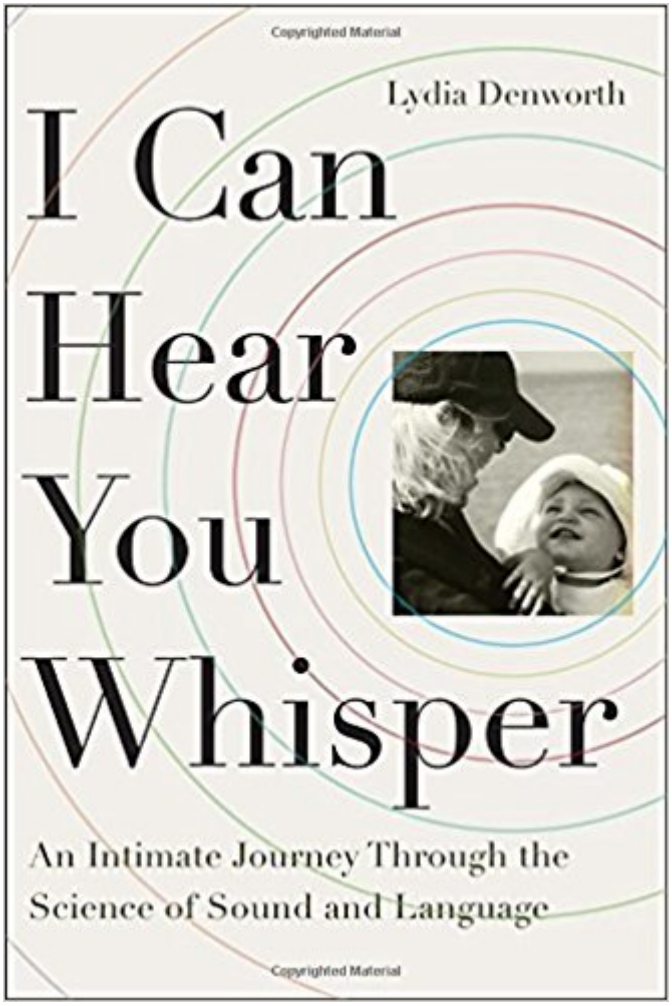
Ebook Directory
the best source of ebook

The book was found

I Can Hear You Whisper: An Intimate Journey Through The Science Of Sound And Language



PDF
Adobe
DOWNLOAD EBOOK

Synopsis

Ã¢â ¬Å“A skilled science translator, Denworth makes decibels, teslas and brain plasticity understandable to all.Ã¢â ¬Â•Ã¢â ¬â •Washington PostÃ Â Lydia DenworthÃ¢â ¬â„¢s third son, Alex, was nearly two when he was identified with significant hearing loss that was likely to get worse. Denworth knew the importance of enrichment to the developing brain but had never contemplated the opposite: deprivation. How would a childÃ¢â ¬â„¢s brain grow outside the world of sound? How would he communicate? Would he learn to read and write?An acclaimed science journalist as well as a mother, Denworth made it her mission to find out, interviewing experts on language development, inventors of groundbreaking technology, Deaf leaders, and neuroscientists at the frontiers of brain plasticity research. I Can Hear You Whisper chronicles DenworthÃ¢â ¬â„¢s search for answersÃ¢â ¬â •and her new understanding of Deaf culture and the exquisite relationship between sound, language, and learning.

Book Information

Paperback: 400 pages

Publisher: Plume; 1 edition (February 24, 2015)

Language: English

ISBN-10: 0142181862

ISBN-13: 978-0142181867

Product Dimensions: 5.3 x 0.8 x 8 inches

Shipping Weight: 10.1 ounces (View shipping rates and policies)

Average Customer Review: 4.9 out of 5 stars 30 customer reviews

Best Sellers Rank: #888,170 in Books (See Top 100 in Books) #103 inÃ Â Books > Health, Fitness & Dieting > Diseases & Physical Ailments > Hearing Problems #811 inÃ Â Books > Medical Books > Allied Health Professions > Audiology & Speech Pathology #1841 inÃ Â Books > Parenting & Relationships > Special Needs

Customer Reviews

In this science-laced story about her youngest son, Alex, veteran journalist Denworth eloquently explains how hearing works and fails. After she and her doctors figure out that Alex is silent because he doesnÃ¢â ¬â„¢t know what people are saying, he gets a cochlear implant at age two, which turns out to be a miraculous device. Denworth weaves her sonÃ¢â ¬â„¢s story throughout her easy-to-understand primer on how people hear, listen, speak, and read. Reporter that she isÃ¢â ¬â •having worked at Newsweek and People and published stories in the New York

TimesÃ¢â ¬â •Denworth interviews many top experts and cites the work of researchers past and present. Back in 1929, for example, a scientist named Harvey Fletcher wrote, The processes of speaking and hearing are very intimately related, so much so that I have often said that we speak with our ears. We can listen without speaking but cannot speak without listening. Think about it. An excellent book for anyone with deafness in the family or with a desire to better understand how people hear, why hearing loss occurs, and how it is treated. --Karen Springen --This text refers to the Hardcover edition.

"In this moving and informative book, formerÃ Â NewsweekÃ Â reporter Denworth recounts her emotional and intellectual quest to help her deaf infant son hear. [...] This is a book that parents, particularly of deaf children, may find indispensable."Ã¢â ¬â •Publishers Weekly "All parents will recognize the moments of both terror and pride that mark the journey; parents of deaf children will garner both information and insights."Ã¢â ¬â •Kirkus Reviews "Eloquently explains how hearing works...An excellent book for anyone with deafness in the family or with a desire to better understand how people hear, why hearing loss occurs, and how it is treated."Ã¢â ¬â •Booklist Ã¢â ¬Å“A beautiful book that combines superb scientific reporting with powerful and deeply enjoyable storytelling. Her quest to acquire every shred of knowledge she can to help her deaf son is an odyssey that all parents who worry about their children (i.e. all parents) can intimately relate to. Her discoveries about the workings of language and the intricacies of brain development will change the way you think about hearing, speaking, and selfhood. And her fascinating exploration of the politics of deaf identity is sure to spark a larger conversation about how we talk about, think about, and treat children with special needs in our time.Ã¢â ¬Â•Ã¢â ¬â •Judith Warner, author of Perfect Madness: Motherhood in the Age of Anxiety Ã¢â ¬Å“Read this if you have ears or ever interact with humans. What a moving and brilliant tour of the scientific, emotional and political landscape of hearing impairment. As a reader, I'm grateful to Lydia Denworth. As a writer, I'm jealous.Ã¢â ¬Â•Ã¢â ¬â •David Shenk, author of The Genius in All of Us and The Forgetting Ã¢â ¬Å“A lucid, engaging, and thoughtful description of the science of hearing. If you are interested in hearing, speech, and language Ã¢â ¬â •as a parent, educator, clinician, or scientistÃ¢â ¬â •this book fills an important gap and is a terrific read. Careful about the science and sensitive to the psychological complexities, Denworth provides a masterful account of the path from ear to the brain, from sounds to words.Ã¢â ¬Â•Ã¢â ¬â •David Poeppel, Professor of Psychology and Neural Science, New York University Ã¢â ¬Å“Lydia DenworthÃ¢â ¬â„¢s beautiful personal account and thorough investigation connect the dots between her sonÃ¢â ¬â„¢s hearing loss, the essential

import of spoken language on the developing brain, and what parents, doctors, and teachers can gain from a deeper understanding of how the mind acquires language.Ã¢â ¬Â•Ã¢â ¬â •Dana Suskind, MD, Professor of Surgery at the University of Chicago and Director of The Thirty Million Words Initiative Ã¢â ¬Å“An affecting and searching personal story and a fascinating job of science reporting, specifically the science of audiologyÃ¢â ¬â •how we hear, why some of us don't, and how an amazing, but controversial, technology was invented. Lydia DenworthÃ¢â ¬â„¢s son Alex, the beautiful boy at the center of the personal story, is lucky to have a mother like her. The rest of us are lucky to have such a perceptive, lucid, and touching book.Ã¢â ¬Â•Ã¢â ¬â •Richard Bernstein, author of A Girl Named Faithful Plum

The day after Lydia DenworthÃƒÂ¢Ã â ¬Ã â„¢s son Alex was born, he failed a routine hearing test given to all newborns. Probably just mucus in the ears, the nurse explained. It turned out not to be. Thanks to a congenital malformation, Alex had too little hearing in both ears to hear language.This was a crisis not just of the ears but of the brain itself, as Denworth explains in her book. A brain that has not had full exposure to language by age three is unlikely to learn language fluently and naturally, with lifelong consequences for the child.Denworth threw herself into researching how hearing, language, and cochlear implants work in order to help her son. The result is this book.As a science writer Denworth has written up what she learned, and the result is so comprehensive, wide-ranging, and well-written that it is essential reading for any parent of a child with hearing loss. Denworth has gone further into the scientific literature than any other writer I know of on this subject, and she interviewed a WhoÃƒÂ¢Ã â ¬Ã â„¢s Who of people involved in developing cochlear implants. The result is a fascinating and magisterial book.The narrative line of the book begins with her early suspicions that something was wrong. At age two, AlexÃƒÂ¢Ã â ¬Ã â„¢s scores for receptive and expressive language were in the eighth and sixth percentiles respectively. They tried hearing aids, but ultimately opted for a cochlear implant.The implant worked. Denworth writes,Now, after one year of using the cochlear implant, the change was almost unbelievable. His expressive language had risen to the sixty -third percentile and his receptive language to the eigthty-eighth percentile. He was actually above age level on some measures. And that was compared to hearing children. I stared at the Post-it note and then at the therapist. ÃƒÂ¢Ã â ¬Ã Å“Oh my god!ÃƒÂ¢Ã â ¬Ã Â• was all I could say. I picked Alex up and hugged him tight. ÃƒÂ¢Ã â ¬Ã Å“You did it,ÃƒÂ¢Ã â ¬Ã Â• I said. From the evaluation, we went straight to Clarke so Alex could go back to school. The directorÃƒÂ¢Ã â ¬Ã â„¢s office was next door to his classroom. I knocked on the door frame and Teresa Boemio looked up from her desk.

ÃƒÂ¢Ã â ¬Ã Å“How did it go?ÃƒÂ¢Ã â ¬Ã Â• she asked as soon as she saw me. She knew where weÃƒÂ¢Ã â ¬Ã â„¢d been.ÃƒÂ¢Ã â ¬Ã Å“Pretty well.ÃƒÂ¢Ã â ¬Ã Â• I handed over the Post-it note. ÃƒÂ¢Ã â ¬Ã Å“Wow!ÃƒÂ¢Ã â ¬Ã Â• she cried.

ÃƒÂ¢Ã â ¬Ã Å“WOW!ÃƒÂ¢Ã â ¬Ã Â•To explain the remarkable success of cochlear implants Denworth offers the most detailed history of them published in the popular press to date. There have been a number of excellent academic papers on the history of cochlear implants, including Mara MillsÃƒÂ¢Ã â ¬Ã â„¢s ÃƒÂ¢Ã â ¬Ã Å“Do Signals Have Politics? Inscribing Abilities in Cochlear Implants,ÃƒÂ¢Ã â ¬Ã Â• but no really good book-length treatment of it. Denworth comes close to giving us that, with fascinating and moving interviews with pioneers such as Graeme Clark, the founder of Cochlear Corporation, and Michael Merzenich, who did pioneering work at UCSF in the physiology of hearing and in brain plasticity. She also gives welcome credit to patients such as Rod Saunders and Charles Graser, who had test devices surgically implanted into their heads at great personal risk. She captures the tension and drama of those early experiments. For example, in 1978, Clark finally tried testing Saunders in a relatively realistic way:Until then, they had done only closed setsÃƒÂ¢Ã â ¬Ã â •reciting words that were part of familiar categories, such as types of fruit. Speech in real life, of course, isnÃƒÂ¢Ã â ¬Ã â„¢t so predictable; open-set testing throws wide the possibilities. Angela Marshall was hesitant, fearing it wouldnÃƒÂ¢Ã â ¬Ã â„¢t work. ÃƒÂ¢Ã â ¬Ã Å“I said, if we fail, we fail,ÃƒÂ¢Ã â ¬Ã Â• says Clark. As the group stood watching with bated breath, Marshall presented one unrelated word at a time.ÃƒÂ¢Ã â ¬Ã Å“Ship,ÃƒÂ¢Ã â ¬Ã Â• she said.ÃƒÂ¢Ã â ¬Ã Å“Chat,ÃƒÂ¢Ã â ¬Ã Â• replied Saunders. Completely wrong.ÃƒÂ¢Ã â ¬Ã Å“Goat.ÃƒÂ¢Ã â ¬Ã Â•ÃƒÂ¢Ã â ¬Ã Å“Boat,ÃƒÂ¢Ã â ¬Ã Â• said Saunders. Closer.ÃƒÂ¢Ã â ¬Ã Å“Rich.ÃƒÂ¢Ã â ¬Ã Â•ÃƒÂ¢Ã â ¬Ã Å“Rich,ÃƒÂ¢Ã â ¬Ã Â• said Saunders. He had gotten one right!By the end of the tests, Saunders had gotten 10 to 20 percent of the open-set words correct. ThatÃƒÂ¢Ã â ¬Ã â„¢s not the least bit impressive by todayÃƒÂ¢Ã â ¬Ã â„¢s standards , but it was hugely significant at the time for a man who was profoundly deaf. Clark was overcome . ÃƒÂ¢Ã â ¬Ã Å“I knew that had really shown that this was effective,ÃƒÂ¢Ã â ¬Ã Â• he says. He pointed down the hallway of the hospital where we sat. ÃƒÂ¢Ã â ¬Ã Å“I was so moved, I simply went into the lab there and burst into tears of joy.ÃƒÂ¢Ã â ¬Ã Â•The invention of these devices is a hugely important and dramatic event that deserves a full-length book treatment. Denworth has not given us this, but she has given us important parts of one.The book also gives us a sweeping overview of advances in the science of hearing and cognition. She discusses, for example, the work of neuroscientist Helen Neville, who

spent decades studying how deafness alters the way the brain processes sound and language. She discusses research using advanced brain-scanning equipment, such as that done by Anu Sharma and David Poeppel, who are trying to work out what exactly happens in the brain on a neural level after sound hits the eardrum. The bottom line, Denworth says, is that while scientists have learned a great deal about the detailed physiology of the brain, they are still struggling to explain how the brain actually understands language. She writes, ÃƒÂ¢Ã â ¬Ã Å“I heard a radio interviewer ask esteemed neuroscientist Eric Kandel of Columbia University what mysteries remain about the brain. ÃƒÂ¢Ã â ¬Ã ËœAlmost everything,ÃƒÂ¢Ã â ¬Ã â„¢ answered Kandel.ÃƒÂ¢Ã â ¬Ã Â•ÃƒÂ¢Ã â ¬Ã Å“Almost everythingÃƒÂ¢Ã â ¬Ã Â• accounts for why, despite the voluminous research that Denworth has assembled and synthesized, there is still remarkably little concrete advice to be given for teaching deaf children how to hear. General principles are well known: the sooner a kid has access to sound, the better; exposure to a language ÃƒÂ¢Ã â ¬Ã â œ any language ÃƒÂ¢Ã â ¬Ã â œ early on is critical; the more language interaction a kid has with parents and peers, the better; in teaching reading, attention to the phonetic sound of language is crucial; and, unfortunately, it helps to be wealthy and privileged, because in such households language is used more often and more richly. And so on.But concrete advice is sparse. There still is no How-To manual that makes raising a deaf child as straightforward as a craft project in a garage. Not that such a thing will ever be possible, because every deaf child is deaf in a different way, requiring a unique and specialized approach. And that is a job that will inevitably fall to the parent. (Parents and CI users should also read Leigh and ChristiansenÃƒÂ¢Ã â ¬Ã â„¢s excellent book Cochlear Implants in Children: Ethics and Choices. While now dated with respect to the technology, it still offers a great deal of excellent material on language acquisition and many other matters related to CIs.)Still, some things have been learned. Denworth questions the common assertion that learning ASL diminishes a deaf childÃƒÂ¢Ã â ¬Ã â„¢s ability to master spoken language. She discusses the work of Marc Marschark, who has written, ÃƒÂ¢Ã â ¬Ã Å“There has never been any real evidence that learning to sign interferes with deaf childrenÃƒÂ¢Ã â ¬Ã â„¢s learning to speak.ÃƒÂ¢Ã â ¬Ã Â• Indeed, Denworth writes, the exact opposite may be true: the process of learning two languages simultaneously may in fact enrich the developing brain. Accordingly, she brings in an ASL tutor in an effort to expose Alex to sign language. This fails, largely because Alex doesnÃƒÂ¢Ã â ¬Ã â„¢t get very interested. But also, she points out, just exposing a child to ASL with periodic tutoring simply isnÃƒÂ¢Ã â ¬Ã â„¢t enough to teach them the language. A second language has to be learned fully and immersively, and maintained over time, to yield cognitive benefits. And that is hard to do with ASL because it is very much a minority

language.Denworth offers a fascinating discussion in recent research in the importance of executive function in learning language. Executive function refers the brainÃƒÂ¢Ã â ¬Ã â„¢s ability to integrate various streams of information ÃƒÂ¢Ã â ¬Ã â • basically, itÃƒÂ¢Ã â ¬Ã â„¢s the ability to synthesize them and work with the results in a controlled way. ÃƒÂ¢Ã â ¬Ã Å“The fact that many deaf children show delays in age-appropriate language means they may also be delayed in executive function,ÃƒÂ¢Ã â ¬Ã Â• Denworth writes. ÃƒÂ¢Ã â ¬Ã Å“Too much structure or overprotectivenessÃƒÂ¢Ã â ¬Ã â • something parents of deaf kids are prone toÃƒÂ¢Ã â ¬Ã â •compounds the problem by further stifling the development of executive function skills.ÃƒÂ¢Ã â ¬Ã Â• I can relate to this personally, because my parents, while loving, were not overprotective: every summer they tossed me into the clutches of a sleepaway camp, where I had to learn to fend for myself. I hated a good deal of it at the time, but it certainly taught me, ah, executive function.She also writes of the cognitive benefits of music and poetry. ÃƒÂ¢Ã â ¬Ã Å“Old-fashioned childrenÃƒÂ¢Ã â ¬Ã â„¢s rhymes such as Mother Goose include alliteration, assonance, rhyme, and repetitionÃƒÂ¢Ã â ¬Ã Â¦kindergartners who got more musical training demonstrated greater phonological awareness than those who got less,ÃƒÂ¢Ã â ¬Ã Â• she writes. I concur with this too. My parents also tossed me into Hebrew school, which bored me most of the time, but the frequent singing trained my ear for the rhythms of language. I played the recorder in the fifth grade, no doubt producing a howl more like a dogÃƒÂ¢Ã â ¬Ã â„¢s than the PhilharmonicÃƒÂ¢Ã â ¬Ã â„¢s, but it was exactly what my brain needed at the time. My fascination with poetry led me to memorize many poems ÃƒÂ¢Ã â ¬Ã â œ I can still recite Yeats, Stevens, and Tolkien by heart ÃƒÂ¢Ã â ¬Ã â œ and that shaped my sense of the rhythms and prosodies of the spoken word.These are all helpful things to know and do, but basically, the sum total of scientific advice still comes down to this: Deaf children need full exposure to a language ÃƒÂ¢Ã â ¬Ã â •any languageÃƒÂ¢Ã â ¬Ã â • as soon as possible. ÃƒÂ¢Ã â ¬Ã Å“Early access to languageÃƒÂ¢Ã â ¬Ã â • any languageÃƒÂ¢Ã â ¬Ã â • and parent-child interaction matter more than anything else,ÃƒÂ¢Ã â ¬Ã Â• she writes.Denworth also discusses the important new issue of bilateral implantation. IÃƒÂ¢Ã â ¬Ã â„¢ve been bilateral since 2007, but a good deal of the science Denworth covered was new to me. ÃƒÂ¢Ã â ¬Ã Å“The average hearing person can find the source of a sound to within seven degrees of error,ÃƒÂ¢Ã â ¬Ã Â•Denworth writes. ÃƒÂ¢Ã â ¬Ã Å“Bilateral implant patients can do it to about twenty degrees.ÃƒÂ¢Ã â ¬Ã Â• I donÃƒÂ¢Ã â ¬Ã â„¢t think I could do it that well, because my ears are so different, as I frequently discuss in my blog entries (such as here). Unfortunately, Denworth overlooks Arlene RomoffÃƒÂ¢Ã â ¬Ã â„¢s ÃƒÂ¢Ã â ¬Ã Å“Listening Closely: A Journey to Bilateral

Hearing,ÃƒÂ¢Ã â ¬Ã Â• which would have enriched her discussion. This is surprising, given how comprehensive her research has been.Cochlear implants are not universally successful; Denworth discusses the wide variation in outcomes. Some children donÃƒÂ¢Ã â ¬Ã â„¢t do that well with cochlear implants, and reasons why are complex and often difficult to untangle. But they are usually successful, and that success rate is increasing. In a moving paragraph, Denworth writes,But hearing aids alone had not been enough for Alex. The transformation came with the cochlear implant. Like the difference between candles and fluorescents, AlexÃƒÂ¢Ã â ¬Ã â„¢s residual hearing registered the world dimly and imprecisely except within a few small circles of light, while his cochlear implant lit everything up brightly if unnaturally. Once he had seen everything clearly, he could make better use of the warmth and ambience he got from his natural hearing, and he knew what lay in the shadows. Language followed.ÃƒÂ¢Ã â ¬Ã Å“I Can Hear You WhisperÃƒÂ¢Ã â ¬Ã Â• has many strengths, but perhaps the greatest is how Denworth has synthesized an enormous amount of material and crafted a compelling and clear book out of it. IÃƒÂ¢Ã â ¬Ã â„¢ve spent a great deal of time sifting through scientific papers myself, and I can attest to how hard it is to figure out which ones are truly important and to write about them in a clear and compelling way. This book is a compelling achievement and will be essential reading for parents, cochlear implant users, and anyone interested in the physiology of hearing for a long time to come.

It would be a mistake to view this book as just some sort of guide for parents of children with hearing loss, for at its heart is nothing less than a wonderful story of what it means to be a parent. Indeed, while the book provides a fascinating and well-researched examination of the science, sociology and politics of hearing loss, its animating feature is the authorÃƒÂ¢Ã â ¬Ã â„¢s voice. It is the voice of a loving mother with whom any parent will easily identify and cheer on.Highly recommended.

I am a personality theorist. Deafness is one of my interests. It sickens me to see professionals treat people who are deaf as broken. This leads many otherwise well-intentioned helpers to pressure these folks to imitate normal, a way of living that guarantees deaf people will live painful lives.This same thing happens to people with Asperger's. No coincidence the personalities of people in both these groups have so many similarities.What's the alternative? To see deafness as a minority personality. And to see the differences deaf people have from the rest of us as a richness to be learned from and a courage to be admired. In this way, this book is amazing. All of it, the

wonderfully clear, scientific background and the heartfelt stories, reveal much of this richness and many moments of courage.Highly recommended.

I Can Hear You Whisper is a thoroughly researched, beautifully written and very engaging account of the physiology of hearing, brain plasticity, deaf culture and a motherÃƒÂ¢Ã â ¬Ã â„¢s pursuit to both understand and help her son, Alex. Denworth provides a wonderful balance between the science and the complex history of deafness, on the one hand, and her own familyÃƒÂ¢Ã â ¬Ã â„¢s struggle to grasp what it means to deal with a childÃƒÂ¢Ã â ¬Ã â„¢s severe hearing impairments, on the other. Denworth has assembled a fascinating and detailed account of the development of the Cochlear implant both from a scientific standpoint as well as the controversy it caused within the deaf community. Indeed, one of the many unexpected treasures in this book is a history of deaf culture and what it means to identify as deaf in a hearing world. Through superb storytelling and an excellent grasp of the underlying science, the book explores the many aspects of brain development and language. One of her many gifts as an author is to sift through enormous amounts of material (both written research and dozens of interviews) and assemble a clear, understandable and fascinating explanation of the science of language and how hearing affects so many aspects of how we learn. At its heart though this book is a wonderfully inspiring story of a motherÃƒÂ¢Ã â ¬Ã â„¢s love for her son and her quest to help him. And whatÃƒÂ¢Ã â ¬Ã â„¢s a better read than a love story with a happy ending?

An extraordinarily well written and well researched book.I was astonished at how well expressed and organized this book is. In addition the author managed to fold very scientific information in with the emotion and deep feelings that surround having a hearing impaired baby whose life will be determined by parental decisions and family attitudes.Every audiologist, language pathologist and teacher of the deaf should read this carefully and subsequently recommend it to parents of children diagnosed with hearing disorder at any level.I would recommend that all students in fields related to hearing loss, speech and language be required to read it. It also contains excellent information for hearing impaired adults who would.like to gain understanding of the scientically basis of their loss as well as a very new future that is now available to newly diagnosed clients. THIS IS AN AMAZINGLY EXCELLENT COMPREHENSIVE BOOK. THE AUTHOR HAS DONE MANY PEOPLE A GREAT FAVOR IN AN EXCELLENT WAY.

Download to continue reading...

I Can Hear You Whisper: An Intimate Journey Through the Science of Sound and Language Hear

Your Body Whisper: How to Unlock Your Self-Healing Mechanism Whisper: How to Hear the Voice of God Making Waves: Sound : Sound (Everyday Science): Sound (Everyday Science) Polar Bear, Polar Bear What Do You Hear? sound book Sound Innovations for String Orchestra: Sound Development (Intermediate) for Violin: Warm up Exercises for Tone and Technique for Intermediate String Orchestra (Sound Innovations Series for Strings) ABC & 123 Learning Songs: Interactive Children's Sound Book (11 Button Sound) (11 Button Sound Book) The SOS Guide to Live Sound: Optimising Your Band's Live-Performance Audio (Sound On Sound Presents...) The Whisper of Stars: A Siberian Journey Healing at the Speed of Sound: How What We Hear Transforms Our Brains and Our Lives Like Sound Through Water: A Mother's Journey Through Auditory Processing Disorder Shouting Won't Help: Why I--and 50 Million Other Americans--Can't Hear You Can't You Hear Me Callin': The Life of Bill Monroe, Father of Bluegrass Can You Hear It? Can You Hear a Rainbow?: The Story of a Deaf Boy Named Chris (Rehabilitation Institute of Chicago Learning Book) Haunted Prisons: Can You Hear The Screams? True Stories From The Scariest Penitentiaries On Earth (True Horror Stories Book 1) So, Do You Think You Can Dance?: A Journey and Guide Through The Life and Career of a Professional Ballroom Dancer 1001 Albums You Must Hear Before You Die: Revised and Updated Edition More Shibari You Can Use: Passionate Rope Bondage and Intimate Connection Do They Hear You When You Cry

Contact Us

DMCA

Privacy

FAQ & Help