

Safe and Sound Protocol

<https://integratedlistening.com/ssp-safe-sound-protocol/>

Developed by [Dr. Stephen Porges](#), the Safe and Sound Protocol (SSP) is a 5 hour auditory intervention designed to reduce stress and auditory sensitivity while enhancing social engagement and resilience. Based on Dr. Porges' Polyvagal Theory, by calming the physiological and emotional state, further therapy is enhanced or even accelerated.

The SSP is a research-based therapy showing significant results in the following areas:

- Social and emotional difficulties
- Auditory sensitivities
- Anxiety and trauma related challenges
- Inattention
- Stressors that impact social engagement

This non-invasive intervention uses prosodic vocal music that has been processed specifically to retune the nervous system (regulating state) to introduce a sense of safety and the ability to socially engage. This allows the client to better interpret not only human speech, but, importantly, the emotional meaning of language. Once interpersonal interactions improve, spontaneous social behaviors and an enhanced ability to learn, self-regulate and engage are often seen.

One's autonomic or physiological state is a factor affecting the ability to listen, to extract information, and to be social. Neuroception is a term used to describe the assessment of safety from cues in the environment and our viscera (bodily organs) that occurs outside of our conscious awareness. Our behaviors are affected by our physiological state. Change in the physiological state allows for different adaptive behaviors to emerge some of which are used to protect us and keep us safe (fight or flight) and others for social engagement.

The music is filtered to train the middle ear muscles to focus in on the frequency envelope of human speech. Once human speech is properly perceived, the portal to social engagement has been opened. You will find you are (or your child is) better able to interpret not only the meaning, but also the intent in conversations. And the sense of safety that is achieved by better understanding the fluctuations in human voice calms your (or your child's) physiological state. Once your system has been primed and your state is calm, further therapy is enhanced and behavioral regulation is improved.

Intervention

The SSP is recommended to be done in 30 minutes to one-hour increments of listening for five to ten consecutive days. The schedule of implementation is dependent on the client's history, sensitivity, emotional reactivity, behavioral regulation and how well they tolerate the initial session. In some cases, it can be beneficial to slow down the intervention to shorter sessions over a longer period of days.

- Listening should be done in a quiet environment with a supportive person present to provide encouragement and cues of safety, thumbs up, smiles, etc.
- The support person is also there to monitor any reactions to the listening or to provide support if a break is needed.
- While listening they can engage in quiet activities, puzzles, games, art activities, legos. Screens or reading are not recommended as this can take too much cognitive focus and may take away from them "listening" to the music.
- They can have quiet snacks (nothing crunchy) and should refrain from talking, singing, being physically active or sleeping.
- During the days of listening they should avoid using ear buds or headphones and should avoid loud noises such as a concert.
- Implementation of the program is individualized, and we will determine the best schedule for you or your child. It is important to continue the sessions consecutively as the program builds a platform and capacity over the days of intervention. For some clients we may recommend a break for a few days as to not overwhelm the system.
- If there is an illness or other interruption in the implementation it may be necessary to repeat sessions from the beginning to gain maximum benefit.
- The SSP is a passive pathway therapy, and we would recommend a pause in regular therapy sessions while the SSP is being administered and to suspend any other auditory therapies being used.

Post SSP

- The most important aspect to the effectiveness is the environments to which the client returns.
- It is important that the client is supported following the SSP with positive regard, cues of safety and understanding as the power of the intervention can cause some dysregulation as the nervous system settles following the intervention.

- The client may begin to seek more engagement and connection which will need to be responded to in a loving, and positive way to continue the progression that occurs and maintain the activation of the social engagement system.
- While some changes maybe observed as soon as the week of the intervention, it may take 4-6 weeks to recognize all the shifts or changes that may occur.
- The intervention is often provided just once or can be repeated after 3-6 months. SSP is generally repeated if:
 - improvement was observed and the intention is that a repeat will provide additional gains shifts or change in state regulation
 - improvement was observed but it seems some of the gains have faded
 - no shifts or changes were observed and so the system may require additional work

SSP -An acoustic vagal nerve stimulator- More about the vagus nerve

The Vagus (the 10th Cranial Nerve) comes from the brain and is known as the wandering nerve because it goes all over the body connecting the facial, eye muscles, heart, lungs and our lower organs like intestines, stomach, bladder. The Vagus Nerve is a highway that helps the body communicate with the brain and the brain communicate with the body. The Vagus Nerve regulates our physiological states. Dr. Porges developed the Polyvagal Theory which identifies the 3 general states that all humans experience: Social Engagement/Relaxed/Safe/Comfortable, Fight or Flight, and Shut Down.

The Vagus nerve keeps heart rate low by means of a vagal "brake"; this inhibits sympathetic (fight or flight) responses. When our body perceives signals of threat, the vagal brake is released, instantaneously speeding heart rate and increasing metabolic output to foster fight or flight behavior. Once in a sympathetic state, we may lose awareness of others and become less able to read social cues and use them to regulate our state. At this point, the muscles of the middle ear will attune the auditory system more toward sounds of threat and danger rather than social communication. When we are in fight or flight it is more difficult to engage socially because our bodies resources are engaged to protect ourselves.

Just like the brain, the Autonomic Nervous System is plastic and can "learn" to stay more activated than necessary. Being in a state of chronic defensiveness, as in some psychiatric and behavioral disorders, compromises the social engagement system and the related neural networks "learn" to engage less. The SSP has been shown in peer-reviewed research to significantly increase vagal regulation of the heart - a vital component of ANS regulation. This has the effect of better control of state.

We often hear parents say that their child will do certain things "when they're comfortable" or "at home", but not in a setting outside their comfort zone. These parents are referring to state. We

ourselves may have trouble thinking on the spot during a presentation if we feel nervous about public speaking. Again, this reflects our state.

The purpose of the SSP is to initiate and accelerate a physiological and emotional state conducive to successful treatment, and eventually to successful interaction with others. It is not meant to be used in isolation. Rather, it is intended to prepare the client's system for other therapies to make lasting improvement in sensory processing, auditory sensitivity, social communication, and state regulation.

The SSP is best used together with other therapies.

Changes from the SSP can be cumulative and self-perpetuating. They will be enhanced by the support the client receives and the learning opportunities they are presented with. While you may notice some positive changes while using the SSP, it is not meant to be used in isolation.

Since a calm autonomic/physiological state is necessary for health, growth, and restoration, achieving it becomes the foundation of an effective therapy. The SSP is a passive pathway therapy helping to change the client's physiologic state regulation by toning the vagus nerve. The changes you see relate to neuroplasticity and opens up the system to engage in subsequent active pathway therapy modalities which include psychotherapy, speech therapy, physical therapy, occupational therapy, cognitive exercises, dance therapy, listening therapy and many others.

Colleen Hanson, LCSW is providing the SSP to clients at CORE Connection Counseling and has had over 50 clients complete the intervention since May 2019 with positive results. For more information on the SSP please contact Colleen by email at Colleen@coreconnectioncc.com or by phone, 630-524-4000

Or visit <https://integratedlistening.com/ssp-safe-sound-protocol/>

Or for more information google: Stephen Porges, Polyvagal Theory, Safe and Sound Protocol

There is also a parent forum on Facebook for more information: Safe and Sound Protocol (SSP) - Parent Info. Forum

Or view video interviews with Dr. Porges on their Youtube channel

<https://www.youtube.com/user/IntegratedListening>

SSP Research

<https://clinicaltrials.gov/ct2/show/NCT02680730>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3610863/pdf/nihms425959.pdf>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4117928/pdf/fped-02-00080.pdf>

<https://trialbulletin.com/lib/entry/ct-02398422>

<https://www.smh.com.au/opinion/middle-ear-may-hold-answers-for-autism-treatment-2014090410c83a.html>

<https://clinicaltrials.gov/ct2/show/NCT02064257>

Podcast Interviews

<https://www.youtube.com/watch?v=yVVaTRbegJs>

<https://www.youtube.com/watch?v=k4NnJ6eJPjg>

<https://www.youtube.com/watch?v=na2blnkRhAY>

<https://www.youtube.com/watch?v=ivLEAlhBHPM>

