

Study_Num	Study	Year	Journal	Rater A	Rater B	Agree1	Agree2	A+B	Neuro	IF2017	doiWebsite	N_Method	N_Journal	Quasi	note
1	Associations between music education, intelligence, and spelling ability in elementary school	2011	Advances in Cognitive Psychology	1	0	.	.		1	0	1.452 10.2478/v10053-008-0082-4	0	0	1	
2	The Brain of Musicians: A Model for Functional and Structural Adaptation	2001	Annals of the New York Academy of Sciences	0	0	0	0	0	0	1	4.277 10.1111/j.1749-6632.2001.tb05739.x	1	0	1	
3	Music training enhances the rapid plasticity of P3a/P3b event-related brain potentials for unattended and attended target sounds	2012	Attention, Perception, and Psychophysics	1	1	1	1	2	1	1.678 10.3758/s13414-011-0257-9		1	0	1	
4	Cross-sectional study on the relationship between music training and working memory in adults	2016	Australian Journal of Psychology	0	0	0	0	0	0	0	0.932 10.1111/ajpy.12087	0	0	1	
5	Musical ability is associated with enhanced auditory and visual cognitive processing	2015	BMC Neuroscience	0	0	0	0	0	0	1	2.173 10.1186/s12868-015-0200-4	1	1	1	
6	Effect of musical expertise on visuospatial abilities: Evidence from reaction times and mental imagery	2004	Brain and Cognition	1	1	1	1	2	1	2.574 10.1016/S0278-2626(03)00264-1		1	1	1	
7	Musical training during early childhood enhances the neural encoding of speech in noise	2012	Brain and Language	1	1	1	1	2	1	2.851 10.1016/j.bandl.2012.09.001		1	1	1	
8	Musical training shapes neural responses to melodic and prosodic expectation	2016	Brain Research	1	1	1	1	2	1	3.125 10.1016/j.brainres.2016.09.015		1	1	1	
9	Effects of reverberation on brainstem representation of speech in musicians and non-musicians	2010	Brain Research	1	1	1	1	2	1	3.125 10.1016/j.brainres.2010.07.100		1	1	1	
10	Examining the association between music lessons and intelligence	2011	British Journal of Psychology	0	0	0	0	0	0	0	2.507 10.1111/j.2044-8295.2010.02000.x	0	0	0	
11	Musical Training Enhances Information Processing Speed	2011	Bulletin of the Council for Research in Music Education	1	1	1	1	2	0	0.146 www.jstor.org/stable/41162320		0	0	1	
12	Degree of Musical Expertise Modulates Higher Order Brain Functioning	2013	Cerebral Cortex	1	1	1	1	2	1	6.308 10.1093/cercor/bhs206		1	1	1	3 groups
13	Musical Expertise Boosts Implicit Learning of Both Musical and Linguistic Structures	2011	Cerebral Cortex	1	1	1	1	2	1	6.308 10.1093/cercor/bhr022		1	1	1	
14	Neuroanatomical Correlates of Musicianship as Revealed by Cortical Thickness and Voxel-Based Morphometry	2009	Cerebral Cortex	0	0	0	0	0	0	1	6.308 10.1093/cercor/bhn196	1	1	1	
15	Cerebellar Volume of Musicians	2003	Cerebral Cortex	1	0	.	.		1	1	6.308 10.1093/cercor/13.9.943	1	1	1	
16	Tuning the mind: Exploring the connections between musical ability and executive functions	2016	Cognition	0	0	0	0	0	0	0	3.354 10.1016/j.cognition.2016.03.017	0	0	0	
17	Musical Training, Bilingualism, and Executive Function: A Closer Look at Task Switching and Dual-Task Performance	2015	Cognitive Science	0	0	0	0	0	0	0	2.617 10.1111/cogs.12183	0	0	1	
18	Moral development, executive functioning, peak experiences and brain patterns in professional and amateur classical musicians: Interpreted in light of a Unified Theory of Performance	2011	Consciousness and Cognition	1	0	.	.		1	1	2.272 10.1016/j.concog.2011.03.020	1	0	1	3 groups
19	Musical training relates to the development of neural mechanisms of selective auditory attention	2015	Developmental Cognitive Neuroscience	1	0	.	.		0	1	4.815 10.1016/j.dcn.2015.01.001	1	1	1	
20	Biological impact of preschool music classes on processing speech in noise	2013	Developmental Cognitive Neuroscience	1	1	1	1	2	1	4.815 10.1016/j.dcn.2013.06.003		1	1	1	
21	Musician Enhancement for Speech-In-Noise	2009	Ear and Hearing	1	1	1	1	2	0	3.12 10.1097/AUD.0b013e3181b412e9		0	0	1	
22	Musical training and emotion comprehension in childhood	2012	Emotion	0	0	0	0	0	0	0	0.039 10.1037/a0027971	0	0	1	
23	Variations on the theme of musical expertise: cognitive and sensory processing in percussionists, vocalists and non-musicians	2017	European Journal of Neuroscience	0	0	0	0	0	0	1	2.832 10.1111/ejnn.13535	1	1	1	3 groups
24	Informal musical activities are linked to auditory discrimination and attention in 2–3-year-old children: an event-related potential study	2012	European Journal of Neuroscience	1	0	.	.		1	1	2.832 10.1111/ejnn.12049	1	1	0	
25	Enhanced brainstem encoding predicts musicians' perceptual advantages with pitch	2011	European Journal of Neuroscience	0	1	.	.		1	1	2.832 10.1111/j.1460-9568.2010.07527.x	1	1	1	
26	Long-term exposure to music enhances the sensitivity of the auditory system in children	2011	European Journal of Neuroscience	1	1	1	1	2	1	2.832 10.1111/j.1460-9568.2011.07795.x		1	1	1	
27	Musical experience and neural efficiency – effects of training on subcortical processing of vocal expressions of emotion	2009	European Journal of Neuroscience	1	1	1	1	2	1	2.832 10.1111/j.1460-9568.2009.06617.x		1	1	1	
28	Musical experience strengthens the neural representation of sounds important for communication in middle-aged adults	2012	Frontiers in Aging Neuroscience	1	1	1	1	2	1	3.582 10.3389/fnagi.2012.00030		1	1	1	
29	Structural and functional plasticity specific to music training with wind instruments	2015	Frontiers in Human Neuroscience	1	0	.	.		1	1	2.871 10.3389/fnhum.2015.00597	1	1	1	
30	Musical training enhances rapid neural plasticity of N1 and P2 source activation for unattended sounds	2012	Frontiers in Human Neuroscience	1	1	1	1	2	1	2.871 10.3389/fnhum.2012.00043		1	1	1	
31	Effects of music learning and piano practice on cognitive function, mood and quality of life in older adults	2013	Frontiers in Psychology	1	1	1	1	2	0	2.089 10.3389/fpsyg.2013.00810		0	0	1	
32	Musical training, cognition, and personality	2013	Frontiers in Psychology	0	0	0	0	0	0	0	2.089 10.3389/fpsyg.2013.00222	0	0	0	
33	Musical expertise modulates early processing of syntactic violations in language	2013	Frontiers in Psychology	1	1	1	1	2	1	2.089 10.3389/fpsyg.2012.00603		1	0	1	
34	Musical training heightens auditory brainstem function during sensitive periods in development	2013	Frontiers in Psychology	1	1	1	1	2	1	2.089 10.3389/fpsyg.2013.00622		1	0	1	
35	Can you hear me now? Musical training shapes functional brain networks for selective auditory attention and hearing speech in noise	2011	Frontiers in Psychology	1	1	1	1	2	1	2.089 10.3389/fpsyg.2011.00113		1	0	1	
36	Musical experience shapes top-down auditory mechanisms: Evidence from masking and auditory attention performance	2010	Hearing Research	1	1	1	1	2	0	2.824 10.1016/j.heares.2009.12.021		0	0	1	
37	Does musical training improve school performance?	2009	Instructional Science	1	0	.	.		0	1	0.122 10.1007/s11251-008-9052-y	0	0	1	
38	Revisiting the association between music lessons and intelligence: Training effects or music aptitude?	2017	Intelligence	0	0	0	0	0	0	0	2.785 10.1016/j.intell.2017.03.005	0	0	0	
39	Enhanced Passive and Active Processing of Syllables in Musician Children	2011	Journal of Cognitive Neuroscience	1	1	1	1	2	1	3.468 10.1162/jocn_a.00088		1	1	1	
40	Long-Term Positive Associations Between Music Lessons and IQ	2006	Journal of Educational Psychology	0	0	0	0	0	0	0	4.433 10.1037/0022-0663.98.2.457	0	0	0	
41	Musical expertise, bilingualism, and executive functioning	2009	Journal of Experiment Psychology	1	1	1	1	2	0	2.289 10.1037/a0012735		0	0	1	
42	Early musical training and white matter plasticity in the corpus callosum: evidence for a sensitive period	2013	Journal of Neuroscience	1	0	.	.		1	1	5.971 10.1523/JNEUROSCI.3578-12.2013	1	1	1	
43	Musical Training Enhances Neural Processing of Binaural Sounds	2013	Journal of Neuroscience	1	1	1	1	2	1	5.971 10.1523/JNEUROSCI.5700-12.2013		1	1	1	
44	A Little Goes a Long Way: How the Adult Brain Is Shaped by Musical Training in Childhood	2012	Journal of Neuroscience	1	1	1	1	2	1	5.971 10.1523/JNEUROSCI.1949-12.2012		1	1	1	3 groups
45	Musical Experience Limits the Degradative Effects of Background Noise on the Neural Processing of Sound	2009	Journal of Neuroscience	1	1	1	1	2	1	5.971 10.1523/JNEUROSCI.3256-09.2009		1	1	1	
46	Brain Structures Differ between Musicians and Non-Musicians	2003	Journal of Neuroscience	0	0	0	0	0	0	1	5.971 10.1523/JNEUROSCI.23-27-09240.2003	1	1	1	
47	The effect of instrumental music participation and socioeconomic status on Ohio fourth-, sixth-, and ninth-grade proficiency test performance	2006	Journal of Research in Music Education	1	1	1	1	2	0	0.696 10.2307/3653456		0	0	1	
48	Pitch and Time Processing in Speech and Tones: The Effects of Musical Training and Attention	2018	Journal of Speech, Language, and Hearing Research	1	1	1	1	2	0	1.906 10.1044/2017_JSLHR-S-17-0207		0	0	1	
49	Associations between length of music training and reading skills in children	2011	Music Perception	1	0	.	.		1	1	0.974 10.1525/mp.2011.29.2.147	0	0	0	
50	Music lessons and intelligence: a relation mediated by executive functions	2011	Music Perception	1	0	.	.		1	0	0.974 10.1525/MP.2011.29.2.195	0	0	0	
51	Musical Training and Reading Readiness	2011	Music Perception	0	0	0	0	0	0	0	0.974 10.1525/MP.2011.29.2.157	0	0	1	
52	Musical Training Facilitates Lexical Stress Processing	2009	Music Perception	1	1	1	1	2	0	0.974 10.1525/mp.2009.26.3.235		0	0	1	
53	Memory for Verbal and Visual Material in Highly Trained Musicians	2008	Music Perception	0	0	0	0	0	0	0	0.974 10.1525/MP.2008.26.1.41	0	0	1	
54	Local processing advantage in musicians: evidence from disembedding and constructional tasks	2007	Music Perception	0	0	0	0	0	0	0	0.974 10.1525/MP.2007.25.2.153	0	0	1	
55	Musical experience shapes human brainstem encoding of linguistic pitch patterns	2007	Nature Neuroscience	1	1	1	1	2	1	19.91 10.1038/nrn1872		1	1	1	
56	Extensive piano practicing has regionally specific effects on white matter development	2005	Nature Neuroscience	1	0	.	.		1	1	19.91 10.1038/nrn1516	1	1	0	
57	Morphology of Heschl's gyrus reflects enhanced activation in the auditory cortex of musicians	2002	Nature Neuroscience	0	0	0	0	0	0	1	19.91 10.1038/nrn871	1	1	1	
58	Bilingualism and Musicianship Enhance Cognitive Control	2016	Neural Plasticity	1	1	1	1	2	1	3.161 10.1155/2016/4058620		0	1	1	
59	Investigating the effects of musical training on functional brain development with a novel Melodic MMN paradigm	2014	Neurobiology of Learning and Memory	1	1	1	1	2	1	3.244 10.1016/j.nlm.2014.01.007		1	1	1	
60	Musical literacy shifts asymmetries in the ventral visual cortex	2017	NeuroImage	1	1	1	1	2	1	5.426 10.1016/j.neuroimage.2017.04.027		1	1	1	
61	Adults and children processing music: An fMRI study	2005	NeuroImage	0	0	0	0	0	0	1	5.426 10.1016/j.neuroimage.2004.12.050	1	1	1	3 groups
62	Context-dependent encoding in the auditory brainstem subserves enhanced speech-in-noise perception in musicians	2011	Neuropsychologia	0	1	.	.		1	1	2.889 10.1016/j.neuropsychologia.2011.08.007	1	1	1	
63	Musical training and working memory: An ERP study	2011	Neuropsychologia	0	0	0	0	0	0	1	2.889 10.1016/j.neuropsychologia.2011.02.001	1	1	1	
64	Musical Training Improves Verbal but Not Visual Memory: Cross-Sectional and Longitudinal Explorations in Children	2003	Neuropsychology	1	1	1	1	2	1	2.699 10.1037/0894-4105.17.3.439		0	1	1	
65	Musical Training Effect on Reading Musical Notation: Evidence from Event-Related Potentials	2012	Perceptual and Motor Skills	1	1	1	1	2	1	0.703 10.2466/22.11.24.PMS.115.4.7-17		1	0	1	
66	Do Older Professional Musicians Have Cognitive Advantages?	2013	PLOS One	0	0	0	0	0	0	0	2.766 10.1371/journal.pone.0071630	0	0	1	
67	Increased engagement of the cognitive control network associated with music training in children during an fMRI Stroop task	2017	PLoS One	0	0	0	0	0	0	1	2.766 10.1371/journal.pone.0187254	1	0	1	
68	Behavioral and Neural Correlates of Executive Functioning in Musicians and Non-Musicians	2014	PLoS One	0	0	0	0	0	0	1	2.766 10.1371/journal.pone.0099868	1	0	1	
69	Inhibitory control in bilinguals and musicians: Event related potential (ERP) evidence for experience-specific effects.	2014	PLoS One	1	1	1	1	2	1	2.766 10.1371/journal.pone.0094169		0	1	1	
70	Enhanced Syllable Discrimination Thresholds in Musicians	2013	PLoS One	1	1	1	1	2	0	2.766 10.1371/journal.pone.0080546		0	0	1	
71	Musical experience, auditory perception and reading-related skills in children.	2013	PLoS One	0	1	.	.		1	0	2.766 10.1371/journal.pone.0075876	0	0	1	

72	Tone Language Speakers and Musicians Share Enhanced Perceptual and Cognitive Abilities for Musical Pitch: Evidence for Bidirectionality between the Domains of Language and Mus	2013	PLOS One	1	0	.		1	1	0	2.766	10.1371/journal.pone.0060676	0	0	1
73	Musical Experience and the Aging Auditory System: Implications for Cognitive Abilities and Hearing Speech in Noise	2011	PLOS One	0	0	0	0	0	0	0	2.766	10.1371/journal.pone.0018082	0	0	1
74	Cognitive Control in Auditory Working Memory Is Enhanced in Musicians	2010	PLOS One	0	1	.		0	1	1	2.766	10.1371/journal.pone.0011120	1	0	1
75	Practicing a Musical Instrument in Childhood is Associated with Enhanced Verbal Ability and Nonverbal Reasoning	2008	PLOS One	0	0	0	0	0	0	0	2.766	10.1371/journal.pone.0003566	0	0	0
76	Musicians have enhanced subcortical auditory and audiovisual processing of speech and music.	2007	Proceedings of the National Academy of Sciences	1	1	1	1	2	1	9.504	10.1073/pnas.0701498104	1	0	1	
77	Cortical activity during perception of musical rhythm: Comparing musicians and nonmusicians	2014	Psychomusicology	1	1	1	1	2	1	10.1037/pmu0000046		1	0	1	
78	Attention to affective audio-visual information: Comparison between musicians and non-musicians	2016	Psychology of Music	0	1	.		1	1	0	1.275	10.1177/0305735616654216	0	0	1
79	The effect of piano lessons on the vocabulary and verbal sequencing skills of primary grade students	2009	Psychology of Music	1	1	1	1	2	0	1.275	10.1177/0305735608097248	0	0	1	
80	Music training enhances the automatic neural processing of foreign speech sounds	2017	Scientific Reports	1	1	1	1	2	1	4.122	10.1038/s41598-017-12575-1	1	0	1	
81	Electrophysiological evidences demonstrating differences in brain functions between nonmusicians and musicians	2015	Scientific Reports	0	1	.		1	1	1	4.122	10.1038/srep13796	1	0	1
82	Musical Experience Influences Statistical Learning of a Novel Language	2013	The American Journal of Psychology	1	1	1	1	2	0	0.938	10.5406/amerjpsyc.126.1.0095	0	0	1	
83	The music of speech: Music training facilitates pitch processing in both music and language	2004	Psychophysiology	1	1	1	1	2	1	3.118	10.1111/1469-8986.00172.x	1	1	1	
84	Long-term music training tunes how the brain temporally binds signals from multiple senses	2011	Proceedings of the National Academy of Sciences	1	1	1	1	2	1	9.504	10.1073/pnas.1115267108	1	0	1	
85	Music Training and Semantic Clustering in College Students	2008	Journal of Genetic Psychology	0	0	0	0	0	0	0.918	10.3200/GNTP.169.4.322-331	0	0	1	
86	Musician Children Detect Pitch Violations in Both Music and Language Better than Nonmusician Children: Behavioral and Electrophysiological Approaches	2006	Journal of Cognitive Neuroscience	1	1	1	1	2	1	3.468	10.1162/jocn.2006.18.2.199	1	1	1	
87	The unusual symmetry of musicians: Musicians have equilateral interhemispheric transfer for visual information	2007	Neuropsychologia	0	1	.		1	1	1	2.889	10.1016/j.neuropsychologia.2007.02.001	1	1	1
88	The effects of noise exposure and musical training on suprathreshold auditory processing and speech perception in noise	2017	Hearing Research	1	1	1	1	2	0	2.824	10.1016/j.heares.2017.07.006	0	0	0	
89	Early musical training contributes to decision-making ability	2017	Psychomusicology	1	1	1	1	2	0	10.1037/pmu0000174		0	0	1 3 groups	
90	Musical training sharpens and bonds ears and tongue to hear speech better	2017	Proceedings of the National Academy of Sciences	1	1	1	1	2	1	9.504	10.1073/pnas.1712223114	1	0	1	
91	Investigating the effects of music training on verbal memory	2017	Psychology of Music	1	1	1	1	2	0	1.275	10.1177/0305735617690246	0	0	1	
92	Children's early bilingualism and musical training influence prosodic discrimination of sentences in an unknown language	2018	The Journal of the Acoustical Society of America	1	1	1	1	2	0	1.605	10.1121/1.5019700	0	0	1	
93	Differences in updating processes between musicians and non-musicians from late childhood to adolescence	2018	Learning and Individual Differences	0	0	0	0	0	0	1.42	10.1016/j.lindif.2017.12.006	0	0	1	
94	Learning a second language: Can music aptitude or music training have a role?	2018	Learning and Individual Differences	0	0	0	0	0	0	1.42	10.1016/j.lindif.2018.04.003	0	0	1	
95	Differences in white matter architecture between musicians and non-musicians: a diffusion tensor imaging study	2002	Neuroscience Letters	0	1	.		1	1	1	2.159	10.1016/S0304-3940(02)00054-X	1	1	1
96	Differences in mental abilities between musicians and non-musicians	2003	Psychology of Music	1	1	1	1	2	0	1.275	10.1177/0305735603031002290	0	0	1	
97	Music lessons and verbal memory in 10- to 12-year-old children: Investigating articulatory rehearsal as mechanism underlying this association	2017	Psychomusicology	0	1	.		0	1	0	10.1037/pmu0000201	0	0	1	
98	The cognitive functioning of older adult instrumental musicians and non-musicians	2018	Aging, Neuropsychology, and Cognition	1	0	.		1	1	1	1.845	10.1080/13825585.2018.1448356	0	1	1 3 groups
99	Attention in musicians is more bilateral than in non-musicians	2007	Laterality: Asymmetries of Body, Brain, and Cognition	1	1	1	1	2	1	1.388	10.1080/13576500701251981	0	1	1	
100	Gesture imitation in musicians and non-musicians	2010	Experimental Brain Research	1	1	1	1	2	1	1.806	10.1007/s00221-010-2322-3	0	1	1	
101	Musicians detect pitch violation in a foreign language better than nonmusicians: Behavioral and electrophysiological evidence	2007	Journal of Cognitive Neuroscience	1	1	1	1	2	1	3.468	10.1162/jocn.2007.19.9.1453	1	1	1	
102	Effects of long-term practice and task complexity in musicians and non-musicians performing simple and complex motor tasks: Implications for cortical motor organization	2005	Human Brain Mapping	1	1	1	1	2	1	4.927	10.1002/hbm.20112	1	1	1	
103	Effects of practice and experience on the arcuate fasciculus: comparing singers, instrumentalists, and non-musicians	2011	Frontiers in Psychology	1	1	1	1	2	1	2.089	10.3389/fpsyg.2011.00156	1	0	1 3 groups	
104	Gray matter differences between musicians and nonmusicians	2003	Annals of the New York Academy of Sciences	1	0	.		0	1	1	4.277	10.1196/annals.1284.062	1	0	1 3 groups
105	Musical experience promotes subcortical efficiency in processing emotional vocal sounds	2009	Annals of the New York Academy of Sciences	1	1	1	1	2	1	4.277	10.1111/j.1749-6632.2009.04864.x	1	0	1	
106	Enhanced divergent thinking and creativity in musicians: a behavioral and near-infrared spectroscopy study	2009	Brain and Cognition	0	1	.		0	1	1	2.574	10.1016/j.bandc.2008.07.009	1	1	1
107	Musical training intensity yields opposite effects on grey matter density in cognitive versus sensorimotor networks	2014	Brain Structure and Function	1	1	1	1	2	1	4.231	10.1007/s00429-013-0504-z	1	1	1 3 groups	
108	The relation between instrumental musical activity and cognitive aging	2011	Neuropsychology	0	1	.		0	1	1	2.699	10.1037/a0021895	0	1	1 3 groups
109	An empirical investigation of creativity and musical experience	2006	Psychology of Music	0	0	0	0	0	0	0	1.275	10.1177/0305735606064839	0	0	0
110	Older adults benefit from music training early in life: Biological evidence for long-term training-driven plasticity	2013	Journal of Neuroscience	1	0	.		1	1	1	5.971	10.1523/JNEUROSCI.2560-13.2013	1	1	1
111	The effect of musical training on the neural correlates of math processing: a functional magnetic resonance imaging study in humans	2004	Neuroscience Letters	1	1	1	1	2	1	2.159	10.1016/j.neulet.2003.10.037	1	1	1	
112	Individual differences in musical training and executive functions: A latent variable approach	2018	Memory and Cognition	0	0	0	0	0	0	0	1.911	10.3758/s13421-018-0822-8	0	0	0
113	Musical training induces functional plasticity in perceptual and motor networks: Insights from resting-state fMRI	2012	PLOS One	1	1	1	1	2	1	2.766	10.1371/journal.pone.0036568	1	0	1	
114	Long-term musical training may improve different forms of visual attention ability	2013	Brain and Cognition	0	1	.		0	1	1	2.574	10.1016/j.bandc.2013.04.009	0	1	1