

Perceived stress and sources of stress in primary school physical education teachers in Germany

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Background

Secondary school physical education (PE) teachers in the German schooling system experience moderate levels of stress (Schäfer et al., 2019). The most frequent sources of stress encountered are inadequate facilities, the curriculum and the low social recognition and status of PE (von Haaren-Mack et al., 2020; Pels et al., 2020). Previous studies have further established that continuous levels of stress may have detrimental physical, as well as psychological consequences, such as backpain and depression (Johnson et al., 2005). However, to date, no data on perceived stress and the occupation-related sources of stress, as well as their relation is present for primary school PE teachers in Germany.

The aim of this study was therefore to examine (1) perceived stress, (2) PE-related sources of stress, and (3) the prediction of perceived stress by the PE-related sources of stress in primary school PE teachers.

Method

Participants

70 primary school PE teachers in Germany (59 females, 11 males, age: 44.25 ± 11.61 years) were recruited for this study. Their mean teaching experience was 16.21 ± 8.81 years.

Measures

Perceived stress and the frequency of PE-related sources of stress were measured through the following online questionnaires:

Perceived stress
 PSQ-20 (Fliege et al., 2005)

PE-related perceived stress in the past 4 weeks

Response scale: 1 = rarely to 4 = frequently

Four factors: worries, tension, joy, demands

Example item: "You have too many decisions to make"

Sources of stress
 ABIS (Heim et al., 1999)

PE-related sources of stress

Response scale: 1 = never to 6 = regularly

Six factors: lack of pupil discipline, inadequate facilities/equipment, lack of pupil motivation, inadequate curriculum, physical strain, problems with colleagues. Two further items were added, based on heterogeneity of pupils and noise.

Example item: "The noise level during lessons is too high"

Statistical analysis

- Descriptive statistics:** perceived stress & frequency of PE-related sources of stress.
- Linear regression analysis:** prediction of perceived stress by the PE-related sources of stress.

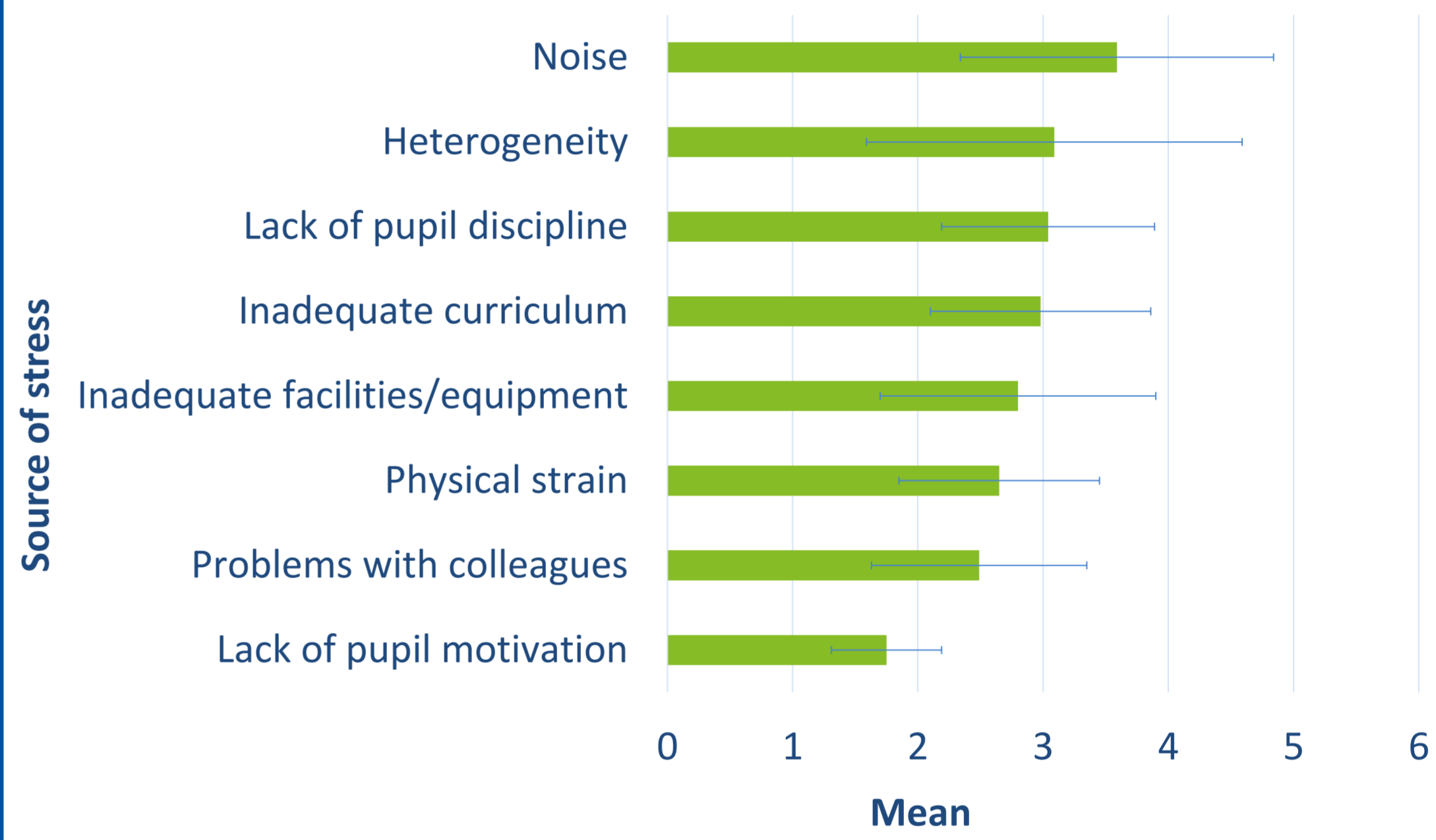
Results

Perceived Stress

- Primary school PE teachers reported a moderate level of **total perceived stress** (2.29 ± 0.36).
- Analyses of the separate factors revealed also moderate levels of perceived **demands** (2.69 ± 0.64), perceived **joy** (2.95 ± 0.8), perceived **tension** (2.52 ± 0.68) and perceived **worries** (2.11 ± 0.61).

PE-related sources of stress

The figure below depicts the frequency of PE-related sources of stress experienced by primary school PE-teachers.



Association between perceived stress and sources of stress

- The results of the whole regression model indicated a partial fit ($R^2 = .388$, $F(4.83) = 7.77$, $p < .001$).
- However, none of the PE-related sources of stress significantly predicted perceived stress.

Discussion

- The moderate levels of perceived stress found indicates the need for competencies in coping with stress in primary school PE-teachers.
- As noise, heterogeneity and lack of discipline presented the most frequent sources of stress, coping strategies which address specifically these sources of stress are mostly required.
- Perceived stress and the frequencies of PE-related sources of stress found in primary school PE teachers were both comparable to those found in a study with secondary school PE teachers (Schäfer et al., 2019).
- The finding that none of the PE-related sources of stress significantly predicted perceived stress may be due to the large number of predictors and the low number of participants.
- Further studies should investigate which coping strategies may be implemented which address the most frequent sources of stress and reduce perceived stress in primary school PE teachers.

References

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