The Danish National Research Foundation's
Center for Music in the Brain
Aarhus University & The Royal Academy of Music Aarhus/Aalborg

Kan musik forbedre søvn?

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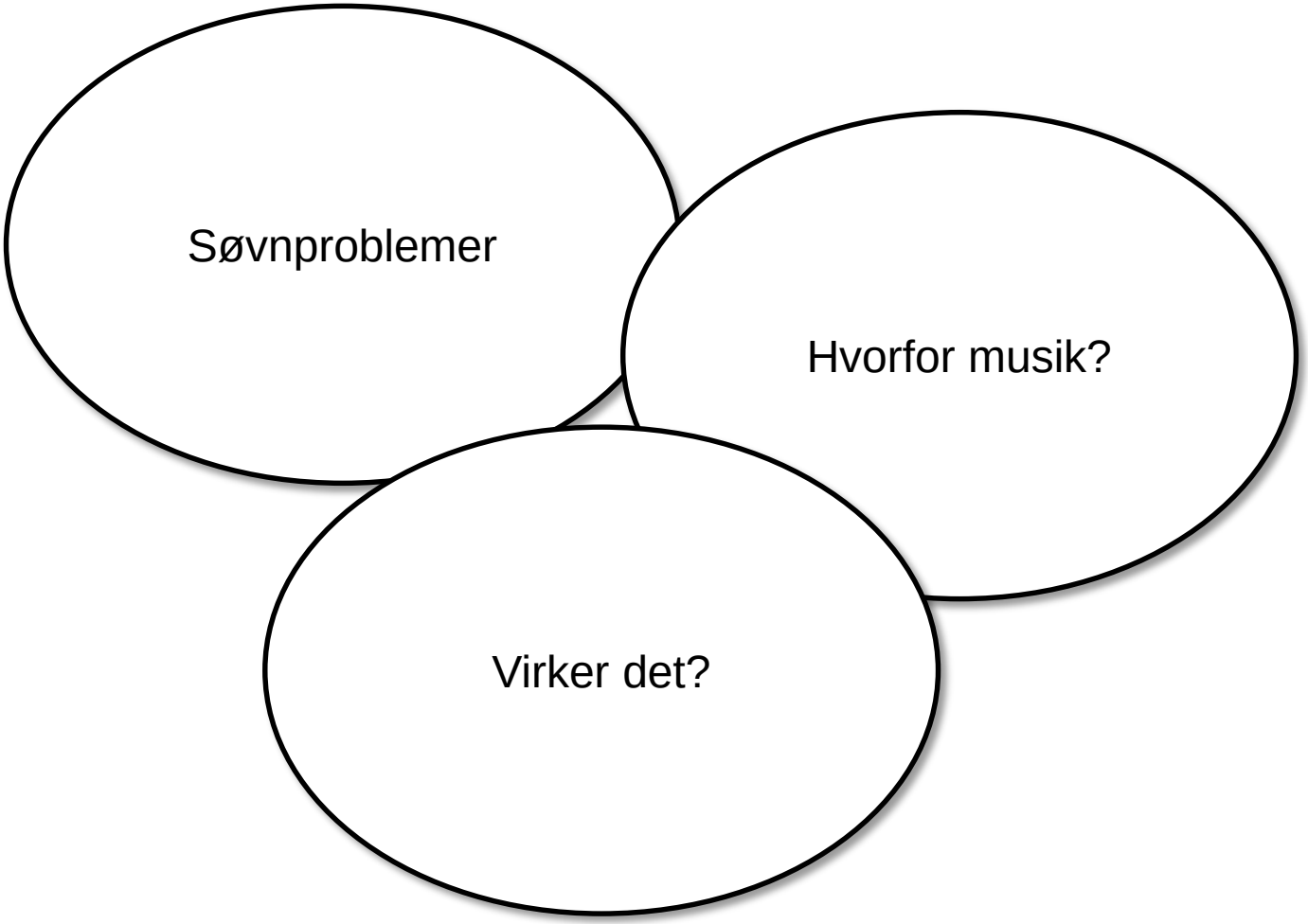
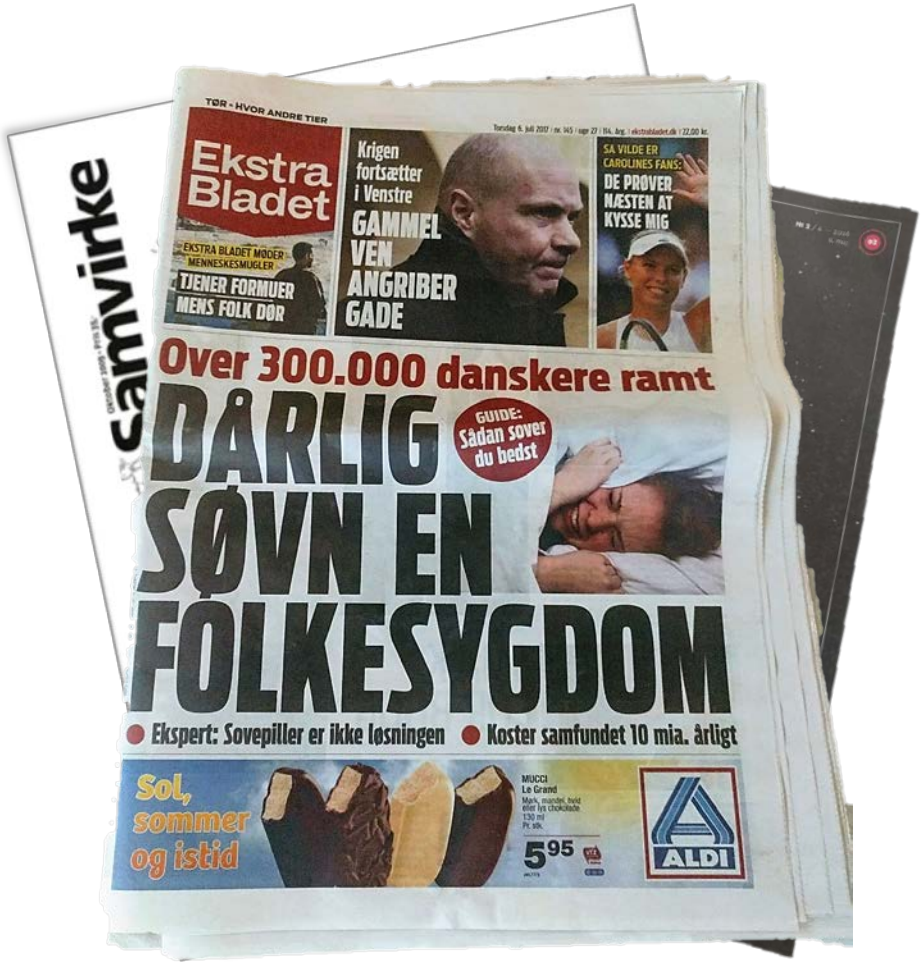
Oversigt



Søvnproblemer



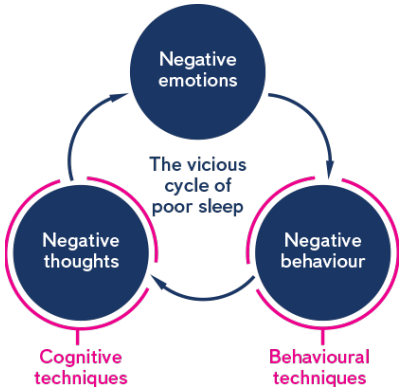
- Negative konsekvenser:
  - Emotion
  - Kognition
  - Helbred
  - Livskvalitet

Léger et al. 2014, Ohayon 2002, Roth 2007

Behandlingsmuligheder

- Medicin

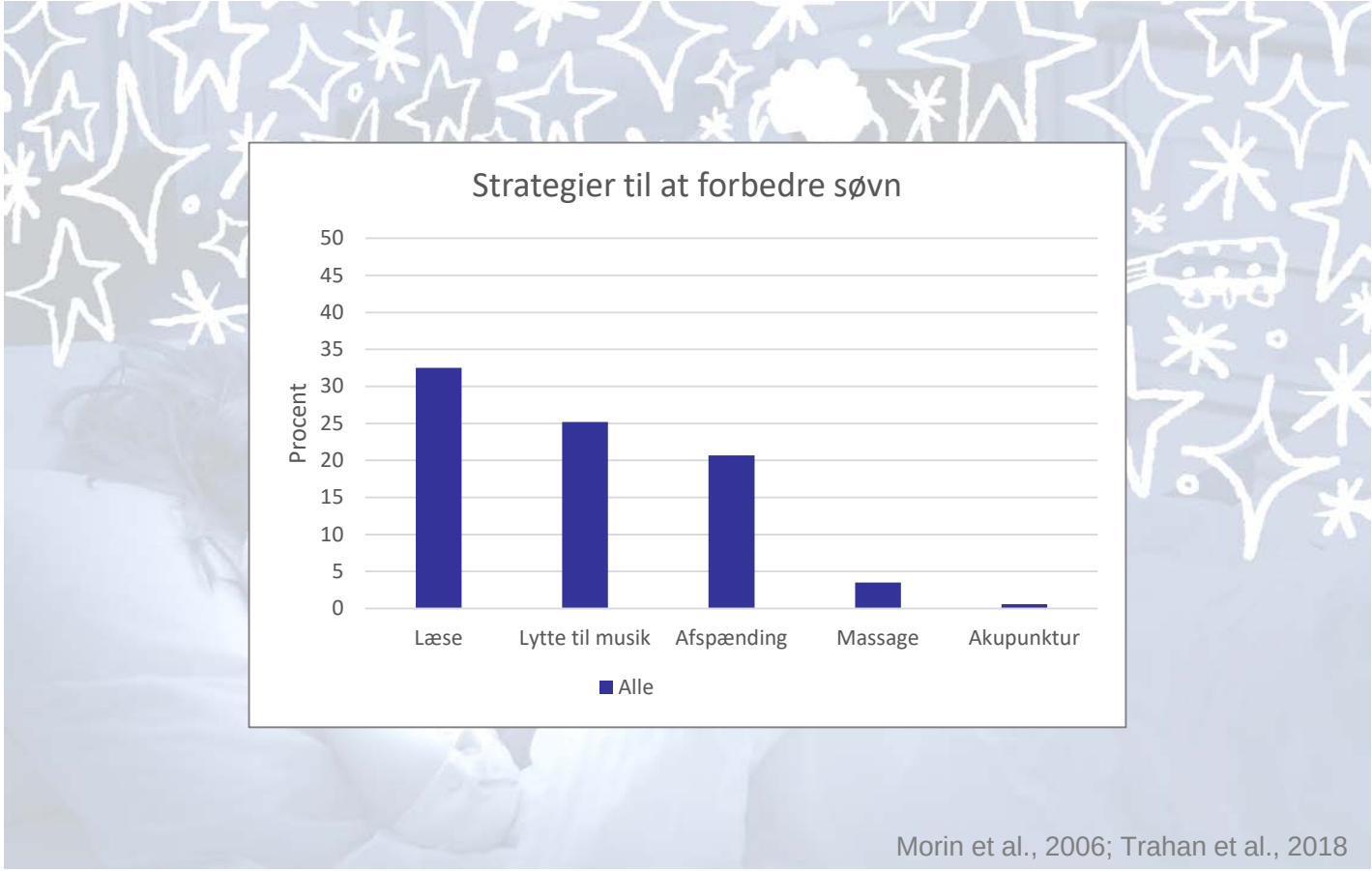
- Kognitiv adfærdsterapi (CBTi)



Morin & Benca 2012, NIH 2005, Riemann et al. 2015 + 2017

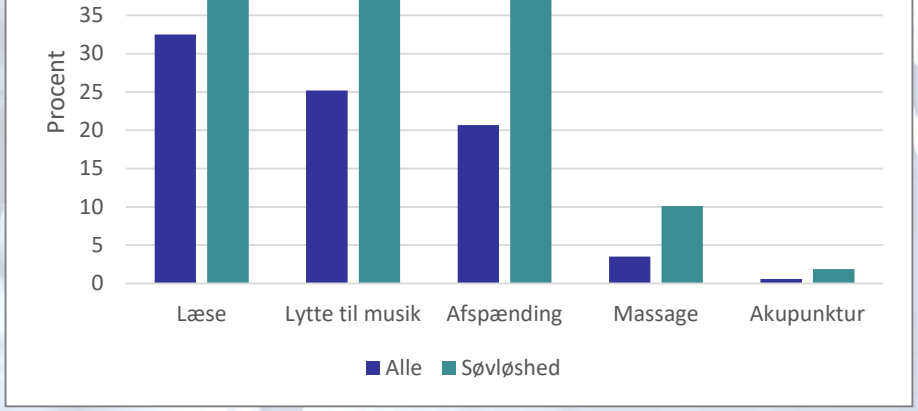
Hvorfor musik?

Mange lytter til musik



Morin et al., 2006; Trahan et al., 2018

Mange lytter til musik



Morin et al., 2006; Trahan et al., 2018

Hvorfor musik?

- Arousal

Bernardi et al. (2006)
Review se (Hodges 2009)

- Distraktion

Mitchell et al. (2009)
Mitchell et al. (2006), Garza Villareal et al. (2012)

- Emotion

Chlan et al. (2013)
Review se Juslin & Sloboda (2010)

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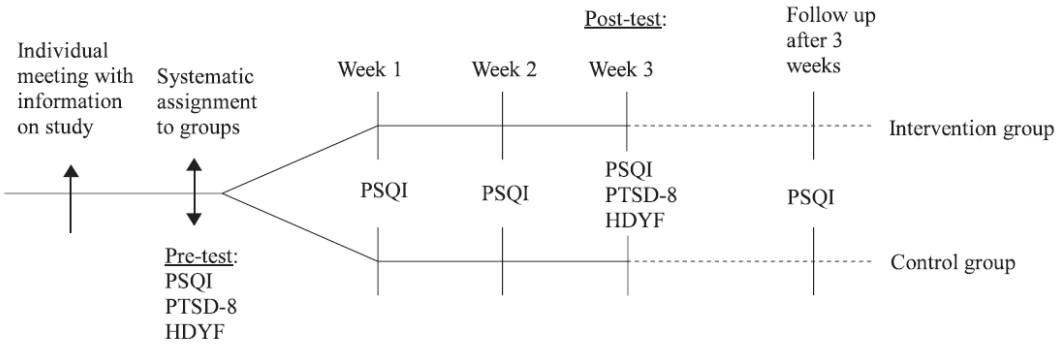
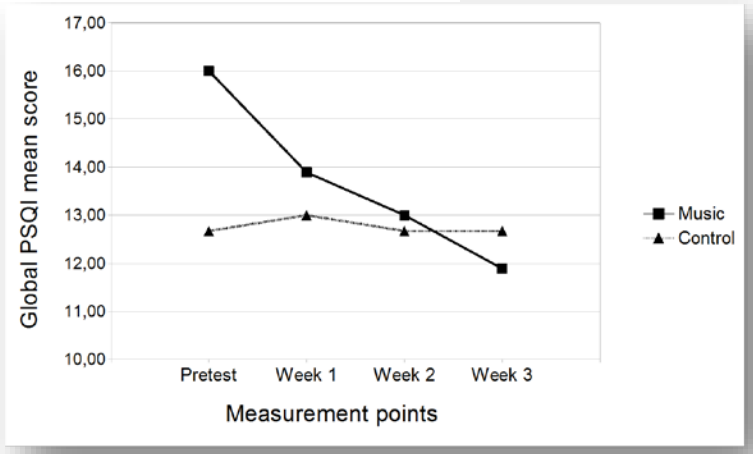
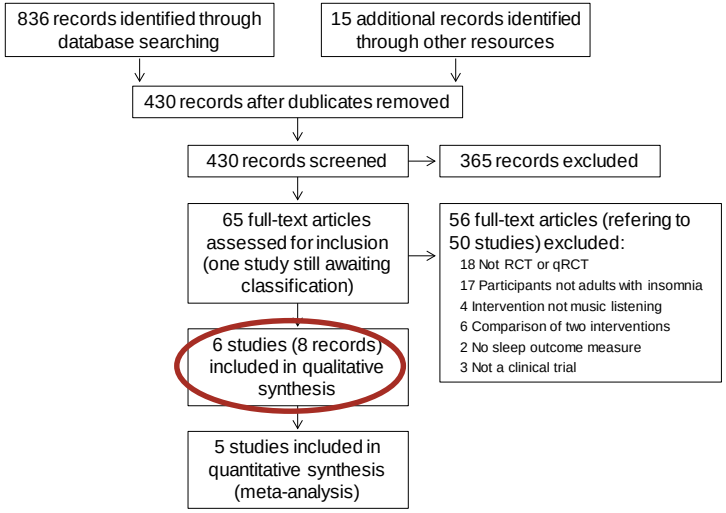
Musik til traumatiserede flygtninge

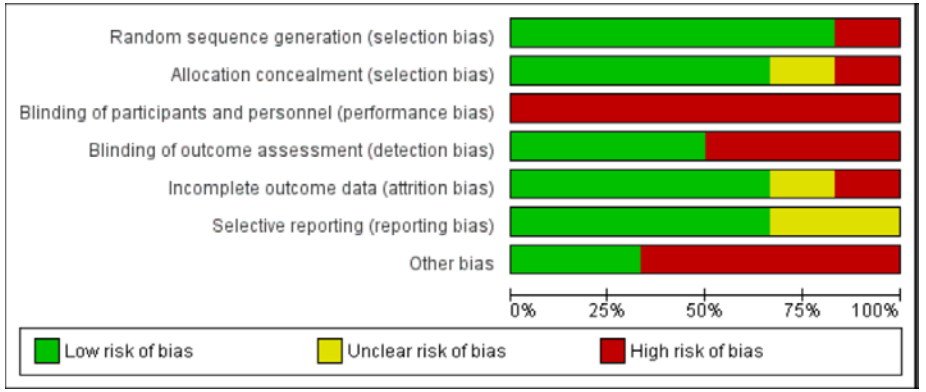




Jespersen & Vuust, 2012, *Journal of Music Therapy*

Oversigt over den eksisterende forskning

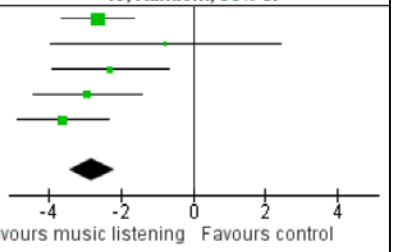




THE COCHRANE COLLABORATION

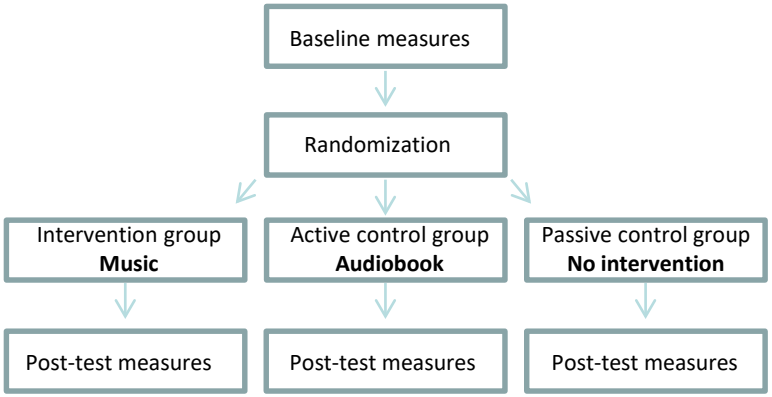
Study or Subgroup	Music listening Mean	SD	Total	Control Mean	SD	Total	Weight	Mean Difference IV, Random, 95% CI
Harmat 2008	3.27	1.8	35	5.9	2.193	29	39.4%	-2.63 [-3.63, -1.63]
Jespersen 2012	11.89	4.11	9	12.67	2.16	6	3.8%	-0.78 [-3.97, 2.41]
Kullich 2003	5.8	3.2	32	8.1	3.4	33	15.2%	-2.30 [-3.90, -0.70]
Lai 2005	7.13	3.19	30	10.07	2.75	30	17.2%	-2.94 [-4.45, -1.43]
Shum 2014	5.9	2.4	28	9.5	2.6	32	24.4%	-3.60 [-4.87, -2.33]
Total (95% CI)			**134**			**130**	**100.0%**	**-2.80 [-3.42, -2.17]**

Heterogeneity: Tau² = 0.00; Chi² = 3.59, df = 4 (P = 0.46); I² = 0%
Test for overall effect: Z = 8.77 (P < 0.00001)



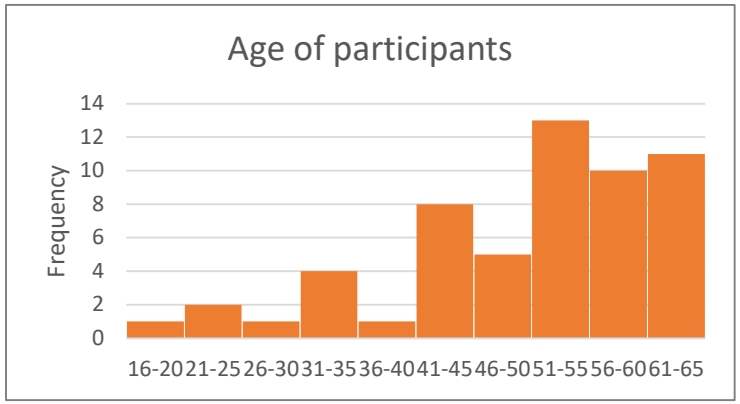
Jespersen et al., 2015, *Cochrane Database of Systematic Reviews*

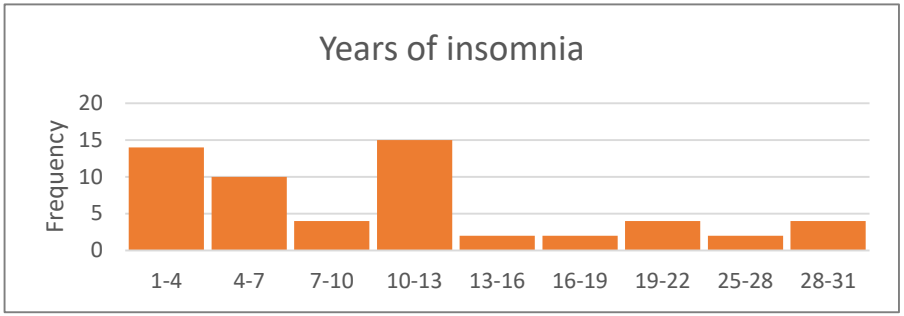
RCT – musik for vedvarende søvnløshed



Intervention period 3 weeks

Follow-up 4 weeks after ended intervention





Jespersen et al., in press, *Journal of Sleep Research*

Musik interventionen

- Universelle karakteristika
  - Langsomt tempo
  - Stabil dynamik
  - Enkel struktur

  - Individuelt valg mellem forskellige genrer

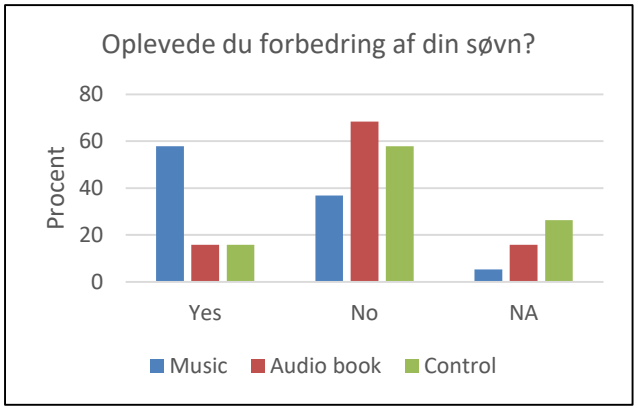
Bernardi et al., 2009; Gomez and Danuser, 2007; Trehub and Trainor, 1998; Jespersen et al., in press, *Journal of Sleep Research*

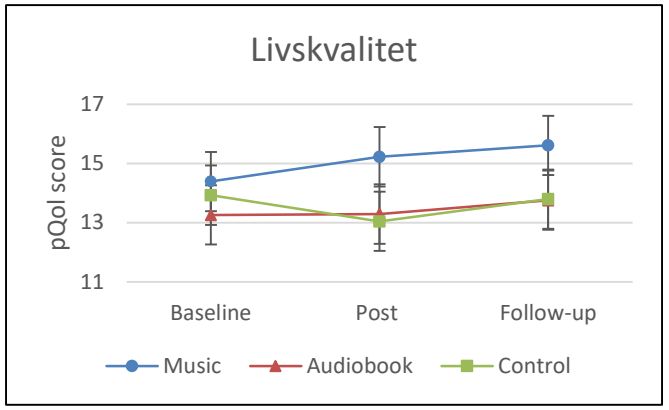
Søvnforbedring

Table – Insomnia severity

		Baseline Mean (SD)		Post-test Mean (SD)	Δ post Mean (CI)
ISI	n		n		
-music	19	17.0 (3.4)	18	13.9 (5.3)	-3.1 (4.6)*
-audiobook	19	19.2 (4.5)	16	17.7 (3.3)	-0.6 (2.9)
-control	19	18.2 (4.9)	15	16.5 (4.9)	-1.2 (2.8)

* Paired t-test, $p < 0.05$

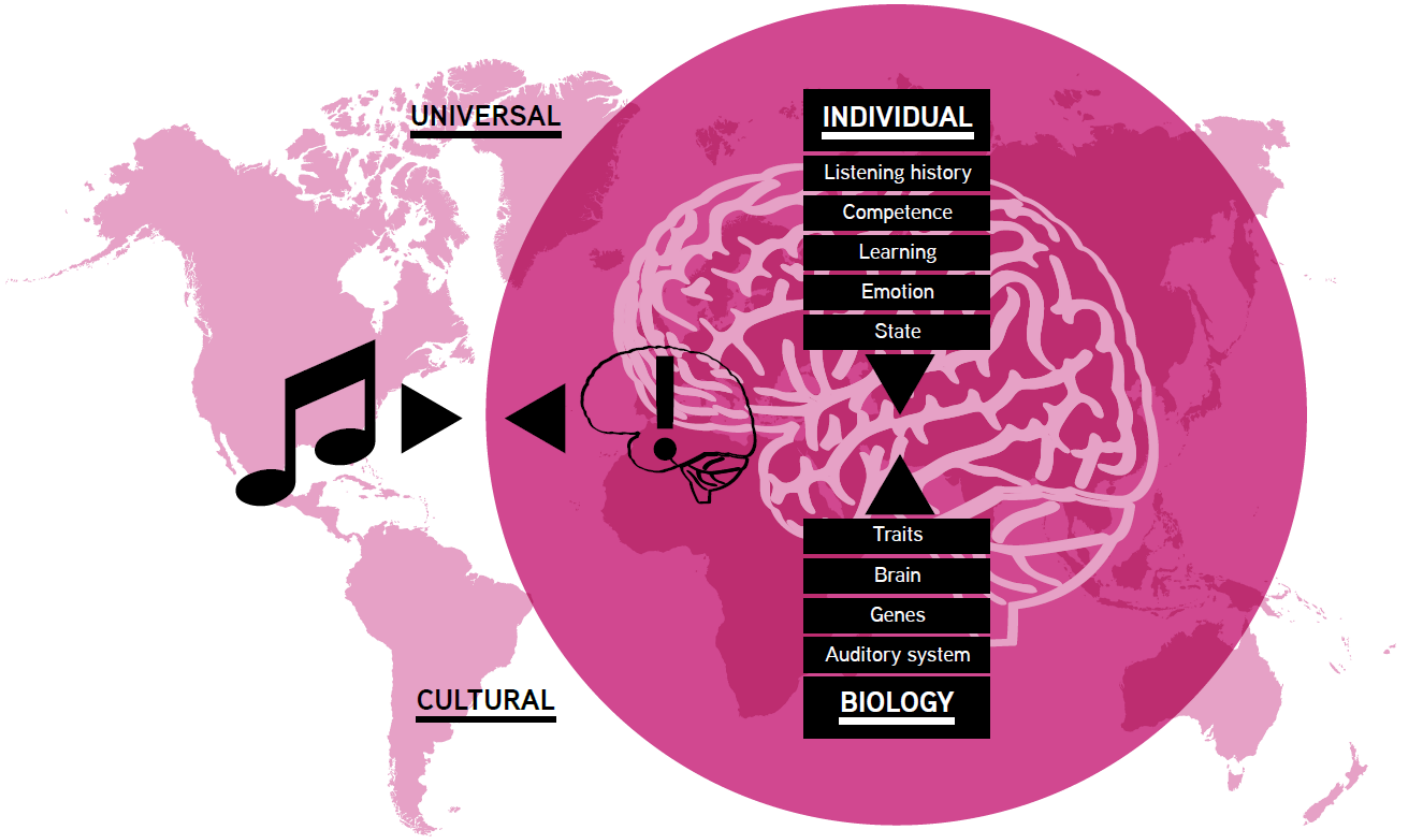




Jespersen et al., in press, *Journal of Sleep Research*

Demensrelaterede søvnproblemer

Musik i sundhedsvæsnet



Vuust & Gebauer, 2014

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Konklusioner

- Musik har positiv effekt på søvnkvaliteten
- Musik kan ikke stå alene som behandling af vedvarende søvnløshed
- Det er vigtigt at tage højde for individuelle præferencer ved valg af musik

Tak til…

- Samarbejdspartnere
  - Peter Vuust, Morten Kringelbach, Eus Van Someren Julian Koenig, Poul Jennum, Marit Otto, Andrew Moskowitz, Jan Larsen, Jens Madsen, Marianne Badstue, Helle Segalt Pedersen, Line Gebauer, Rasmine Holm Mogensen, Maja Bjerg, Edith Clausen, Ima Mustafic, Lene Vistisen, Rebecca Engberg, Karin Thøgersen
- Organisationer
  - Center for Music in the Brain, Klinisk Medicin, Health, Aarhus Universitet
  - Center for Funktionel Integrativ neurovidenskab, Klinisk Medicin, Health, Aarhus Universitet
  - Søvnklinikken, Neurofysiologisk afdeling, Aarhus Universitets Hospital
  - Integrationsnet – en del af Dansk Flygtningehjælp
  - Psykologisk Institut, Aarhus Universitet
  - DTU compute, Institut for Matematik og Computer Science, Danmarks Tekniske Universitet
  - Department of Sleep and Cognition, Netherlands Institute for Neuroscience, Amsterdam, The Netherlands
  - Department of Psychiatry, Oxford University, UK
- Kolleger

- Økonomisk støtte