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ABSTRACT

Background: The present study will help to understand the importance of the helicopter parenting style. The term is used to describe a phenomenon of a growing number of parents who pay too close attention and are obsessed with their children’s success, particularly in areas of decision-making, academic studies, and social relationships.

Aim: This study aimed to evaluate the prevalence of helicopter parenting (HP) and its influence on adolescents’ academic performance and oral hygiene status.

Materials and Methods: The study was carried out with 301 children aged 12-17yrs. HP’s prevalence was assessed using the Helicopter parenting scale, and the children’s academic performance was recorded from school records. Oral hygiene status using the oral hygiene index-simplified (OHI-S), and Frankl’s behaviour rating was assessed during the examination. Data were analyzed using SPSS software (version 21.0, IBM Corp., Armonk, NY, USA). Independent student t-test and chi-square test were used to test the statistical significance (P<0.05 considered statistically significant).

Results: The study participants’ mean age was 14.26 years; the prevalence of children with HP was 48%, with academic performance of 79.54 ± 10.98 compared to without HP (83.41 ± 9.40). There was a statistically significant difference between HP and the academic performance of children. The mean OHI-S scores in children with HP and without HP were 0.27 ± 0.51 and 1.13 ± 0.74, respectively, with a statistically significant difference (p<0.001) was observed. Frankl’s behaviour rating scale did not show any significant difference between children with HP and without HP (P= 0.766).

Conclusion: The prevalence of HP was about 48% and had a significant effect on academic performance as it influences children’s capability. However, better oral hygiene was observed in children with HP. Frankl’s behaviour-rating scale did not show any significant difference among children, as the examination was performed in a non-dental setting.

Key Words: Academic outcome, Frankl’s behaviour rating, Helicopter parenting, Overparenting, Oral health, Parenting style

INTRODUCTION

Child-rearing in the modern world has gained utmost importance, with parents and educators focusing on various parenting styles. Researchers have interrelated parenting styles directly to a child’s social, physical, psychological development. Moreover, parenting styles play a pivotal role in building a child’s character. Delving into the history of parenting styles, one discovers four main types of ‘Parenting styles’ as defined by Baumrind and Maccoby such as: Authoritative, Authoritarian, Permissive, and Neglectful. A new subgroup of these parenting styles is emerging rapidly in recent years, such as HP, little emperors, tiger moms, free rangers, and concentrated cultivation.

The most commonly knowledgeable parenting style is Helicopter Parenting (HP), also called cosseting parents or hovering parents. HP is a metaphor that describes a type of parenting where parents act as helicopters hovering or shadowing over their children. The word hovering concerning parenting initially appeared in 1969 in a book called “Between Parent and Teenager” by Dr.Haim G. Ginott. Moreover, Foster Cline and Jim Fay coined the term ‘Helicopter
parenting “in 1990.

Helicopter parenting is also termed as over-involvement, intensive parenting, over parenting, overprotection, intense parental support, intrusiveParental involvement, black Hawk parent, and stealth missiles. The most popular press articles and books have suggested that parents are too involved in their children’s lives and influence their behaviour. HP has deleterious effects on the child’s development. Helicopter parents are in continuous contact with their children and the school administration, making children lack emotional resilience and independence. Furthermore, parents feel bad about themselves when their adult children do not perform well. HP in young children is also known to be responsible for anxiety, depression, and insecurity. Moreover, it is also related to narcissism, negative impact on Psychological well-being, lower academic success, lower self-efficacy, lower coping skills, neuroticism, and a higher sense of entitlement.

Aims and objectives
The present study aimed to evaluate the prevalence of HP and its effect on academic performance, oral hygiene status, and the behaviour assessed during the dental examination.

MATERIALS AND METHODS

Study design and setting: This is a descriptive cross-sectional study conducted with children aged 12 to 17 years in two randomly selected Nellore district schools, Andhra Pradesh.

Sample size: A systematic sampling method was used to select the participants, and every third child took to a total sample size of 301. The sample size was calculated by using the following formula

\[ N = \frac{z^2 \times p \times q}{d^2} \]

It was estimated based on the pilot study, which revealed an estimated prevalence of 27% for helicopter parenting on academic performance at a marginal error of 5%. The estimated final sample was 301.

Duration of the study: The study was conducted between 21-8-2019 to 28-10-2019.

Eligibility criteria:

Inclusion criteria: Children with,

- Age 12-17 years of same geographic distribution.
- good general health condition
- acceptance for participation in the study and whose caregiver gave informed consent

Exclusion criteria: Children,

- With any systemic disease.
- Who was absent on the day of examination or who did not give consent.

Data collection
Informed consent was obtained from the school authorities, and forms were given to students to get consent from their parents. An appointment was made for children to examine; the only children who had their consent to participate in the survey were examined within their school premises. In this survey, a questionnaire was initially given to all the children, followed by a clinical examination.

Measures

Helicopter parenting
According to Padilla-Walker and Nelson HP scale, HP’s prevalence was assessed using a ten-item questionnaire. Children responded on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), which gives a score of 10 to 50. The highest score represents a high level of HP.

Each question was translated into the native language. The time given for completion of the questionnaires was 15–20 min. The children were instructed to read the statement carefully and choose the answer that best suited them. The academic performances of the children were collected from the school records.

Clinical examination
The children were examined using a mouth mirror, probe, and daylight as per the WHO survey recommendations. Each examination took about 10 to 15 minutes, and an Oral hygiene assessment was performed using the oral hygiene index simplified (OHI-S), which can be interpreted as good, fair, poor. At the time of oral examination, the child’s behaviour was assessed by employing the Frankl Behavior Rating Scale.

Statistical analysis
Entries were double-checked to minimize the data entry errors. Data were collected on predefined case record sheets that were transferred into a Microsoft Excel spreadsheet and statistically evaluated using the SPSS software (version 21.0. by IBM Corporation). Descriptive statistics were presented in the form of frequency, mean, and standard deviation. Chi-square test and Independent standard ‘t’ test was used to know the significant difference among categorical variables and continuous variables, respectively. The level of significance was set at P<0.05 for all tests.
RESULTS

Among the 301 children aged 12-17 years analyzed, the percentage of males and females were 54.5% and 45.5%, respectively, and the mean age was 14.26 years. 28.9% (12-13 years) belonged to the VIII grade, 35.2% (14-15 years) belonged to the IX grade, and 35.9% (16-17 years) belonged to the X grade. (Table -1)

The prevalence of children with helicopter parents is about 48.8%, and without helicopter parents are about 51.2% (Table-2).

When intergroup comparison was made between mean values academic performance of children with HP and without HP using independent sample 't' test. The mean value of academic performance in children with helicopter parents is 79.54 ± 10.98, and in children without HP is 83.41 ± 9.40. A statistically significant reduction of academic performance in children with helicopter parents (p=0.001). Moreover, the mean debris, calculus index, and OH1-S scores are lower in children with HP than children without HP. Children with HP had better oral hygiene than those without HP; a statistically significant difference was observed (p<0.001) (Table-3).

The percentage of children with HP shows 51.7% were positive, 67% were positive, 2.7% were negative and zero percent were negative. Comparative assessment of children’s behaviour using Frankl behaviour rating scale in children with HP and without HP. A statistically non-significant difference was observed (p= 0.776) (Table - 4)

DISCUSSION

The current study is one of the studies to evaluate HP’s prevalence and its association with academic performance and oral hygiene status in children. Helicopter parents are defined as parents who continually “hover” over their children, and in times of emergency, parents “swoop down” to rescue their children. After the emergency has been rectified, the parents will be hovering over their children until the next emergency arises. 22, 23

In the present study, the prevalence of children with HP is 48.8%, and academic performance was reduced due to excessive involvement in their lives. The self-determination theory outlines three innate needs for healthy development and functioning in all human beings. 24, 25 The first and most crucial constituent of self-determination theory is making independent decisions or the basic need for autonomy. 24 The second constituent is the basic need for competence or confidence in one’s capabilities and achievements. 26 Relatedness is the third component; it involves feeling that one is part of a genuinely caring relationship. 27 According to this theory, ‘HP’ Behaviors may impinge on the offspring’s autonomy and competence. The decrease in autonomy and competence could be detrimental to the offspring because two of her/his basic psychological needs did not meet. 27, 28

HP has been associated with a child’s maladaptive problem, correlated with dependency on others and ineffective coping skills. This study result is similar to Allan et al. 29 which also affirms that intrusive parenting negatively influences adolescents’ academic performance. The same study also states that an increase in the sense of entitlement of adolescents may also result in low academic performance.

HP has been associated with decreased school engagement4 and academic achievement. 30, 31 Embedding maladaptive perfectionism in children can also result in high anxiety and unsatisfying academic Performance. 32 Highly involved parents who continuously pressurize the child to perform well make the child feel incapable of learning. According to Schiffirin and Liss (2017) 33, helicopter parents continuously try to eliminate their child’s life obstacles to ensure their academic success. However, the study discovers that involved or intrusive parenting negatively influences adolescent’s academic performance. Parent’s intrusion disrupts the normal process of learning in children and inclines them to achieve outstanding results, resulting in unsatisfactory academic performance. 34, 35

In the current study, when debris index scores (Mean ± SD) were compared children with HP and without HP shows 0.44 ± 0.49, 0.57 ± 0.53 respectively, found that less mean value in children with HP than children without HP and a statistically significant difference was observed(P= 0.025).

When calculus index scores (Mean ± SD) were compared, children with HP showed that 0.10 ± 0.26 and without HP 0.29 ± 0.36 reduced mean value scores in children with HP than children without HP and a statistically significant difference was found.

OHI – S index scores were compared with children with HP mean score was 0.27 ± 0.51, children, without HP 1.13 ± 0.74 respectively. It was found that children with HP have significant OHI-S scores. It may be attributed to parents’ attention to these children’s oral health, demonstration of the right tooth brushing techniques, and oral hygiene instructions. The practice of oral hygiene involves keeping the mouth clean through regular tooth brushing and dental floss to clean between the teeth and maintaining good oral hygiene like rinsing the mouth after food, brushing twice a day, and correct tongue cleaning. Another explanation is that parents make their children maintain good oral hygiene with their over-involvement in their daily activities.

A comparative assessment of children’s behaviour using the Frankl behaviour rating scale in children with HP revealed that positive, positive, definitely negative, negative was 51.7%, 45.6%, zero per cent, and 2.7%, respectively.
Whereas in children without HP were 52.6%, 44.8%, 0.6%, 1.9% respectively. Frankl scores showed no statistically significant difference (p=0.766), which might be due to the examination of oral hygiene in a non-dental setting.

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Conflicts of interest: Nil

REFERENCES


Table 1: Distribution of participants according to gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Participants</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Males</td>
<td>164</td>
</tr>
<tr>
<td>Females</td>
<td>137</td>
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<td>Total</td>
<td>301</td>
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</table>

Table 2: Prevalence of children with Helicopter parents and without HP

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>%</th>
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</thead>
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<tr>
<td>Children without Helicopter parents</td>
<td>154</td>
<td>51.2</td>
</tr>
<tr>
<td>Helicopter parents</td>
<td>147</td>
<td>48.8</td>
</tr>
<tr>
<td>Total</td>
<td>301</td>
<td>100</td>
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Table 3: Comparative distribution of mean values of children academic performance and oral hygiene index scores

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Mean ± SD</th>
<th>t Value</th>
<th>P-value</th>
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<tbody>
<tr>
<td><strong>Academic Performance</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Children with HP</td>
<td>79.54 ± 10.98</td>
<td>3.283</td>
<td>0.001*</td>
</tr>
<tr>
<td>Children without HP</td>
<td>83.41 ± 9.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Debris Index</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with HP</td>
<td>0.44 ± 0.49</td>
<td>2.255</td>
<td>0.025*</td>
</tr>
<tr>
<td>Children without HP</td>
<td>0.57 ± 0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Calculus Index</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Children with HP</td>
<td>0.10 ± 0.26</td>
<td>5.273</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Children without HP</td>
<td>0.29 ± 0.36</td>
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<tr>
<td><strong>OHI-S Index</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Children with HP</td>
<td>0.27 ± 0.51</td>
<td>11.588</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>Children without HP</td>
<td>1.13 ± 0.74</td>
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Independent Sample ‘t’ Test: *P < 0.05 (significant), **p > 0.05 (Not significant)

Table 4: Comparative assessment of the behavior of children using Frankl behavior rating scale in children with HP and without HP

<table>
<thead>
<tr>
<th>Frankl Scale</th>
<th>Children with HP</th>
<th>Children without HP</th>
<th>Significant difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N) (%)</td>
<td>(N) (%)</td>
<td></td>
</tr>
<tr>
<td>Definitely Positive</td>
<td>76 (51.7%)</td>
<td>81 (52.6%)</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>67 (45.6%)</td>
<td>69 (44.8%)</td>
<td></td>
</tr>
<tr>
<td>Definitely Negative</td>
<td>0</td>
<td>1 (0.6%)</td>
<td>1.146</td>
</tr>
<tr>
<td>Negative</td>
<td>4 (2.7%)</td>
<td>3 (1.9%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>147 (100%)</td>
<td>154 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

Chi Square Test, *P < 0.05 (Significant), **p > 0.05 (Not significant)