIEW

The intent of this report is to provide a written/documented record of changes/benefits from The Listening Program® (TLP) after 3 months of therapy, with regular monitoring throughout the entire course.

At the end of the first 3 months of TLP an updated evaluation was made to determine changes, including the following:

1. Re-screening using the Listening Screening Tool for an updated evaluation of five areas of development: Learning and Attention, Auditory Processing, Speech and Language, Sensory Motor and Social Behavioral.
2. Review with parent of all the original developmental documentation, to examine changes in all areas that were originally reported with issues
3. Review and compilation of all Monitoring Call Discussions/Notes

Please see the following discussion and reports that document the changes that were observed.

PART 1: INITIAL CHALLENGES AND GOALS

Per extensive review of Nicholas' developmental and physiological health history and an extensive written evaluation, and verbal interview completed by Mom and Dad, and the Listening Screening Tool; an online evaluation tool based on ratings in several different developmental areas, by Advanced Brain Technologies, an Initial

Assessment was completed for a baseline reference, prior to starting The Listening Program.

A Pre-screening Test was completed to determine the level of need for The Listening Program. Per this test, any score higher than an 11 demonstrates an area that is challenged, and where TLP could be beneficial.

Note: the higher the score in an area, with the highest possible score being a 30, the higher the need for support. Five major areas of development were tested: Learning and Attention, Auditory Processing, Speech and Language, Sensory Motor and Social Behavioral]. Nicholas' scores indicated a need for support in all areas, with Learning and Attention being most impacted, followed by Auditory Processing and Social Behavioral.

Based on these scores, the TLP ACHIEVE program was selected to be used with the Waves Multi-Sensory Bone Conduction Headphones.

GOALS FOR NICHOLAS: Developmental improvements in all five areas.

Pre-screening Scores

Learning and Attention	22
Auditory Processing	18
Speech and Language	13
Sensory Motor	12
Social Behavioral	19

METHOD: To achieve improvements in these areas, Nicholas was to follow the TLP ACHIEVE Listening Protocol using Waves headphones on a Base Schedule (15-minute sessions, twice daily or a Condensed Schedule (one 30-minute session, once daily), 5 days per week. Continuous monitoring would take place, with a follow-up assessment after 3 months using TLP ACHIEVE.

PART 2: MONITORING CALLS REVIEW

There were 8 monitoring calls plus a 3-month follow-up assessment to track changes, provide suggestions and support, and make schedule/program adjustments, as necessary. The monitoring calls notes are listed below.

MONITORING CALL #1: 6/7/18

ACHIEVE Program, Blue Zone, Base Schedule, starting Module 16

- Nicholas is compliant with listening.
- Walks Boomer, his dog, with Mom or does play dough during listening
- Note: Slept in until 11:30 AM for the first time in his life. Nicholas has always awakened extremely early in the morning. Mom was very happy to see that he was able to sleep in late during his summer school break. He slept in again the next day until 9:30 AM.
- Mom has noticed that Nicholas is more verbal. For example, he was at his sister's dance practice and he said, "Sorry to disturb you guys," when he had to leave to use the bathroom.
- Mom said he is more attentive and making more comments that demonstrate an increased awareness of what is happening in his environment. – Angela Woodward (AW), TLP Certified Provider

MONITORING CALL #2: 6/14/18

ACHIEVE Program, Green Zone, Base Schedule, starting Module 27

- Asking more questions: Looked at Mom yesterday and asked 3 questions in a row. Mom made the comment. “Maybe this is working” referring to TLP.
- Attention and focus seem a little better.
- A little calmer, physically [not as much of a “busy-body.”]
- Compliance continues.
- Awareness of others continues. Ex: By accident, he bumped Mom’s arm and right away he said, “Sorry Mommy.” He is also saying “excuse me,” to others at appropriate times.
- Mom sees more understanding of how he should communicate with people.
- Seems to have more recognition that he is working with a therapist who comes to his house. He never really commented on it in the past, but now he is asking questions about why he must work with her. – AW

MONITORING CALL #3: 6/21/18

ACHIEVE Program. Green Zone, Base Schedule, starting Module 37

- Good moods.
- Pretty calm.
- Doing well in summer.
- Still on computer a lot and does do some scripting.
- More inquisitive. Asking more questions and making more comments. One day he said “Mom, what’s wrong with your voice?” Sister’s friend came over and he ran to the door and said, “Are you here to babysit me?”
- Wants to be around more people.
- Mom is looking forward to starting TLP Orange Zone for language and socialization.
- Mom would also like to see him on the computer less. – Sancta Familia Center TLP Provider

MONITORING CALL #4: 6/28/18

ACHIEVE Program. Orange Zone. Base Schedule, starting Module 45

- Doing well.
- Monday night family went camping. Nicholas talking so much more, per mom. People could not believe the changes in him.
- While camping, he would say “Here, you tell a story. My turn, I’ll tell a story.” Then he told a story about Big Foot.
- An aide at school said, “Whatever you are doing, keep doing it.” He is really chatty.
- Mom said he was very social. – AW

MONITORING CALL #5: 7/15/18

ACHIEVE Program, Orange Zone, Base Schedule, starting Module 56

- Going great!
- More creative. He is saying things like: “Hey Mom, let me show you, I did this,” and “I want to do this.”
- Some attention improvements.
- Swim teacher said he is listening better during his swimming lessons.
- He is a little more interested in playing with other kids.
- Still saying “sorry” if he bumps into someone.
- He is coming out of the computer room more.
- He asked to play a game that is not a computer game, but a fun board type game called Kudo.
- He wants more interaction with others.
- Wanting to do more with siblings.
- Mom does see some meltdowns on weekends when they have their rest days from TLP. Provider let Mom know they can do a module on Sat and a module on Sun if they need that to help sustain on those days. Mom said she might just repeat a module they just finished on the two break days to help him on weekends. - AW

MONITORING CALL #6: 7/19/18

ACHIEVE Program, Orange Zone, Base Schedule, starting Module 66

- Missed a few listening days during family vacation at grandparents.
- Mom plans to repeat the week of the missed sessions.
- They just had the first vacation where he did not ask to go home.
- Played with siblings in the ocean.
- Lots of expressive words “Oh, that’s amazing! That’s unbelievable!”
- Excited about people coming for his birthday party. - AW

MONITORING CALL #7: 8/2/18

ACHIEVE Program, Orange Zone, Base Schedule, starting Module 76

- More desire to be around people.
- Desire to share his likes with others. “Hey, Mom - come here, let me show you something.”
- His intervention teacher told mom his language is improving, and he is putting more words together.
- Mom sees the language improvements, as do many others.
- Better overall demeanor. Recovers quickly if something bothers him.
- More aware of time and schedule. He knows when the therapist is late. Knows his own schedule.
- Independence with his own schedule. Example, he said “No, I don’t watch TV except on weekends.” Demonstrating some maturity around that. - AW

MONITORING CALL #8: 8/16/18

ACHIEVE Program, Orange Zone, Base Schedule, starting Module 95

- OK with going to school.
- Likes routine.
- Wants to be around the family.
- Bringing his toys around his family, rather than isolating himself.
- Went to dentist and it was the first time his mom did not have to hold him.
- Aware and alert.
- Picks up on conversations he is hearing among the people around him. - AW

PART 3: LISTENING SCREENING TOOL EVALUATION COMPARISON

3 MONTH REVIEW

DESCRIPTION: The Listening Screening Tool provides a baseline report for auditory function status in relation to learning, attention, social skills, behavior, communication, coordination, and sensory processing. The same assessment can be completed periodically, following the start of The Listening Program, as a comparative way to monitor progress. **Please see the attached Pre- and Post- Listening Screening Tool Reports included. A summary of the findings is also listed below.*

NOTE: Scores of 12 or higher mean that area is challenged and could benefit from TLP.

SHORT-TERM OBJECTIVE: Bring all five categories to lower scores during the initial 3-month period of TLP music listening therapy.

LONG-TERM OBJECTIVE: Bring all five category scores to below 12, following additional months of continued use of TLP.

LISTENING SCREENING TOOL SCORES PRE AND POST

Category:	Pre-Screening	Post-Screening
Learning and Attention	22	16
Auditory Processing	18	14
Speech and Language	13	11
Sensory Motor	12	10
Social Behavioral	19	16

** Copies of the Pre-screening and 3-month Post-screening reports are included with this report*

PART 4: FINAL REVIEW DISCUSSION AND SUMMARY

Nicholas has demonstrated an excellent response following 3 months of using The Listening Program: ACHIEVE with Waves Multi-Sensory Bone Conduction Headphones. Extensive discussions and observations, review of monitoring call notes and the Listening Screening Tool/Evaluations reveal developmental gains in multiple areas after The Listening Program. Improvements have been observed in all five areas. Learning and Attention,

Auditory Processing, Speech and Language, Sensory Motor, and Social Behavioral.

Of these five areas, Learning and Attention saw the greatest positive change with a 6-point decrease, followed by Auditory Processing with a 4-point decrease. Within 3 months, two of the scores are now within normal range.

Please see the following additional attachments to this report:
Listening Screening Tool [pre-evaluation]
Listening Screening Tool [post-evaluation]

Graph – Demonstrating beneficial changes
TLP Listening Checklist – Response Report

LISTENING SCREENING REPORT: TLP PRE-SCREENING

AREA OF PERFORMANCE	SCORE	ZONES
Learning and Attention	22	2 3
Auditory Processing	18	1 2 3
Speech and Language	13	2 3
Sensory Motor	12	1 3
Social Behavioral	19	1 2 3

QUESTION	SCORE	AREA OF PERFORMANCE / ZONES
1. Difficulty paying attention	4	LA 2 3
2. Poor short-term memory	3	LA 2 3
3. Poor reading comprehension	4	LA 2 3
4. Difficulties spelling	2	LA 2 3
5. Low academic/job performance	5	LA 2 3
6. Difficulty starting and/or completing projects	4	LA 2 3
7. Easily distracted in presence of background noise	4	AP 1 2 3
8. Is oversensitive to certain sounds	3	AP 1 2 3
9. Misunderstands directions or instructions	3	AP 2 3
10. Confuses similar sounding words	1	AP 2 3
11. Difficulty understanding jokes/puns	4	AP 2 3
12. Frequently asks "huh" or "what"	3	AP 2 3
13. Difficulty discrimination sounds	1	SL 2 3
14. Flat and monotonous voice quality	3	SL 2 3
15. Speech lacks fluency and rhythm	2	SL 2 3
16. Difficulty sounding out words	1	SL 2 3
17. Mispronounces words	1	SL 2 3
18. Difficulty summarizing a story/expressing thoughts	5	SL 2 3
19. Hyperactivity	3	SM 1 3
20. Has poor posture, including slouching or slumping	1	SM 1 3
21. Has coordination problems	1	SM 1
22. Difficulty with organization and planning	4	SM 1 2 3
23. Is overwhelmed with sensory information	2	SM 1
24. Confusion of right and left and/or location and direction	1	SM 1
25. Lack of tactfulness	4	SB 2 3
26. Poor social skills	5	SB 2 3
27. Feels overburdened with everyday tasks	1	SB 1 2 3
28. Low stress/frustration tolerance	3	SB 1 2 3
29. Difficulty reading non-verbal communication	4	SB 2 3
30. Poor self-image or low self-confidence	2	SB 1 2 3

LISTENING SCREENING REPORT: POST-SCREENING

AREA OF PERFORMANCE	SCORE	ZONES
Learning and Attention	16	2 3
Auditory Processing	14	1 2 3
Speech and Language	11	2 3
Sensory Motor	10	1 3
Social Behavioral	16	1 2 3

QUESTION	SCORE	AREA OF PERFORMANCE / ZONES
1. Difficulty paying attention	3	LA 2 3
2. Poor short-term memory	2	LA 2 3
3. Poor reading comprehension	4	LA 2 3
4. Difficulties spelling	1	LA 2 3
5. Low academic/job performance	3	LA 2 3
6. Difficulty starting and/or completing projects	3	LA 2 3
7. Easily distracted in presence of background noise	3	AP 1 2 3
8. Is oversensitive to certain sounds	2	AP 1 2 3
9. Misunderstands directions or instructions	2	AP 2 3
10. Confuses similar sounding words	1	AP 2 3
11. Difficulty understanding jokes/puns	3	AP 2 3
12. Frequently asks "huh" or "what"	3	AP 2 3
13. Difficulty discrimination sounds	1	SL 2 3
14. Flat and monotonous voice quality	2	SL 2 3
15. Speech lacks fluency and rhythm	2	SL 2 3
16. Difficulty sounding out words	1	SL 2 3
17. Mispronounces words	1	SL 2 3
18. Difficulty summarizing a story/expressing thoughts	4	SL 2 3
19. Hyperactivity	2	SM 1 3
20. Has poor posture, including slouching or slumping	1	SM 1 3
21. Has coordination problems	1	SM 1
22. Difficulty with organization and planning	4	SM 1 2 3
23. Is overwhelmed with sensory information	1	SM 1
24. Confusion of right and left and/or location and direction	1	SM 1
25. Lack of tactfulness	4	SB 2 3
26. Poor social skills	4	SB 2 3
27. Feels overburdened with everyday tasks	1	SB 1 2 3
28. Low stress/frustration tolerance	2	SB 1 2 3
29. Difficulty reading non-verbal communication	3	SB 2 3
30. Poor self-image or low self-confidence	2	SB 1 2 3

THE LISTENING PROGRAM PERFORMANCE ASSESSMENT

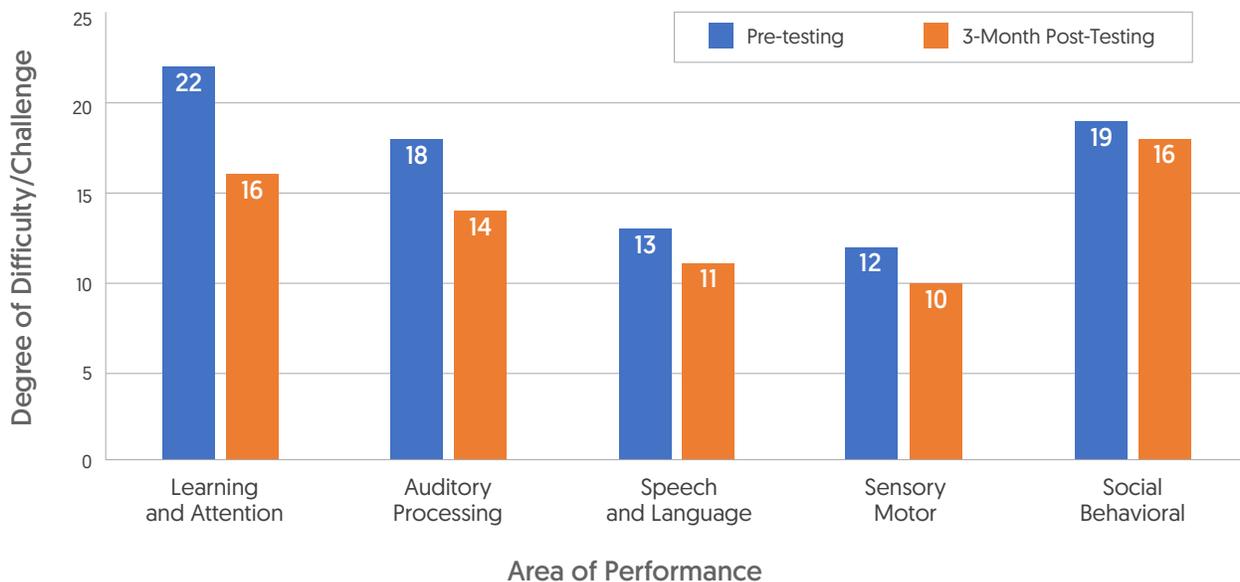
SUMMARY OF BAR GRAPH: Pre and Post Testing was completed prior to starting The Listening Program and again after 3 months of listening therapy.

Higher numbers show higher degrees of difficulty/challenge. Lower numbers show improvements in given areas.

The bar chart below demonstrates benefits seen in all areas of development assessed with the Listening Screening Tool.

This chart is intended to accompany the Pre and Post Listening Screening Tool Reports.

LISTENING SCREENING TOOL COMPARISON PRE-TESTING AND POST-TESTING



** Higher levels show more difficulty/Lower levels show improvement*



LISTENING CHECKLIST: 3-MONTH RESPONSE REPORT

RECEPTIVE AND EXPRESSIVE LISTENING AND LANGUAGE

Better at comprehending written language. Example: he is looking for more books and magazines to read.

More. Example: per aide at school he is more vocal and more involved. Joining conversations more. Using bigger words in play "Actually, I'll be the director."

Better at expressing thoughts and feelings. For example, per aide: said "I'm a big kid now. I'm in the 7th grade now."

Expanded conversations. Example: talking more about friends.

Better fluency. Assembling sentences better.

Better at reading aloud.

BEHAVIORAL AND SOCIAL ADJUSTMENT

Less impulsive. Examples: Mom noticed this when they were at the carnival and the pool.

Less self-stimulation. Example: not doing as much running around.

Less rigidity and improved temperament. Better frustration tolerance. Example: not having tantrums with change.

Tantrums less often.

Reduced avoidance behavior. Example: rather than behaviors, now he just says, "Not again."

Improved interaction with peers.

More engaged.

More independent. Example: saying "I can do it."

Improved awareness of time. Example: says "You're picking me up at..."

ATTENTION AND FOCUS

Improved attention and less frequently distracted.

Better at following directions and staying on task.

Will respond when called most of the time now, without having to be called a second time.

OTHER

Better at math concepts and math problem-solving.

Better with organization. Example: can collect the items he needs to do something on his own.

Was able to sleep better over the summer than he had in the past.