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Extensive crowdsourced dataset of in-situ evaluated binaural soundscapes of private dwellings containing subjective sound-related and situational ratings along with person factors to study time-varying influences on sound perception - research data



2023 | *Forschungsdaten*

Versümer, Siegbert; Steffens, Jochen; Rosenthal, Fabian

**Published:** 2023

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/4006>

**Digital Object Identifier:** [10.5281/zenodo.7193937](https://doi.org/10.5281/zenodo.7193937)

**Abstract**

The soundscape approach highlights the role of situational factors in sound evaluations; however, only a few studies have applied a multi-domain approach including sound-related, person-related, and time-varying situational variables. Therefore, we conducted a study based on the Experience Sampling Method to measure the relative contribution of a broad range of potentially relevant acoustic and non-auditory variables in predicting indoor soundscape evaluations. Here we present the comprehensive dataset for which 105 participants reported temporally (rather) stable trait variables such as noise sensitivity, trait affect, and quality of life. They rated 6.594 situations regarding the soundscape standard dimensions, perceived loudness, and the saliency of its sound components and evaluated situational variables such as state affect, perceived control, activity, and location. To complement these subject-centered data, we additionally crowdsourced object-centered data by having participants make binaural measurements of each indoor soundscape at their homes using a low-(self-)noise recorder. These recordings were used to compute (psycho-)acoustical indices such as the energetically averaged loudness level, the A-weighted energetically averaged equivalent continuous sound pressure level, and the A-weighted five-percent exceedance level. This complex hierarchical data can be used to investigate time-varying non-auditory influences on sound perception and to develop soundscape indicators based on the binaural recordings to predict soundscape evaluations.

### The effect of visual recognition on listener choices when searching for music in playlists

2023 | Wissenschaftlicher Artikel

*Psychology of Aesthetics, Creativity, and the Arts*

Steffens, Jochen; Anglada-Tort, Manuel

**Published:** 2023

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/4063>

**Digital Object Identifier:** [10.1037/aca0000562](https://doi.org/10.1037/aca0000562)



### Analysis of physical and perceptual properties of room impulse responses: development of an online tool

2023 | Konferenzveröffentlichung

*Forum Acusticum 2023: 10th Convention of European Acoustics Association, Turin, Italy,*

11th-15th September 2023, S. 8

von Berg, Markus; Schwörer, Paul; Prinz, Lukas; Steffens, Jochen

**Published:** 2023

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/4195>

#### Abstract

Over the past decades, research in room acoustics has established several derivative measures of an impulse response, some of which are incorporated in the ISO 3382 standards. These parameters intend to represent perceptual qualities, but were developed without a consistent modeling of room acoustical perception. More recent research proposed comprehensive inventories of room acoustic perception that are purely based on evaluations by human subjects, such as the Room Acoustical Quality Index (RAQI). In this work RA-QI scores acquired for 70 room impulse responses were predicted from room acoustical parameters. Except for Reverberance, the prediction of RAQI factors performed rather poor. In most cases, the sound source had a greater impact on RAQI scores. All analyses are published in an online tool, where users can upload omnidirectional and binaural impulse

responses, and instantly obtain and visualize several physical descriptors, as well as predicted RAQI scores for three different sound sources. So far, acceptable prediction accuracy is achieved for Reverberance, Strength, Irregular Decay, Clarity and Intimacy. Larger data sets of evaluated impulse responses are required to improve the model performance and enable reliable predictions of room acoustical quality. Therefore, the administration of RAQI evaluations within the website is currently being developed.

## Comparing individual perception of timbre and reverberance



2022 | Konferenzveröffentlichung

von Berg, Markus; Prinz, Lukas; Steffens, Jochen

**Published:** 2022

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3870>

### Abstract

Room reverberation alters the spatial impression and timbre of a sound by modulating its spectral and temporal characteristics. Thus, we argue that, on a perceptual level, reverberation basically breaks down into interaural differences and spectro-temporal cues and that the separation of a perceived timbre into a sound source and a surrounding room is a purely cognitive process. To investigate the connection between the perception of reverberation cues and timbre analysis, the sensitivity for changes in reverberation was compared to timbre perception abilities. The Timbre Perception Test was used to measure the perception of the temporal envelope, spectral centroid, and spectral flux of artificial sounds. Sensitivity for changes in reverberation time was tested with a discrimination task using speech and noise with speech-alike spectral and temporal envelopes as source signals. Musical and acoustical expertise was assessed through the Goldsmiths Musical Sophistication Index and self-reports on experience with and knowledge of acoustics. There was a considerable correlation between timbre and reverberance perception ability, but timbre perception and academic experience predicted only 41% of the variance in reverberance perception. Still, perception abilities related to similar acoustical phenomena seem to be better indicators of listening skills than self-reports on acoustical or musical expertise.

## The Behavioural Economics of Music: Systematic review and future directions



2022 | Wissenschaftlicher Artikel

*Quarterly Journal of Experimental Psychology*, 76, 5, Article-Nr. 17470218221113761

Anglada-Tort, Manuel; Masters, Nikhil; Steffens, Jochen; North, Adrian; Müllensiefen, Daniel

**Published:** 2022

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3942>

**Digital Object Identifier:** [10.1177/17470218221113761](https://doi.org/10.1177/17470218221113761)

### Abstract

Music-related decision-making encompasses a wide range of behaviours including those associated with listening choices, composition and performance, and decisions involving music education and therapy. Although research programmes in psychology and economics have contributed to an improved understanding of music-related behaviour, historically, these disciplines have been unconnected. Recently, however, researchers have begun to bridge this gap by employing tools from behavioural economics. This article contributes to the literature by providing a discussion about the benefits of using behavioural economics in

music-decision research. We achieve this in two ways. First, through a systematic review, we identify the current state of the literature within four key areas of behavioural economics— heuristics and biases, social decision-making, behavioural time preferences, and dual-process theory. Second, taking findings of the literature as a starting point, we demonstrate how behavioural economics can inform future research. Based on this, we propose the Behavioural Economics of Music (BEM), an integrated research programme that aims to break new ground by stimulating interdisciplinary research in the intersection between music, psychology, and economics.

## Evidenzbasierte Praxis im Music Branding - Musikalische Markenkommunikation wird erwachsen

2022 | Sammelbandbeitrag / Buchkapitel  
*Musik & Marken*, S. 73-91  
Egermann, Hauke; Lepa, Steffen; Herzog, Martin; Steffens, Jochen

**Published:** 2022

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3945>

## Flowerleben beim Musikhören: Die Wichtigkeit situativer und personenbezogener Variablen und Zusammenhänge mit der aktuellen Stimmung

2022 | Sammelbandbeitrag / Buchkapitel  
*Abstract-Band zur 38. Jahrestagung der Deutschen Gesellschaft für Musikpsychologie*  
Loepthien, Tim; Hantschel, Florian; Ruth, Nicolas; Steffens, Jochen; Randall

**Published:** 2022

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3947>

## Audioinhaltsanalyse und Multilevelmodellierung zur Vorhersage der Bewertung von Indoor Soundscapes

2022 | Sammelbandbeitrag / Buchkapitel  
*Deutsche Jahrestagung für Akustik (DAGA)*  
Rosenthal, Fabian; Versümer, Siegbert; Steffens, Jochen

**Published:** 2022

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3948>

## Induced cognitive load influences unpleasantness judgments of modulated noise

2022 | Konferenzveröffentlichung  
*Proceedings of the 24th International Congress on Acoustics*  
Steffens, Jochen; Himmlein, Hendrik

**Published:** 2022  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3949>

Subjektive Lautheitsbewertung unter Einfluss situativer und personenbezogener Faktoren

2022 | Konferenzveröffentlichung  
*Deutsche Jahrestagung für Akustik (DAGA)*  
Versümer, Siegbert; Steffens, Jochen; Blättermann, Patrick

**Published:** 2022  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3951>

"Ich sehe, was Du hörst!" - Verwendung der Pupillometrie zur Messung des Einflusses kognitiver Belastung auf die Geräuschbewertung

2022 | Konferenzveröffentlichung  
*Deutsche Jahrestagung für Akustik (DAGA), Stuttgart*  
Himmlein, H.; Steffens, Jochen

**Published:** 2022  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3955>

Investigating contextual influences on urban soundscape evaluations with structural equation modeling



2021 | Wissenschaftlicher Artikel  
*Building and Environment*, 188, Article-Nr. 107490  
Tarla, Cynthia; Steffens, Jochen; Guastavino, Catherine

**Published:** 2021-01-15  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/4038>  
**Digital Object Identifier:** [10.1016/j.buildenv.2020.107490](https://doi.org/10.1016/j.buildenv.2020.107490)

Musical DIAMONDS: The influence of situational classes and characteristics on

## music listening behavior

2021 | Wissenschaftlicher Artikel

*Psychology of Music, 49, 6, S. 1532-1545*

Behbehani, Sami; Steffens, Jochen

**Published:** 2021

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2771>

**Digital Object Identifier:** [10.1177/0305735620968910](https://doi.org/10.1177/0305735620968910)



## Junk Food or Haute Cuisine to the Ear? – Investigating the Relationship Between Room Acoustics, Soundscape, Non-Acoustical Factors, and the Perceived Quality of Restaurants

2021 | Wissenschaftlicher Artikel

*Frontiers in Built Environment, 676009, S. 11*

Steffens, Jochen; Wilczek, Tobias; Weinzierl, Stefan



ORIGINAL RESEARCH  
published: 13 May 2021  
doi: 10.3389/fbuil.2021.676009

### Junk Food or Haute Cuisine to the Ear? – Investigating the Relationship Between Room Acoustics, Soundscape, Non-Acoustical Factors, and the Perceived Quality of Restaurants

#### OPEN ACCESS

*Editor for this Article:* Jochen Steffens<sup>1\*</sup>, Tobias Wilczek<sup>2</sup> and Stefan Weinzierl<sup>2</sup>

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**Published:** 2021

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3211>

**Digital Object Identifier:** [10.3389/fbuil.2021.676009](https://doi.org/10.3389/fbuil.2021.676009)  
**Abstract**

Sound and music are well-studied aspects of the quality of experience in restaurants; the role of the room acoustical conditions, their influence on the visitors' soundscape evaluation and their impact on the overall customer satisfaction in restaurants, however, has received less scientific attention. The present field study therefore investigated whether sound pressure level, reverberation time, and soundscape pleasantness can predict factors associated with overall restaurant quality. In total, 142 persons visiting 12 restaurants in Berlin rated relevant acoustical and non-acoustical factors associated with restaurant quality. Simultaneously, the A-weighted sound pressure level ( $LA_{eq,15}$ ) was measured, and the reverberation time in the occupied state ( $T20,occ$ ) was obtained by measurements performed in the unoccupied room and a subsequent calculation of the occupied condition according to DIN 18041. Results from linear mixed-effects models revealed that both the  $LA_{eq,15}$  and  $T20,occ$  had a significant influence on soundscape pleasantness and eventfulness, whereby the effect of  $T20,occ$  was mediated by the  $LA_{eq,15}$ . Also, the  $LA_{eq,15}$  as well as soundscape pleasantness were significant predictors of overall restaurant quality. A comprehensive structural equation model including both acoustical and non-acoustical factors, however, indicates that the effect of soundscape pleasantness on overall restaurant quality is mediated by the restaurant's atmosphere. Our results support and extend previous findings which suggest that the acoustical design of restaurants involves a trade-off between comfort and liveliness, depending on the desired character of the place.

**Keywords:** comfort, gastronomy acoustics, soundscape, room acoustics, reverberation time, restaurant quality, restaurant acoustics, noise

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quality. A comprehensive structural equation model including both acoustical and non-acoustical factors, however, indicates that the effect of soundscape pleasantness on overall restaurant quality is mediated by the restaurant's atmosphere. Our results support and extend previous findings which suggest that the acoustical design of restaurants involves a trade-off between comfort and liveliness, depending on the desired character of the place.

## Assessing room acoustic listening expertise

2021 | Wissenschaftlicher Artikel

*Journal of the Acoustical Society of America*, 150, 4, S. 2539-2548

von Berg, Markus; Steffens, Jochen; Weinzierl, Stefan; Müllensiefen, Daniel

**Published:** 2021

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3496>

**Digital Object Identifier:** [10.1121/10.0006574](https://doi.org/10.1121/10.0006574)

### Abstract

Musicians and music professionals are often considered to be expert listeners for listening tests on room acoustics. However, these tests often target acoustic parameters other than those typically relevant in music such as pitch, rhythm, amplitude, or timbre. To assess the expertise in perceiving and understanding room acoustical phenomena, a listening test battery was constructed to measure the perceptual sensitivity and cognitive abilities in the identification of rooms with different reverberation times and different spectral envelopes. Performance in these tests was related to data from the Goldsmiths Musical Sophistication Index, self-reported previous experience in music recording and acoustics, and academic knowledge on acoustics. The data from 102 participants show that sensory and cognitive abilities are both correlated significantly with musical training, analytic listening skills, recording experience, and academic knowledge on acoustics, whereas general interest in and engagement with music do not show any significant correlations. The regression models, using only significantly correlated criteria of musicality and professional expertise, explain only small to moderate amounts (11%–28%) of the variance in the “room acoustic listening expertise” across the different tasks of the battery. Thus, the results suggest that the traditional criteria for selecting expert listeners in room acoustics are only weak predictors of their actual performances.

## A global investigation of music listening practices: The influence of country latitude and seasons on music preferences



2021 | Konferenzveröffentlichung

*ICMPC-ESCOM 2021: 16th International Conference on Music Perception and Cognition/11th Triennial conference of the European Society for the Cognitive Sciences of Music*, 28-31 July 2021, Sheffield

Krause, Amanda; Baker J., David; Groarke, Jenny; Pereira, Ana I.; Liew, Kongmeng; Anglada-Tort, Manuel; Steffens, Jochen

**Published:** 2021

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/3946>

## The Impact of Source Effects on the Evaluation of Music for Advertising

2020 | Wissenschaftlicher Artikel

*Journal of Advertising Research*, 60, 3, Article-Nr. JAR-2020-016

Anglada-Tort, Manuel; Keller, Steve; Steffens, Jochen; Müllensiefen, Daniel

**Published:** 2020

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2351>

**Digital Object Identifier:** [10.2501/JAR-2020-016](https://doi.org/10.2501/JAR-2020-016)

## Towards a common terminology for music branding campaigns



2020 | Wissenschaftlicher Artikel

*Journal of Marketing Management*, 36, 1-2, S. 176-209

Herzog, Martin; Lepa, Steffen; Egermann, Hauke; Schoenrock, Andreas; Steffens, Jochen

**Published:** 2020

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2356>

**Digital Object Identifier:** [10.1080/0267257X.2020.1713856](https://doi.org/10.1080/0267257X.2020.1713856)

## From acceleration to rhythmicity: Smartphone-assessed movement predicts properties of music



2020 | Wissenschaftlicher Artikel

*Journal of New Music Research*, 49, 7, S. 1-14

Irrgang, Melanie; Steffens, Jochen; Egermann, Hauke

**Published:** 2020

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2357>

**Digital Object Identifier:** [10.1080/09298215.2020.1715447](https://doi.org/10.1080/09298215.2020.1715447)

## A computational model for predicting perceived musical expression in branding scenarios

2020 | Wissenschaftlicher Artikel

*Journal of New Music Research*, 49, 4, S. 387-402

Lepa, Steffen; Herzog, Martin; Steffens, Jochen; Schoenrock, Andreas; Egermann, Hauke

<b>Published:</b>	2020
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2359">https://opus4.kobv.de/opus4-hs-duesseldorf/2359</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.1080/09298215.2020.1778041">10.1080/09298215.2020.1778041</a>

Popular Music as Entertainment Communication: How Perceived Semantic Expression Explains Liking of Previously Unknown Music



2020 | Wissenschaftlicher Artikel

*Media and Communication*, 8, 3, S. 191-204

Lepa, Steffen; Steffens, Jochen; Herzog, Martin; Egermann, Hauke

<b>Published:</b>	2020
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2360">https://opus4.kobv.de/opus4-hs-duesseldorf/2360</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.17645/mac.v8i3.3153">10.17645/mac.v8i3.3153</a>

Singing in different rooms: Common or individual adaptation patterns to the acoustic conditions?



2020 | Wissenschaftlicher Artikel

*The Journal of the Acoustical Society of America*, 147, 2, Article-Nr. EL132-EL137

Luizard, Paul; Steffens, Jochen; Weinzierl, Stefan

<b>Published:</b>	2020
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2361">https://opus4.kobv.de/opus4-hs-duesseldorf/2361</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.1121/10.0000715">10.1121/10.0000715</a>

The influence of film music on moral judgments of movie scenes and felt emotions

2020 | Wissenschaftlicher Artikel

*Psychology of Music*, 48, S. 3-17

Steffens, Jochen

<b>Published:</b>	2020
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2367">https://opus4.kobv.de/opus4-hs-duesseldorf/2367</a>

The effect of inattention and cognitive load on unpleasantness judgments of environmental sounds

2020 | Wissenschaftlicher Artikel

*Applied Acoustics*, 164, Article-Nr. 107278

*Steffens, Jochen; Müller, Franz; Schulz, Melanie; Gibson, Samuel*

**Published:** 2020  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2370>  
**Digital Object Identifier:** [10.1016/j.apacoust.2020.107278](https://doi.org/10.1016/j.apacoust.2020.107278)

Modelling evaluations of low-level sounds in everyday situations using linear machine learning for variable selection  CC BY

2020 | Wissenschaftlicher Artikel

*Frontiers in Psychology*, 11, Article-Nr. 570761

*Versümer, Siegbert; Steffens, Jochen; Blättermann, Patrick; Becker-Schweitzer, Jörg*



**Published:** 2020

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2377>

**Digital Object Identifier:** [10.3389/fpsyg.2020.570761](https://doi.org/10.3389/fpsyg.2020.570761)

Zum Einfluss der Akustik auf die Qualität von Restaurants. Eine Feldstudie 

2020 | Konferenzveröffentlichung

*Fortschritte der Akustik - DAGA 2020: 46. Deutsche Jahrestagung für Akustik*, S. 854-857

*Wilczek, Tobias; Steffens, Jochen; Weinzierl, Stefan*

**Published:** 2020  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2534>  
**Digital Object Identifier:** [10.14279/depositonce-9999](https://doi.org/10.14279/depositonce-9999)

Gibt es raumakustische Hörexpertise? 

2020 | Sammelbandbeitrag / Buchkapitel

*Fortschritte der Akustik - DAGA 2020: 46. Deutsche Jahrestagung für Akustik*, S. 858-861

*von Berg, Markus; Steffens, Jochen; Müllensiefen, Daniel; Weinzierl, Stefan*

<b>Published:</b>	2020
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2563">https://opus4.kobv.de/opus4-hs-duesseldorf/2563</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.14279/depositonce-9998">10.14279/depositonce-9998</a>

Modellierung von Publikumsgeräuschen bei Veranstaltungen mit Sprache und Musik 

2020 | Konferenzveröffentlichung

*Fortschritte der Akustik - DAGA 2020: 46. Deutsche Jahrestagung für Akustik, S. 850-853*

*Böldt, Sebastian; Steffens, Jochen; Büttner, Clemens; Weinzierl, Stefan*

<b>Published:</b>	2020
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2564">https://opus4.kobv.de/opus4-hs-duesseldorf/2564</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.14279/depositonce-9991">10.14279/depositonce-9991</a>

Names and titles matter: The impact of linguistic fluency and the affect heuristic on aesthetic and value judgements of music

2019 | Wissenschaftlicher Artikel

*Psychology of Aesthetics, Creativity, and the Arts, 13, 3, S. 277-292*

*Anglada-Tort, Manuel; Steffens, Jochen; Müllensiefen, Daniel*

<b>Published:</b>	2019
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2352">https://opus4.kobv.de/opus4-hs-duesseldorf/2352</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.1037/aca0000172">10.1037/aca0000172</a>

Modeling Music-Selection Behavior in Everyday Life: A Multilevel Statistical Learning Approach and Mediation Analysis of Experience Sampling Data 

2019 | Wissenschaftlicher Artikel

*Frontiers in psychology, 10, Article-Nr. 390*

*Greb, Fabian; Steffens, Jochen; Schlotz, Wolff*

<b>Published:</b>	2019
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2355">https://opus4.kobv.de/opus4-hs-duesseldorf/2355</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.3389/fpsyg.2019.00390">10.3389/fpsyg.2019.00390</a>

## Abstract

Music listening has become a highly individualized activity with smartphones and music streaming services providing listeners with absolute freedom to listen to any kind of music in any situation. Until now, little has been written about the processes underlying the selection of music in daily life. The present study aimed to disentangle some of the complex processes among the listener, situation, and functions of music listening involved in music selection. Utilizing the experience sampling method, data were collected from 119 participants using a smartphone application. For 10 consecutive days, participants received 14 prompts using stratified-random sampling throughout the day and reported on their music-listening behavior. Statistical learning procedures on multilevel regression models and multilevel structural equation modeling were used to determine the most important predictors and analyze mediation processes between person, situation, functions of listening, and music selection. Results revealed that the features of music selected in daily life were predominantly determined by situational characteristics, whereas consistent individual differences were of minor importance. Functions of music listening were found to act as a mediator between characteristics of the situation and music-selection behavior. We further observed several significant random effects, which indicated that individuals differed in how situational variables affected their music selection behavior. Our findings suggest a need to shift the focus of music-listening research from individual differences to situational influences, including potential person-situation interactions.

Effects of congruity of combined audiovisual stimuli in movie scenes on perceived emotions in the context of film reception

2019 | Wissenschaftlicher Artikel

*Psychomusicology: Music, Mind & Brain*, 29, 4, S. 200-208

Rosenfeld, Ninett; Steffens, Jochen

**Published:** 2019

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2362>

**Digital Object Identifier:** [10.1037/pmu0000242](https://doi.org/10.1037/pmu0000242)

Room acoustics, soundscapes and customer satisfaction in restaurants – a field study



2019 | Konferenzveröffentlichung

*Proceedings of the International Symposium on Room Acoustics (ISRA) 2019, Amsterdam, Netherlands.*, S. 854-857

Wilczek, Tobias; Steffens, Jochen; Weinzierl, Stefan

**Published:** 2019

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2533>

**Digital Object Identifier:** [10.18154/RWTH-CONV-240148](https://doi.org/10.18154/RWTH-CONV-240148)

Cognitive load influences the evaluation of complex acoustical scenarios



2019 | Konferenzveröffentlichung  
Proceedings of the 23rd International Congress on Acoustics  
Steffens, Jochen; Müller, Franz; Schulz, Melanie; Gibson, Samuel

**Published:** 2019  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2544>  
**Digital Object Identifier:** [10.18154/RWTH-CONV-239577](https://doi.org/10.18154/RWTH-CONV-239577)

### The Behavioral Economics of Music

2019 | Sammelbandbeitrag / Buchkapitel  
Proceedings of the Prague Conference on Behavioral Sciences (PCBS), Prague, Czech Republic  
Anglada-Tort, Manuel; Steffens, Jochen; Müllensiefen, Daniel

**Published:** 2019  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2562>

### Extreme response style in listening tests



2019 | Konferenzveröffentlichung  
Proceedings of the 23rd International Congress on Acoustics: integrating 4th EAA Euroregio 2019 : 9-13 September 2019 in Aachen, Germany  
Jakobs, Christoph; Böldt, Sebastian; Selbach, Dustin; Steffens, Jochen

**Published:** 2019  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2584>  
**Digital Object Identifier:** [10.18154/RWTH-CONV-239966](https://doi.org/10.18154/RWTH-CONV-239966)

### Adaptation of singers to physical and virtual room acoustics



2019 | Konferenzveröffentlichung  
Proceedings of the International Symposium on Room Acoustics (ISRA) 2019, Amsterdam, Netherlands.  
Luizard, Paul; Steffens, Jochen; Weinzierl, Stefan

**Published:** 2019  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2588>  
**Digital Object Identifier:** [10.18154/RWTH-CONV-240115](https://doi.org/10.18154/RWTH-CONV-240115)

## Music listening as self-enhancement

2018 | Wissenschaftlicher Artikel  
*Psychology of Music*, 10, 2, S. 1-19  
Elvers, Paul; Fischinger, Timo; Steffens, Jochen

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2349>

**Digital Object Identifier:** [10.1177/0305735617707354](https://doi.org/10.1177/0305735617707354)

## Personal and situational influences on the functions of music listening

2018 | Wissenschaftlicher Artikel  
*Psychology of Music*, 46, 6, S. 763-794  
Greb, Fabian; Schlotz, Wolff; Steffens, Jochen

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2353>

## Understanding music-selection behavior via statistical learning



2018 | Wissenschaftlicher Artikel  
*Music & Science*, 1, 2, S. 1-17  
Greb, Fabian; Steffens, Jochen; Schlotz, Wolff

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2354>

**Digital Object Identifier:** [10.1177/2059204318755950](https://doi.org/10.1177/2059204318755950)

## "Bridging the Semantic Gap" - Kann der semantische Ausdruck von Musik mithilfe von akustischen Signaleigenschaften vorhergesagt werden?

2018 | Konferenzveröffentlichung  
Tagungsband - DAGA 2018  
Steffens, Jochen; Lepa, Steffen; Herzog, Martin; Schönrock, Andreas; Egermann, Hauke

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2542>

## Kann Filmmusik moralische Urteile von dargebotenen Filmhandlungen beeinflussen?

2018 | Konferenzveröffentlichung

34. Abstract-Band zur Jahrestagung der Deutschen Gesellschaft für Musikpsychologie (DGM)

Steffens, Jochen

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2556>

## Patterns of situational cues and characteristics contributing to music listening in daily life: Towards a taxonomy of music listening situations

2018 | Konferenzveröffentlichung

Proceedings of the 15th International Conference on Music Perception and Cognition (ICMPC), Graz, Austria.

Steffens, Jochen; Greb, Fabian; Schlotz, Wolff

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2558>

## Source-Effekte, ästhetische Bewertung und geschätzte Lizenzkosten im Kontext von Werbemusik

2018 | Sammelbandbeitrag / Buchkapitel

34. Abstract-Band zur Jahrestagung der Deutschen Gesellschaft für Musikpsychologie (DGM):

7.–9. September 2018, Institut für Musikwissenschaft und Musikpädagogik der Justus-Liebig-Universität

Anglada-Tort, Manuel; Keller, Steve; Steffens, Jochen; Müllensiefen, Daniel

**Published:** 2018

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2561>

## Situational influences on music selection behavior in daily life: An experience sampling study

2018 | Konferenzveröffentlichung

Proceedings of the 15th International Conference on Music Perception and Cognition (ICMPC),

Graz, Austria.

Greb, Fabian; Steffens, Jochen; Schlotz, Wolff

<b>Published:</b>	2018
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2580">https://opus4.kobv.de/opus4-hs-duesseldorf/2580</a>

## Smartphone-Assessed Movement Predicts Music Properties

2018 | Konferenzveröffentlichung

*Proceedings of the 5th International Conference on Movement and Computing, ICPS, S. 1-4*

Irrgang, Melanie; Steffens, Jochen; Egermann, Hauke

<b>Published:</b>	2018
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2583">https://opus4.kobv.de/opus4-hs-duesseldorf/2583</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.1145/3212721.3212852">10.1145/3212721.3212852</a>

## Non-Participant Observation Methods for Soundscape Design and Urban Planning

2018 | Konferenzveröffentlichung

*Handbook of research on perception-driven approaches to urban assessment and design, S. 73-99*

Lavia, Lisa; Witchel, Harry J.; Aletta, Francesco; Steffens, Jochen; Fiebig, André; Kang, Jian; Howes, Christine; Healey, Patrick G. T.

<b>Published:</b>	2018
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2587">https://opus4.kobv.de/opus4-hs-duesseldorf/2587</a>

## The Sound of Success: Investigating Cognitive and Behavioral Effects of Motivational Music in Sports

2017 | Wissenschaftlicher Artikel

*Frontiers in psychology, 8, Article-Nr. 2026*

Elvers, Paul; Steffens, Jochen

<b>Published:</b>	2017
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2350">https://opus4.kobv.de/opus4-hs-duesseldorf/2350</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.3389/fpsyg.2017.02026">10.3389/fpsyg.2017.02026</a>

### Abstract

Listening to music before, during, or after sports is a common phenomenon, yet its functions and effects on performance, cognition, and behavior remain to be investigated. Listening to music before, during, or after sports is a common phenomenon, yet its functions and effects on performance, cognition, and behavior remain to be investigated. In this study we present a novel approach to the role of music in sports and exercise that focuses on the notion of musical self-enhancement (Elvers, 2016). We derived the following hypotheses from this framework: listening to motivational music will (i) enhance self-evaluative cognition, (ii) improve performance in a ball game, and (iii) evoke greater risk-taking behavior. To evaluate

the hypotheses, we conducted a between-groups experiment ( $N = 150$ ) testing the effectiveness of both an experimenter playlist and a participant-selected playlist in comparison to a no-music control condition. All participants performed a ball-throwing task developed by Decharms and Davé (1965), consisting of two parts: First, participants threw the ball from fixed distances into a funnel basket. During this task, performance was measured. In the second part, the participants themselves chose distances from the basket, which allowed their risk-taking behavior to be assessed. The results indicate that listening to motivational music led to greater risk taking but did not improve ball-throwing performance. This effect was more pronounced in male participants and among those who listened to their own playlists. Furthermore, self-selected music enhanced state self-esteem in participants who were performing well but not in those who were performing poorly. We also discuss further implications for the notion of musical self-enhancement. // Listening to music before, during, or after sports is a common phenomenon, yet its functions and effects on performance, cognition, and behavior remain to be investigated. In this study we present a novel approach to the role of music in sports and exercise that focuses on the notion of musical self-enhancement (Elvers, 2016). We derived the following hypotheses from this framework: listening to motivational music will (i) enhance self-evaluative cognition, (ii) improve performance in a ball game, and (iii) evoke greater risk-taking behavior. To evaluate the hypotheses, we conducted a between-groups experiment ( $N = 150$ ) testing the effectiveness of both an experimenter playlist and a participant-selected playlist in comparison to a no-music control condition. All participants performed a ball-throwing task developed by Decharms and Davé (1965), consisting of two parts: First, participants threw the ball from fixed distances into a funnel basket. During this task, performance was measured. In the second part, the participants themselves chose distances from the basket, which allowed their risk-taking behavior to be assessed. The results indicate that listening to motivational music led to greater risk taking but did not improve ball-throwing performance. This effect was more pronounced in male participants and among those who listened to their own playlists. Furthermore, self-selected music enhanced state self-esteem in participants who were performing well but not in those who were performing poorly. We also discuss further implications for the notion of musical self-enhancement.

## Situational and person-related factors influencing momentary and retrospective soundscape evaluations in day-to-day life

2017 | Wissenschaftlicher Artikel

*The Journal of the Acoustical Society of America*, 141, 3, S. 1414-1425

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2376>

**Digital Object Identifier:** [10.1121/1.4976627](https://doi.org/10.1121/1.4976627)

## Entwicklung eines Systems zur automatischen Musikempfehlung im Kontext des Audio Brandings

2017 | Konferenzveröffentlichung

*Fortschritte der Akustik - DAGA 2017*, S. 198-201

Steffens, Jochen; Lepa, Steffen; Egermann, Hauke; Schönrock, Andreas; Herzog, Martin

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2541>

High-level chord features extracted from audio can predict perceived musical expression

2017 | Konferenzveröffentlichung

*Extended Abstracts for the Late-Breaking Demo Session of the 18th ISMIR Conference 2017*

*Steffens, Jochen; Lepa, Steffen; Herzog, Martin; Schönrock, Andreas; Peeters, Geoffroy; Egermann, Hauke*

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2543>

Automatische Vorhersage musikinduzierter Attributassoziationen im Kontext von  Audio-Branding

2017 | Konferenzveröffentlichung

*33. Abstract-Band zur Jahrestagung der Deutschen Gesellschaft für Musikpsychologie (DGM)*

*Egermann, Hauke; Lepa, Steffen; Herzog, Martin; Schönrock, Andreas; Steffens, Jochen*

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2566>

Development and Evaluation of a General Attribute Inventory for Music in  Branding

2017 | Konferenzveröffentlichung

*Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music (ESCOM): "The expressive interaction with music" (Ghent, Belgium)*

*Egermann, Hauke; Lepa, Steffen; Schönrock, Andreas; Herzog, Martin; Steffens, Jochen*

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2567>

Motivational music influences decision-making processes but not the execution of a ball-throwing task

2017 | Konferenzveröffentlichung

*Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music (ESCOM): "The expressive interaction with music" (Ghent, Belgium)*

*Elvers, Paul; Steffens, Jochen*

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2572>

The influence of motivational music on risk-behavior and ball-throwing performance

2017 | Konferenzveröffentlichung

TeaP 2017: Abstracts of the 59th Conference of Experimental Psychologists : Dresden, Germany, March 26-29, 2017

Elvers, Paul; Steffens, Jochen

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2573>

Situational and dispositional influences on the functions of music listening

2017 | Sammelbandbeitrag / Buchkapitel

Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music (ESCOM): "The expressive interaction with music" (Ghent, Belgium)

Greb, Fabian; Schlotz, Wolff; Steffens, Jochen

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2577>

Wer hört wann was? – Modellierung des Musikauswahlverhaltens unter Berücksichtigung von Person und Situation

2017 | Konferenzveröffentlichung

33. Abstract-Band zur Jahrestagung der Deutschen Gesellschaft für Musikpsychologie (DGM)

Greb, Fabian; Steffens, Jochen; Schlotz, Wolff

**Published:** 2017

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2579>

Predicting Musical Meaning in Audio Branding Scenarios



2017 | Konferenzveröffentlichung

Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music (ESCOM): "The expressive interaction with music" (Ghent, Belgium), S. 75-79

Herzog, Martin; Lepa, Steffen; Egermann, Hauke; Steffens, Jochen; Schönrock, Andreas

<b>Published:</b>	2017
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2581">https://opus4.kobv.de/opus4-hs-duesseldorf/2581</a>

“Shake it out” - How Motion Capture and Smartphone-Assessed Movement Can Predict Properties of Music

2017 | Sammelbandbeitrag / Buchkapitel

33. Abstract-Band zur Jahrestagung der Deutschen Gesellschaft für Musikpsychologie (DGM)  
Irrgang, Melanie; Steffens, Jochen; Egermann, Hauke

<b>Published:</b>	2017
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2582">https://opus4.kobv.de/opus4-hs-duesseldorf/2582</a>

How do personality traits influence the effect of listening to sad music on induced musical emotions?

2017 | Sammelbandbeitrag / Buchkapitel

Proceedings of the 25th Anniversary Conference of the European Society for the Cognitive Sciences of Music (ESCOM): “The expressive interaction with music” (Ghent, Belgium)  
Karnop, Christoph; Steffens, Jochen

<b>Published:</b>	2017
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2585">https://opus4.kobv.de/opus4-hs-duesseldorf/2585</a>

Smartphones as research tools in ambulatory assessment: Effects of own or loan devices on adherence, response attrition, usability, and reactivity

2017 | Konferenzveröffentlichung

Proceedings of the 5th Conference of the Society for Ambulatory Assessment (SAA 2017),  
Luxembourg

Schlotz, Wolff; Greb, Fabian; Steffens, Jochen

<b>Published:</b>	2017
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2590">https://opus4.kobv.de/opus4-hs-duesseldorf/2590</a>

Neue Einblicke in die Bewertung von Soundscapes mithilfe der Experience Sampling Methode [New Insights into Soundscape Evaluations Using the Experience Sampling Method]

2016 | Wissenschaftlicher Artikel

Zeitschrift für Lärmbekämpfung, 11, 1, S. 20-22

Steffens, Jochen

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2366>

Der Einfluss von Musik auf die Bewertung der Umwelt

2016 | Konferenzveröffentlichung

Fortschritte der Akustik - DAGA 2016 (Aachen)

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2539>

Music influences the perception of our acoustic and visual environment

2016 | Sammelbandbeitrag / Buchkapitel

Proceedings of the 45th International Congress and Exposition on Noise Control Engineering,  
INTER-NOISE 2016, S. 7155-7160

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2540>

Why listen to music right now? – Towards an inventory measuring the functions of music listening under situational influences

2016 | Konferenzveröffentlichung

Proceedings of the 14th International Conference on Music Perception and Cognition (ICMPC),  
San Francisco (CA), USA, S. 842-

Steffens, Jochen; Greb, Fabian; Schlotz, Wolff

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2557>

How empowering music influences performance and risk-behavior in sports: a randomized controlled trial

2016 | Konferenzveröffentlichung

Proceedings of the Congress of the International Association of Empirical Aesthetics (Wien,

Österreich)

Elvers, Paul; Steffens, Jochen

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2570>

The influence of empowering music on performance and risk-behavior in sports: a randomized controlled trial (RCT)

2016 | Sammelbandbeitrag / Buchkapitel

*Proceedings of the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco (CA), USA, S. 866*

Elvers, Paul; Steffens, Jochen

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2571>

How do the functions of music listening vary across situations and persons?

2016 | Konferenzveröffentlichung

*SysMus 2016: Proceedings of the International Conference of Students of Systematic Musicology 16: Programme, abstracts & proceedings*

Greb, Fabian; Schlotz, Wolff; Steffens, Jochen

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2574>

Situational and dispositional influences on the functions of music listening

2016 | Sammelbandbeitrag / Buchkapitel

*Proceedings of the 14th International Conference on Music Perception and Cognition (ICMPC), San Francisco (CA), USA, S. 834*

Greb, Fabian; Schlotz, Wolff; Steffens, Jochen

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2575>

Wie hören wir Musik? Situative und personenbezogene Einflussfaktoren auf die Funktionen des Musikhörens

2016 | Sammelbandbeitrag / Buchkapitel

*Abstract-Band zur Jahrestagung der Deutschen Gesellschaft für Musikpsychologie, S. 40*

Greb, Fabian; Schlotz, Wolff; Steffens, Jochen

**Published:** 2016

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2576>

### Trend Effects of Momentary and Retrospective Soundscape Evaluations

2015 | Wissenschaftlicher Artikel

*Acta Acustica united with Acustica, 101, S. 713-722*

Steffens, Jochen; Guastavino, Catherine

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2368>

### Measuring Momentary and Retrospective Soundscape Evaluations in Everyday Life by Means of the Experience Sampling Method

2015 | Wissenschaftlicher Artikel

*The Brunswik Society Newsletter, 30, S. 45-48*

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2375>

### Die Experience Sampling Methode - Ein Werkzeug der Zukunft für die Soundscape-Forschung?

2015 | Konferenzveröffentlichung

*Fortschritte der Akustik*

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2536>

### How does music affect soundscape evaluation?

2015 | Konferenzveröffentlichung

*Proceedings of the Ninth Triennial Conference of the European Society for the Cognitive*

Sciences of Music (ESCOM)

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2537>

## New Insights into Soundscape Evaluations Using the Experience Sampling Method



2015 | Konferenzveröffentlichung

Proceedings of Euronoise 2015, 31 May - 3 June, Maastricht, S. 1495-1500

Steffens, Jochen; Steele, Daniel; Guastavino, Catherine

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2538>

## Zusammenhang zwischen Bewertungen der Angenehmheit von einzelnen und miteinander kombinierten Geräuschen

2015 | Konferenzveröffentlichung

Fortschritte der Akustik

Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2547>

## The role of activity in urban soundscape evaluations



2015 | Konferenzveröffentlichung

Proceedings of Euronoise 2015, 31 May - 3 June, Maastricht, S. 1507-1512

Steele, Daniel; Steffens, Jochen; Guastavino, Catherine

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2549>

## Empowering music - music-induced manipulations of self-esteem

2015 | Konferenzveröffentlichung

Proceedings of the Ninth Triennial Conference of the European Society for the Cognitive

*Sciences of Music (ESCOM), CD-ROM*  
*Elvers, Paul; Fischinger, Timo; Steffens, Jochen*

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2568>

Musikhören als Selbst-Regulation: Musikinduzierte Manipulationen des impliziten und momentanen Selbstwerts

2015 | Sammelbandbeitrag / Buchkapitel  
31. Jahrestagung der Deutschen Gesellschaft für Musikpsychologie (DGM)  
*Elvers, Paul; Fischinger, Timo; Steffens, Jochen*

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2569>

Sound Quality evaluation of acoustical environments with multiple sources

2015 | Konferenzveröffentlichung  
Proceedings of Euronoise 2015, 31 May - 3 June, Maastricht  
*Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg*

**Published:** 2015

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2597>

Comparison of momentary and retrospective soundscape evaluations

2014 | Wissenschaftlicher Artikel  
Journal of the Acoustical Society of America, 135, 2, S. 2187  
*Steffens, Jochen; Petrenko, Johannes; Guastavino, Catherine*

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2371>

**Digital Object Identifier:** [10.1121/1.4877121](https://doi.org/10.1121/1.4877121)

Können Wassergeräusche zur Minderung der Lästigkeit von Straßenverkehrslärm im Wohnumfeld [Can water sounds contribute to a reduced annoyance caused by road traffic noise in living environments?] beitragen?

2014 | Wissenschaftlicher Artikel  
Zeitschrift für Lärmbekämpfung, 9, 4, S. 172-178  
Steffens, Jochen; Skoda, Sabrina; Becker-Schweitzer, Jörg; Heinze, Michael

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2374>

Soundscaping im häuslichen Umfeld - Können Wassergeräusche Straßenverkehrslärm erträglicher machen? 

2014 | Sammelbandbeitrag / Buchkapitel  
"Fortschritte der Akustik", S. 513-514  
Steffens, Jochen; Skoda, Sabrina; Becker-Schweitzer, Jörg; Kameier, Jörg; Heinze, Michael

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2535>

Looking back by looking into the future – The role of anticipation and trend effects in retrospective judgments of musical excitement

2014 | Konferenzveröffentlichung  
Proceedings of the Congress of the International Association of Empirical Aesthetics, New York City (NY), USA  
Steffens, Jochen; Guastavino, Catherine

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2559>

Auralisierung von Verkehrsgeräuschen mithilfe von Max 6

2014 | Konferenzveröffentlichung  
"Fortschritte der Akustik"  
Büchel, Joachim; Becker-Schweitzer, Jörg; Steffens, Jochen

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2565>

Vergleich von momentanen und retrospektiven Bewertungen natürlicher Soundscapes

2014 | Konferenzveröffentlichung  
"Fortschritte der Akustik"  
Petrenko, Johannes; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2589>

Contribution of single sounds to sound quality assessments of multi-source environments

2014 | Konferenzveröffentlichung  
*Proceedings of Internoise (Melbourne)*  
Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2594>

Geräuschbewertungen in komplexen akustischen Umgebungen – Wie tragen einzelne Schallquellen zur subjektiven Bewertung der Lästigkeit einer Soundscape bei? 

2014 | Konferenzveröffentlichung  
"Fortschritte der Akustik", S. 511-512  
Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2595>

Road traffic noise annoyance in domestic environments can be reduced by water sounds

2014 | Konferenzveröffentlichung  
*Proceedings of Forum Acusticum 2014 (Krakow), CD-ROM*  
Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2014

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2596>

Geräuscharme Reifen - Händlerempfehlungen in der Praxis

2013 | Wissenschaftlicher Artikel

Zeitschrift für Lärmbekämpfung, 8, 3, S. 118-121

Wagner, Stefan; Hallmann, Dijana; Steffens, Jochen; Becker-Schweitzer, Jörg; Kameier, Jörg

**Published:** 2013

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2378>

Geräuschbeurteilung im Kontext des Wohnumfeldes

2013 | Konferenzveröffentlichung

ALD-Winterveranstaltung "Nachbarschaftslärm"

Steffens, Jochen

**Published:** 2013

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2551>

Realism and ecological validity of sound quality experiments on household appliances

2013 | Sammelbandbeitrag / Buchkapitel

Soundscape of European Cities and Landscapes: COST TD0804 Final conference :

Soundscape of European cities and landscapes Conference location Merano, Italy, 2013-03-22, S. 132-135

Steffens, Jochen

**Published:** 2013

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2552>

### Abstract

Test environments in sound quality research often significantly differ from human's everyday world. Hence the claim for ecological validity of such experiments is reasonable, but too vague in its bare formulation. The estimation of ecological validity requires theoretical knowledge about the meaning and the totality of factors influencing everyday listening and their interaction. Therefore the influence of "reality factors" on the sound evaluation of household appliances was investigated within the framework of nine experiments. These tests were performed in four different settings with varied reality degrees. The psychological realism and the perceived face validity of the tests were examined by means of interviews. The results reveal, on the one hand, that stimuli are perceived as more pleasant in everyday-like environments. The analysis of the relative judgments shows, on the other hand, that the influence of the experimental realism is moderated by a number of factors. These are the saliency and meaning of the sounds, differences between the assessed devices, and personality traits. The correlation and regression analysis confirms that the perceived sound character is widely independent from experimental realism. However, there is great empirical evidence, that valid assessments of sound quality require the reconstruction of everyday attention and action processes.

When do we judge sounds? – Relevant everyday situations for the estimation of ecological validity of indoor soundscape experiments 

2013 | Konferenzveröffentlichung

*International Congress on Acoustics (ICA) 2013, Montréal, Canada*

Steffens, Jochen

**Published:** 2013

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2553>

**Digital Object Identifier:** [10.1121/1.4800346](https://doi.org/10.1121/1.4800346)

"Wie viel Realität braucht der Mensch?" - Untersuchungen zum Einfluss der Versuchsumgebung auf die Geräuschbeurteilung von Haushaltsgeräten 

2013 | Dissertation

Steffens, Jochen

**Published:** 2013

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2554>

**Digital Object Identifier:** [10.14279/depositonce-3732](https://doi.org/10.14279/depositonce-3732)

The Impact of Music Preference on the Physiological Activation of the Human Body due to Music Reception

2013 | Konferenzveröffentlichung

*Fortschritte der Akustik 2013, DAGA-AIA, Merano, Italy, CD-ROM*

Greb, Fabian; Steffens, Jochen

**Published:** 2013

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2578>

Subjective evaluation and psychoacoustic analysis of the sound quality of low-noise asphalt on motorways in North-Rhine Westphalia

2013 | Konferenzveröffentlichung

*Fortschritte der Akustik 2013, DAGA-AIA, Merano, Italy, CD-ROM*

Kärst, Michaela; Steffens, Jochen; Skoda, Sabrina

**Published:** 2013  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2586>

### Investigations on subconscious perception of product sounds



2013 | Konferenzveröffentlichung  
*Fortschritte der Akustik 2013*  
Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2013  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2593>

### Einfluss von Beschleunigungskräften auf die Geräuschbewertung im Fahrzeuginnenraum

2012 | Wissenschaftlicher Artikel  
*Zeitschrift für Lärmbekämpfung*, 7, 1, S. 24-28  
Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2012  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2363>

### Urteilsbildung bei der subjektiven Bewertung des Innengeräusches von Elektrofahrzeugen

2012 | Wissenschaftlicher Artikel  
*Zeitschrift für Lärmbekämpfung*, 7, 3, S. 133-135  
Steffens, Jochen

**Published:** 2012  
**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2365>

### Human-machine interaction as influencing factor of indoor soundscape evaluation

2012 | Wissenschaftlicher Artikel  
*The Journal of the Acoustical Society of America*, 131, 4, Article-Nr. 3438  
Steffens, Jochen; Schulte-Fortkamp, Brigitte; Becker-Schweitzer, Jörg

**Published:** 2012

<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2372">https://opus4.kobv.de/opus4-hs-duesseldorf/2372</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.1121/1.4708899">10.1121/1.4708899</a>

Geräuschbewertung von Haushaltsgeräten im Labor und in der Realität [Sound evaluations of household appliances in laboratory and in real environments]

2012 | *Wissenschaftlicher Artikel*

*Zeitschrift für Lärmbekämpfung*, 7, 2, S. 64-68

Steffens, Jochen; Schulte-Fortkamp, Brigitte; Becker-Schweitzer, Jörg

**Published:** 2012

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2373>

Mensch-Maschine-Interaktion als Einflussfaktor bei der Geräuschbewertung im akustischen Produkt-Design

2012 | *Konferenzveröffentlichung*

*Fortschritte der Akustik*

Steffens, Jochen; Schulte-Fortkamp, Brigitte; Becker-Schweitzer, Jörg

**Published:** 2012

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2546>

Einfluss von Fahrzeugginnengeräuschen auf die subjektive Bewertung von Beschleunigung

2012 | *Konferenzveröffentlichung*

*Fortschritte der Akustik*

Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

**Published:** 2012

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2591>

Multisensory interaction – A comparative study on driving sound evaluation in moving base and fixed base driving simulators

2012 | *Konferenzveröffentlichung*

*Proceedings of the Driving Simulation Conference 2012, CD-ROM*

Skoda, Sabrina; Steffens, Jochen; Becker-Schweitzer, Jörg

<b>Published:</b>	2012
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2592">https://opus4.kobv.de/opus4-hs-duesseldorf/2592</a>

## Structurized sound design process of electric vehicle interior sound

2011 | Wissenschaftlicher Artikel

*Journal of the Acoustical Society of America, 130, 4, Article-Nr. 2546*

Küppers, Thomas; Biermann, Jan-Welm; Steffens, Jochen

<b>Published:</b>	2011
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2358">https://opus4.kobv.de/opus4-hs-duesseldorf/2358</a>

## Auditory-proprioceptive interaction – How do acceleration forces influence the evaluation of driving sounds?

2011 | Wissenschaftlicher Artikel

*Journal of the Acoustical Society of America, 130, 4, Article-Nr. 2546*

Skoda, Sabrina; Steffens, Jochen; Küppers, Thomas

<b>Published:</b>	2011
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2364">https://opus4.kobv.de/opus4-hs-duesseldorf/2364</a>

## Psychological factors influencing the evaluation of electric vehicle interior noise

2011 | Wissenschaftlicher Artikel

*Journal of the Acoustical Society of America, 130, 4, S. 2546*

Steffens, Jochen; Küppers, Thomas; Skoda, Sabrina

<b>Published:</b>	2011
<b>Weblink:</b>	<a href="https://opus4.kobv.de/opus4-hs-duesseldorf/2369">https://opus4.kobv.de/opus4-hs-duesseldorf/2369</a>
<b>Digital Object Identifier:</b>	<a href="https://doi.org/10.1121/1.3655176">10.1121/1.3655176</a>

### Abstract

Increasing global awareness of the benefits of electromobility has brought about the need for new concepts in terms of the acoustic design of future vehicle generations. This includes both the creative design process and the development of suitable methods for the evaluation of target sounds by trial participants. The main difference between e-car sound surveys and those carried out on familiar sound categories is the potential consumer's lack of experience with electric vehicles. Thus the consumer has no, or very unspecific, expectations in this regard. Several studies have consequently shown that many subjects have to construct their personal frame of reference for evaluation within the listening experiment. However, this is possibly at odds with experience-based expectations relating to the sounds of conventional combustion engines. The result is a conflict of objectives between the traditional and the modern, familiarity and strangeness and not least between driving freedom and ecological awareness. In this context, the authenticity of the sound and the subjective interpretability of

the sound information also appear as moderator variables. Moreover, associations with other vehicle categories, for example streetcars, also influence the perceived sound quality. In the course of this contribution, these factors will be expounded and their influence on the evaluation of interior noise discussed.

## Design of domestic soundscapes - Evaluation of household appliances in laboratory and reality

2011 | Konferenzveröffentlichung

*Proceedings of Forum Acusticum 2011*

Steffens, Jochen; Schulte-Fortkamp, Brigitte; Becker-Schweitzer, Jörg

**Published:** 2011

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2545>

## Untersuchungen zum Einfluss von Beschleunigungskräften auf die Geräuschbewertung im Fahrzeuginnenraum

2011 | Sammelbandbeitrag / Buchkapitel

5. DEGA-Symposium "E-Mobilität & Akustik"

Skoda, Sabrina; Steffens, Jochen; Büchel, Joachim

**Published:** 2011

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2548>

## Psychologische Einflussfaktoren bei der Beurteilung des Innengeräusches von Elektrofahrzeugen

2011 | Sammelbandbeitrag / Buchkapitel

5. DEGA-Symposium "E-Mobilität & Akustik": 21. Oktober 2011, Stuttgart

Steffens, Jochen; Küppers, Thomas; Skoda, Sabrina

**Published:** 2011

**Weblink:** <https://opus4.kobv.de/opus4-hs-duesseldorf/2560>

## Untersuchung von Abbeiß- und Kaugeräuschen bei Gebäckkonsum

2007 | Masterarbeit / Diplomarbeit

Steffens, Jochen

**Published:** 2007

Weblink: <https://opus4.kobv.de/opus4-hs-duesseldorf/2550>

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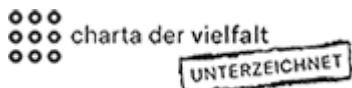


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