

The sociometric status of children in epilepsy in regular Czech schools

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Background and objectives

• Status of children with epilepsy (CWE) in schools is difficult because of stigma related to this condition.

• The affected children are more than their peers at risk of being bullied [1].

• No attention devoted to sociometric status of CWE and the class environment in the classes attended by them.

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• **To evaluate variables potentially affecting sociometric status of CWE attending regular Czech primary schools such as cognitive and behavioural comorbidities, knowledge about epilepsy and perceived epilepsy-related stigmatization among their peers.**

• **To analyze the class environment in terms of relationships and cooperation among pupils and perceived teacher support and to compare the results with the classes not attended by CWE.**

Measures (classmates of CWE)

Sociometric status

• Long-Jones sociometric test: each pupil in the class selected three preferred and three rejected classmates with the order of the selection → 3, 2, 1 points to the scores of popularity and unpopularity → total score as difference of both scores (the higher value, the more preferred child)

• categorization the children in the class to five groups (**rejected, preferred, neglected, controversial, average**)

Knowledge

• 11-item multiple-choice knowledge test [2].

Stigma

• 21-item Czech version of SSE having good psychometric properties [3] and four subscales (two interpersonal and two intrapersonal)

Class environment

• Class environment inventory measuring quality of relationships with classmates, level of cooperation among pupils in the class and perceived support of teacher.

Methodology

Procedure, respondents and data analysis

• In total, 104 children with epilepsy aged 8-15 years attending regular schools and 1 828 of their classmates participated (data collection from September 2016 to June 2017 in schools in West and South Bohemia)

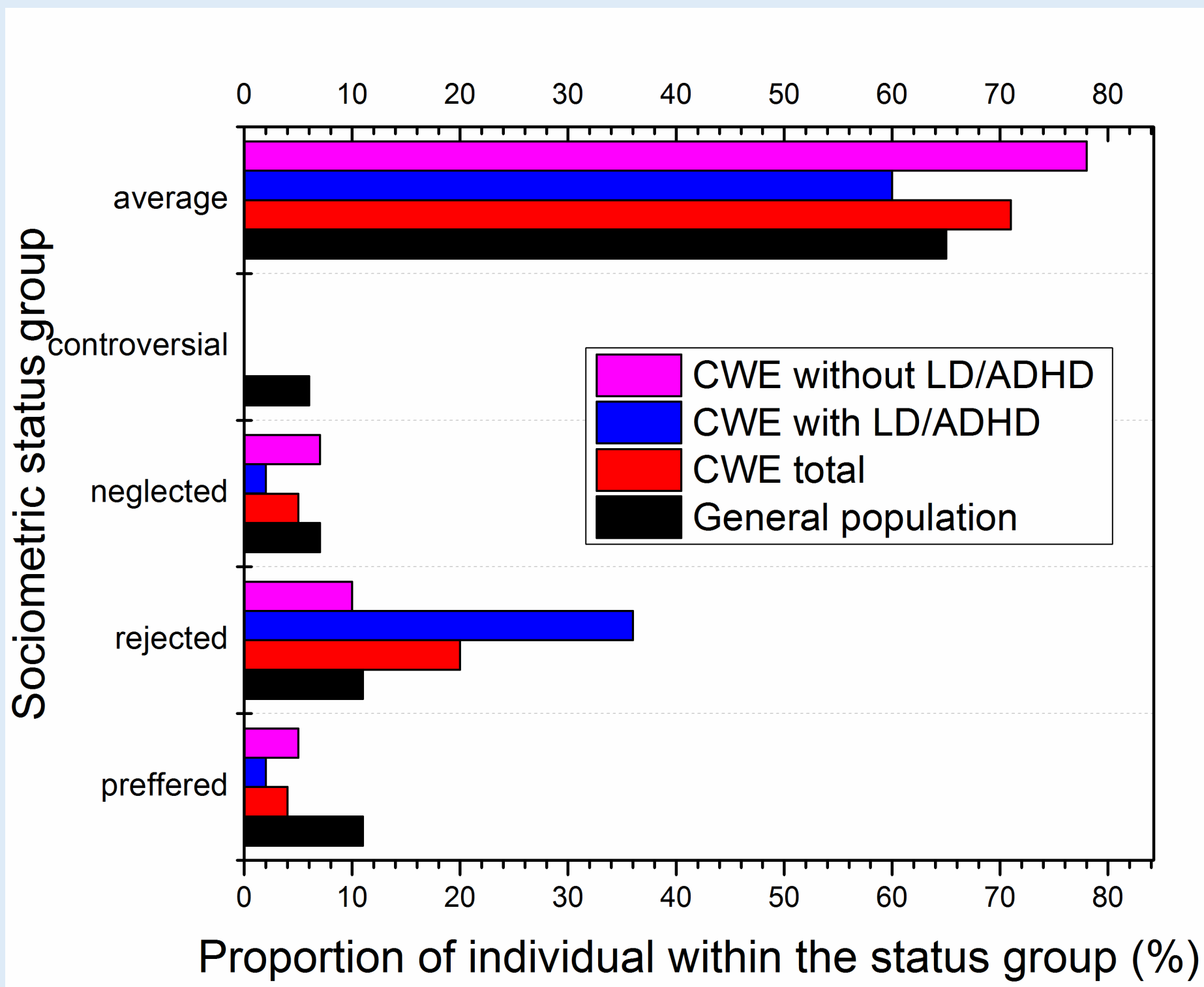
• **CWE in detail characterized in terms of medical variables (type and frequency of seizures, age at onset, number of AEDs etc.) as well as cognitive and behavioural variables (nonverbal IQ – Raven matrices, learning disability, ADHD, level of depression – Children depression inventory)**

• 52 % of CWE were girls, average age of 11.9 years. 43 % diagnosed with learning disability (LD) and/or ADHD (ADHD – 26 %, dyslexia – 23 %, dysgraphia – 20 %, dyscalculia – 18 %).

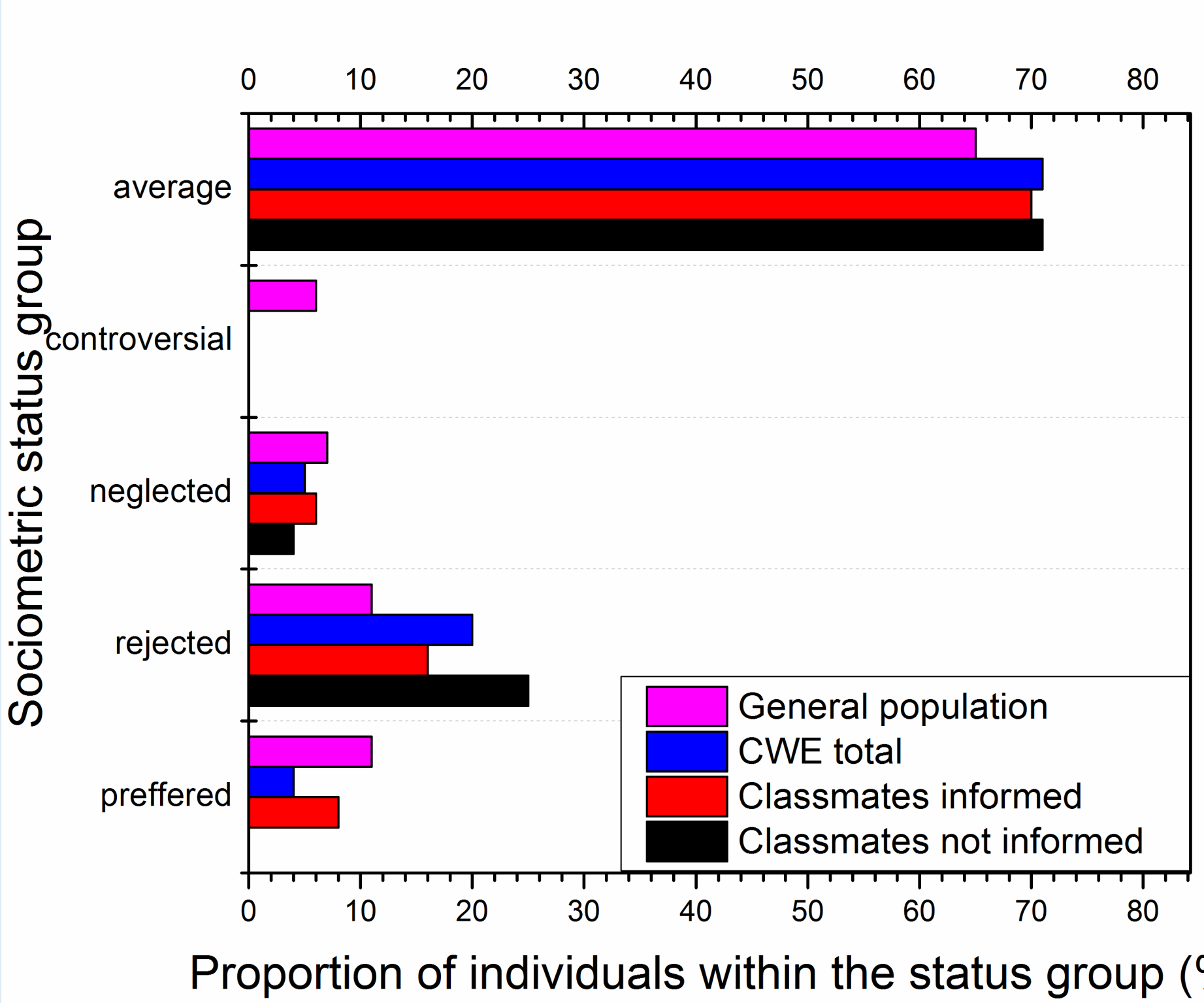
• 65 % of CWE had nonverbal IQ in the range of 85-115, 6 % had IQ > 115, 29 % had IQ < 85 and 6 % IQ < 70. Only in 48 % of cases, a majority of classmates knew that CWE had epilepsy.

• The obtained data were processed in MS Excel and common statistical tests were used. The results are given with p-values; the values lower than 0.05 are considered as significant.

Results

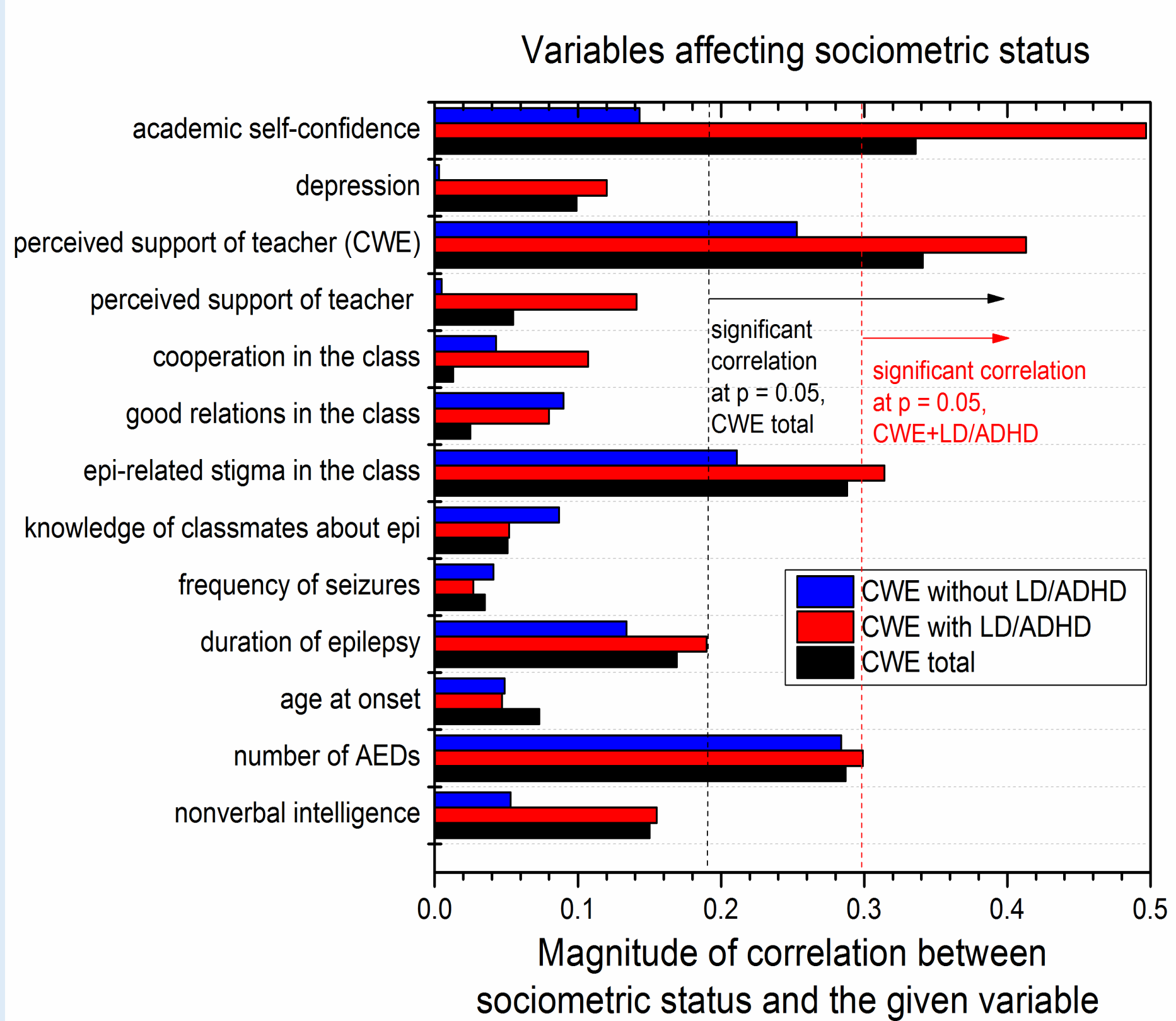


• 71 % of CWE have an average sociometric status compared with 65 % in other children. However, the proportion of CWE rejected by their peers was higher (20 % compared with 11 %; $p = 0.003$) and only 4 % were preferred (“stars”) compared with 11 % ($p = 0.023$). Among CWE with LD and/or ADHD ($n=45$), the proportion of rejected individuals was even 36 % compared with only 10 % among other CWE ($p = 0.001$) which seem to have similar status as children not having epilepsy.



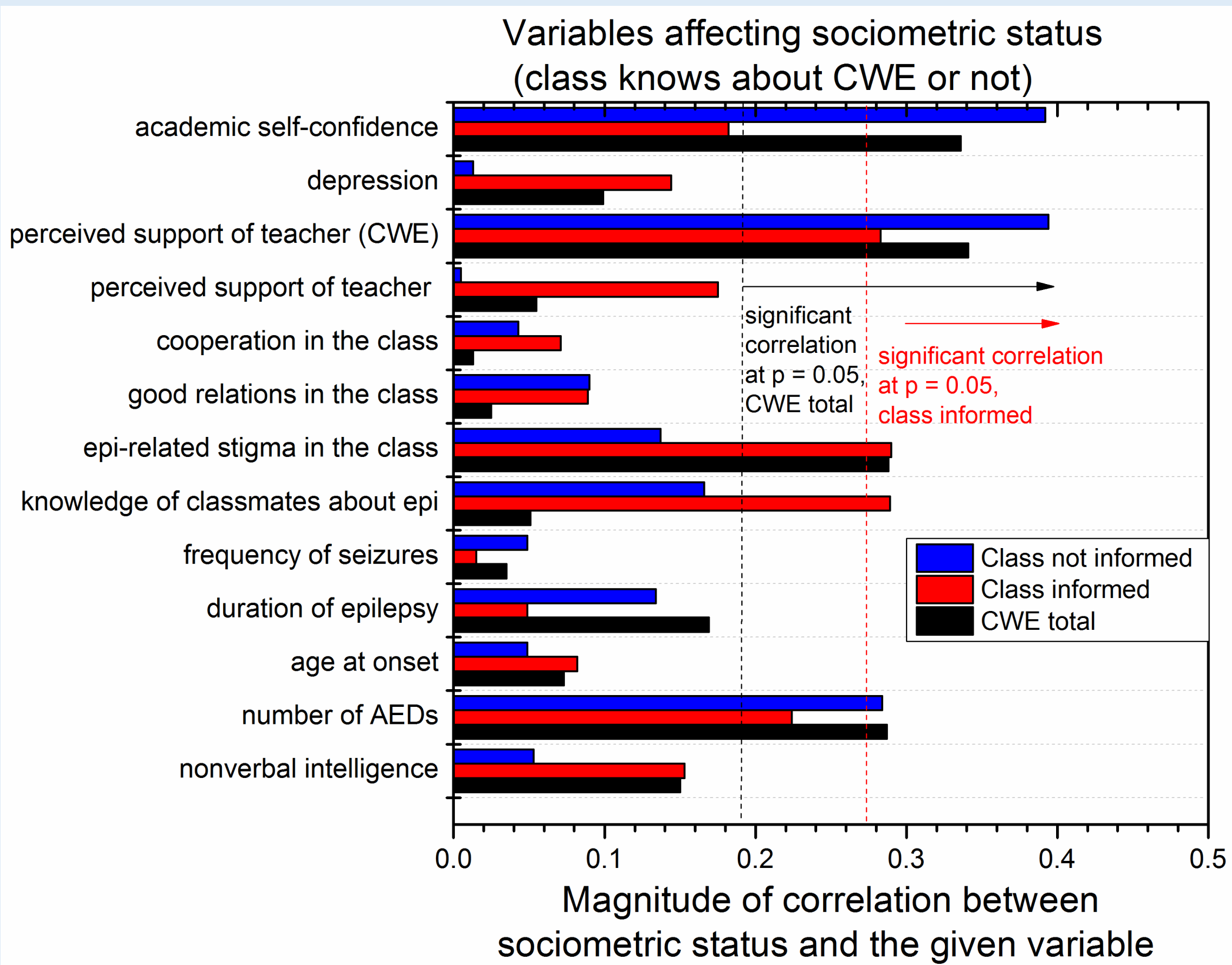
• CWE whose classmates do not know about their epilepsy ($n = 50$) seem to have worse status than CWE whose classmates are informed ($n = 54$; $p = 0.034$ for the category “preferred”).

• No CWE in our sample has controversial social status in contrary to approximately 6 % of children not having epilepsy.



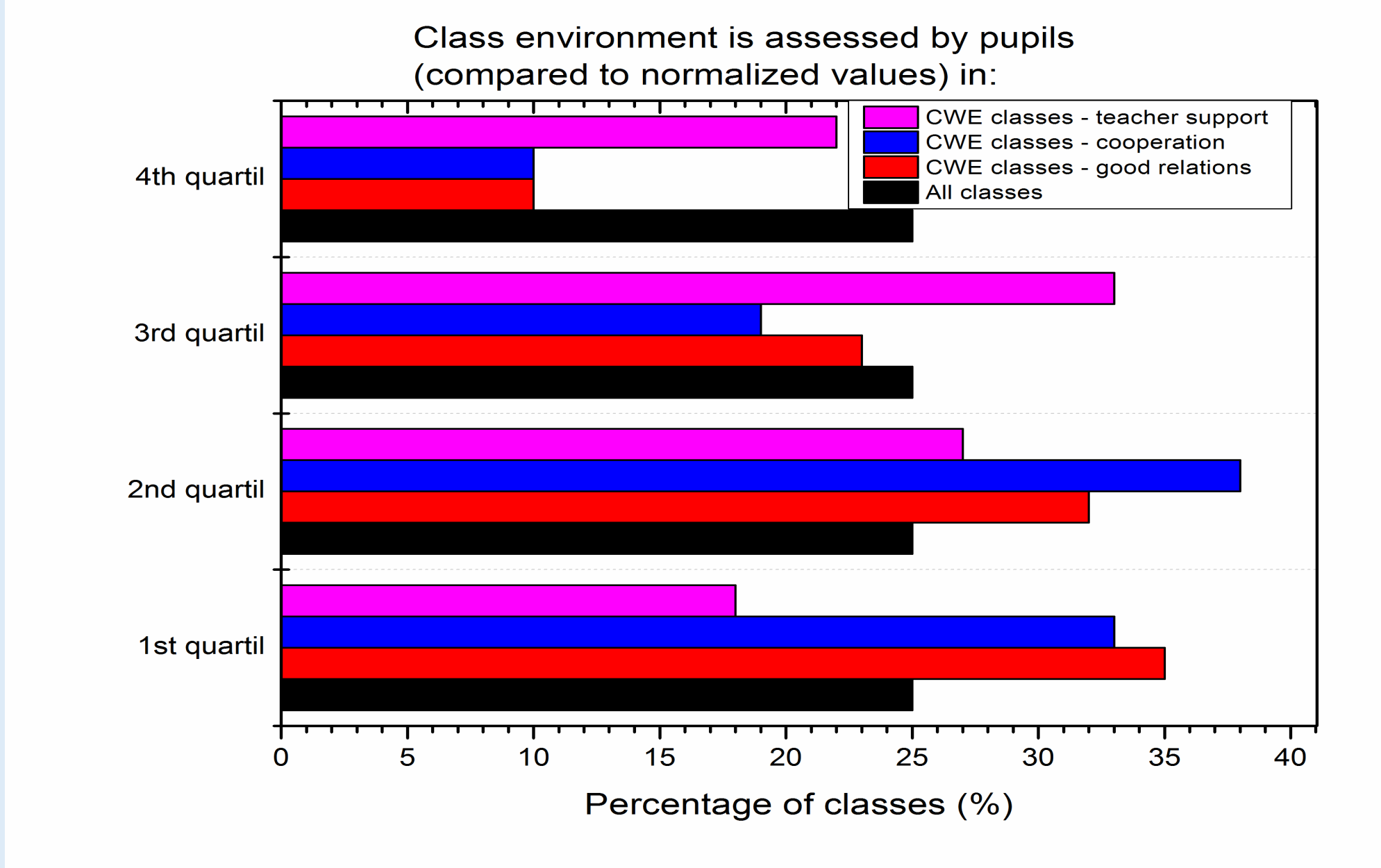
• The sociometric status of CWE was significantly correlated with their academic self-confidence ($p < 0.001$), their perceived support of teacher ($p < 0.001$), number of AEDs ($p = 0.003$) and epilepsy-related psychosocial stigma in the class ($p = 0.003$).

• The perceived support of teacher and stigmatization in the class are especially important predictor variables for CWE with LD/ADHD.

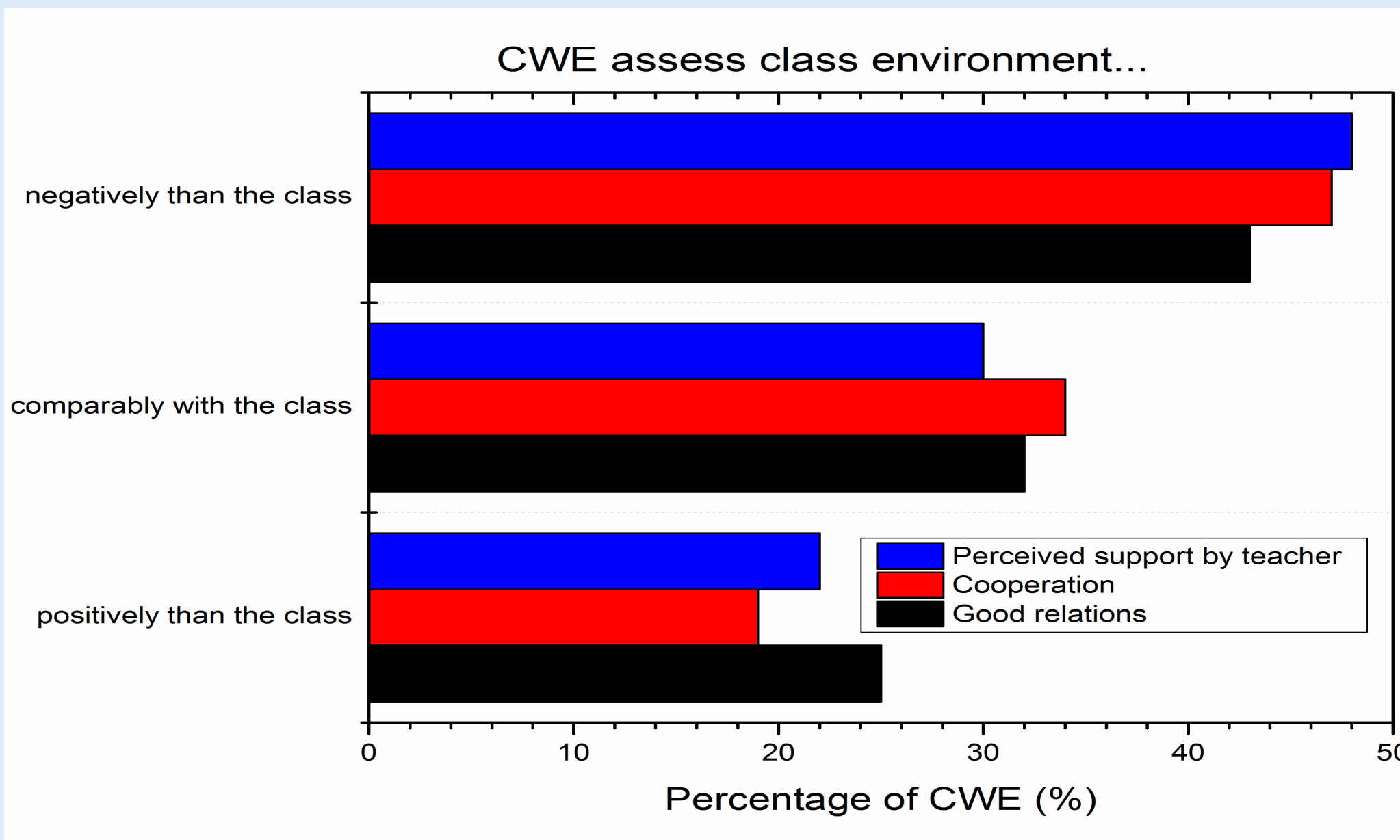


• Epilepsy-related stigma and also knowledge of classmates about epilepsy play important role for sociometric status of CWE in the classes with a majority of pupils knowing that their classmate has epilepsy.

• On the other hand, perceived support of teacher seems to be more important in the classes in which pupils do not know about CWE (the teacher is informed in all cases).



Class environment is in the classes with CWE worse than in other classes in terms of good relations ($p = 0.003$) and cooperation ($p < 0.001$). No significant difference was found in the domain of perceived support by teacher ($p = 0.228$).



CWE assess on average good relations, cooperation among children as well as teacher support more negatively than the rest of the class (40 to 50 % of CWE give significantly (more than 1 SD) lower notes than the median values for the given class are).

Conclusions

• **Especially CWE with learning difficulties and/or ADHD tend to be significantly rejected by their peers in regular schools. It is to believe that these children are at greater risk of being bullied and thus special attention should be devoted to them.**

• **It seems to be quite beneficial for the sociometric status of CWE if his/her classmates know that (s)he has epilepsy.**

• **The sociometric status of CWE is significantly positively correlated with the teacher support perceived by them and their academic self-confidence, and negatively correlated with the epilepsy-related stigma in the class and the number of AEDs used by CWE.**

• **Class environment in the classes attended by CWE is worse than in other classes in terms of good relations and cooperation among the pupils and comparable in terms of perceived teacher support by children.**

Acknowledgments and references

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