Emotional and behavioural adjustment in children and adolescents with short stature vs. their normal-statured peers.

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Background/Objectives: the aim of the current cross-sectional study is to explore and compare the emotional and behavioural conditions of children and adolescents with short stature (i.e., familial short stature and constitutional delay of growth), idiopathic growth hormone deficiency (GHD), and normal height.

Methods: twenty-nine participants (15 males, 14 females; mean age ± standard deviation (SD) = 11.2 ± 1.96 years) with short stature (height standard deviation score (SDS): −2.10 ± 0.57), 10 age-matched participants (4 males, 6 females; mean age ± SD = 10.9 ± 2.35 years) with growth hormone deficiency (GHD; height SDS: −2.44 ± 0.29), and 36 age-matched participants (19 males, 17 females; mean age ± SD = 11.3 ± 1.93 years) with normal stature (height SDS: 0.56 ± 0.78) were admitted to this study. Psychological distress was evaluated using the Depression Anxiety and Stress Scale (DASS-21), and emotional and behavioural problems using the Child Behaviour Checklist for Children (CBCL) and the Strengths and Difficulties Questionnaire (SDQ).

Results: participants with GHD exhibited higher levels of the “withdrawn/depressed subscale” score of CBCL (H = 7.794, df = 2, p = 0.020), compared to their peers with normal height, while no significant differences were observed between participants with short stature and those with normal stature. Normal-statured participants reported higher levels of the “conduct problems” subscale score (H = 10.421, df = 2, p = 0.005) and the “rulebreaking behaviour” subscale score of CBCL (H = 10.358, df = 2, p = 0.006) compared to both short-statured groups. No significant differences among the three subgroups were found in the DASS-21 and SDQ scores questionnaires, suggesting the lack of short stature-dependent effects on psychological distress and emotional and behavioural adjustment.

Conclusions: although participants with GHD exhibited higher levels of the “withdrawn/depressed subscale” score of CBCL (H = 7.794, df = 2, p = 0.020) compared to their peers with normal height, participants with short stature did not experience the same problems. Although short-statured participants had lower levels of “conduct problems” and “rule-breaking behaviours” scores than their normal-statured peers, the psychological distress and emotional and behavioural adjustment were not affected by short stature, being comparable to those recorded in normal-statured participants.