

Teachers' Assumptions About Musically Gifted Students

What Kind of Implicit Assumptions Regarding Behavior-, Personality, and Performance-Related Dimensions do (Prospective) Music School Teachers Hold About Allegedly Musically Gifted Students?

Theoretical Background

- Harmony theory (superiority through giftedness) vs. disharmony theory (vulnerability through giftedness) [1]
 - Results in the school context and in the musical domain predominantly in line with the disharmony stereotype [2]
 - Empirical and epidemiological evidence rather point in the direction of the harmony theory [3]
- Relevance: Stereotypical assumptions might impact motivational, behavioral, developmental, and performance-related aspects in teaching-learning contexts [4, 5]

Hypotheses

- H₁**: Music school teachers assess musically highly gifted students more positively in terms of performance and predominantly more negatively in terms of other behavioral characteristics and personality traits than musically averagely gifted ones.
- H₂**: A positively connoted social interaction between students moderates teachers' stereotypical assessment of musically highly gifted students; adding counter-stereotyping information has a compensation effect.
- H₃**: Variations in background information of a performing student (giftedness level, age, training duration) will influence teachers' implicit performance judgments and have an impact on their further lesson planning and goal setting.

Method

Participants

- $N = 211$ German music school teachers
 - $M = 45.00$ yrs ($SD = 14.23$)
 - 63% female
 - Working experience: $M = 20.89$ yrs ($SD = 13.59$)
 - 94% reported an activity in music teaching

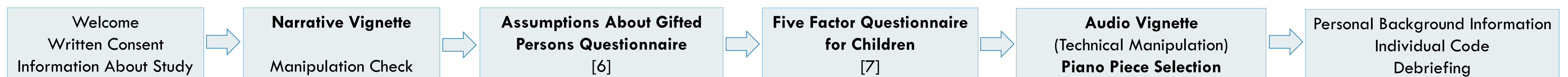
Design

- Experiment (online)
 - 2 (giftedness) x 2 (age) x 2 (training) x 2 (social interaction) factorial between-subjects design resulting in 16 conditions
 - Vignette approach

Measures

- Behavioral characteristics: Assumptions about gifted persons [6]
- Personality traits: Five factor questionnaire for children [7]
- Lesson planning: List of three piano pieces

Procedure (online questionnaire via SoSci Survey)



Materials

Imagine that today, together with a colleague, you were in charge of the children of your music school's orchestra at the final concert before the summer vacation. While your colleague leaves the concert hall for a short time during the break, you observe Siri, whom you already know from various events at the music school. Siri is **musically highly gifted**. She is **eight years old** and has been taking piano lessons at the music school for **two years**. [...]

Fig. 1. Narrative vignette (excerpt).



Fig. 2. Technical manipulation - music score of audio vignette (excerpt).

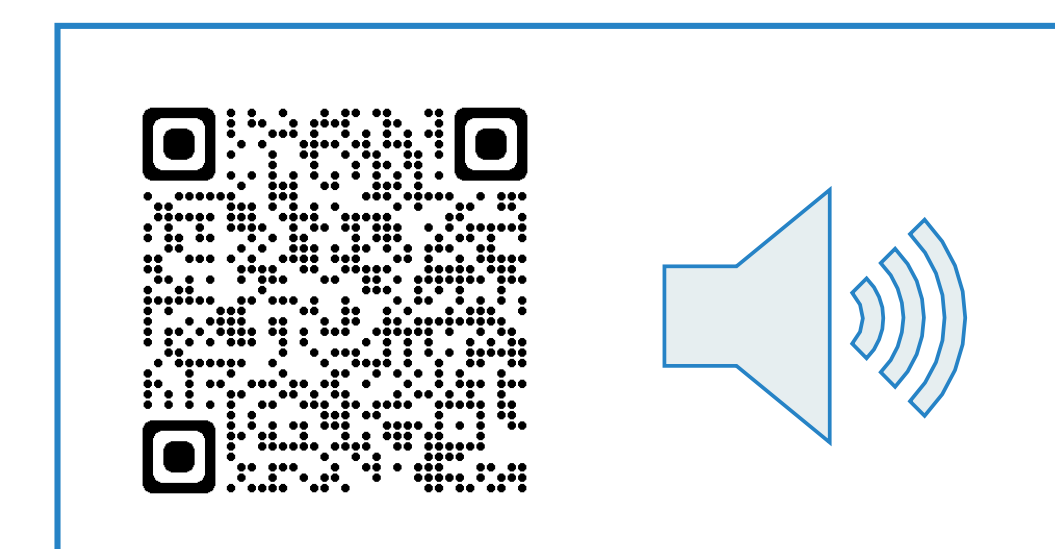


Fig. 3. QR-Code for the audio vignette (audio samples).

Results

- H₁** can be partially confirmed:
 - Significant main effects for both, level of giftedness and social interaction
 - Higher scores for musically gifted students in the subscales intellectual abilities ($F(1, 200) = 94.02, p < .001^{***}, \eta_p^2 = .32$), musical abilities ($F(1, 199) = 121.93, p < .001^{***}, \eta_p^2 = .38$), performance and motivation ($F(1, 200) = 65.96, p < .001^{***}, \eta_p^2 = .25$), conscientiousness ($F(1, 201) = 17.42, p < .001^{***}, \eta_p^2 = .08$), and openness for new experiences ($F(1, 201) = 32.49, p < .001^{***}, \eta_p^2 = .14$) [see Fig. 4]
 - Significant effects for social interaction in all subscales except musical abilities and conscientiousness
- H₂** cannot be confirmed: A positive social interaction has no compensation effect (no significant interaction effect)
- H₃** cannot be confirmed: No significant correlation between independent variables and piece selection for further instruction
 - Level of giftedness ($\chi^2 = 5.03, df = 2, p = .08, V = 0.17$); students' age ($\chi^2 = 3.81, df = 2, p = .15, V = 0.15$); students' training duration in instrumental lessons ($\chi^2 = 0.15, df = 2, p = .93, V = 0.03$)
 - Level of giftedness x age ($\chi^2 = 23.16, df = 165, p = 1$); level of giftedness x years of instrumental lessons ($\chi^2 = 23.11, df = 165, p = 1$)
- Further material can be accessed via <https://osf.io/u6nxq/> or via the following QR-Code:

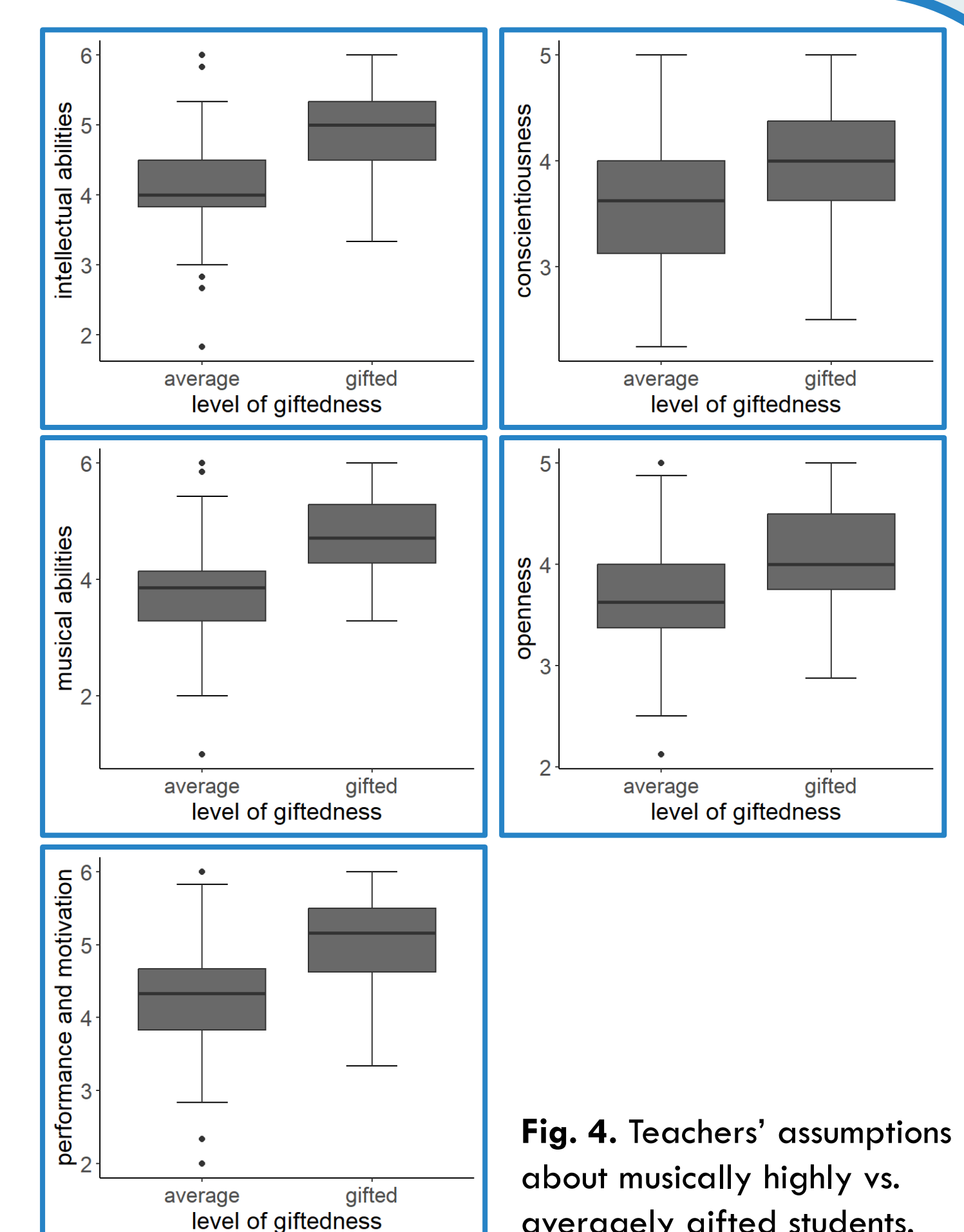


Fig. 4. Teachers' assumptions about musically highly vs. averagely gifted students.

Discussion

- Results are partially consistent with further results; however, the negative component of the disharmony stereotype is missing
- Results rather point in the direction of the harmony stereotype as teachers' prevailing preconceptions about musically gifted students

Limitations

- Limiting factors might be the construction of the narrative vignette (ecological validity) and the selection of musical pieces as recommendation for future lessons

Implications and future perspectives

- Focus more on teachers' characteristics and their general assumptions about giftedness and performance achievement
- Considering additional target groups (e.g., parents, peers) [2]
- Cross-domain comparisons provide a more general picture of implicit assumptions about individuals with a domain-specific giftedness
- Need of valid measurement approaches to elicit and distinguish stereotypical categories
- Combination of musical performance with interpreter-related background information as a domain-specific feature

References

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