

Effect of traditional games on social skills of children with attention deficit and hyperactivity disorder

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ABSTRACT

Aim: To determine the effect of Traditional Games social skill of children with attention deficit hyperactivity disorder (ADHD). **Objectives:** 1. To assess the level of social skill among the children with ADHD. 2. To evaluate the effect of Traditional games on developing social skill among the children with ADHD. **Methodology:** Totally 30 subjects, 15 in experimental group and 15 in control group with age of 8 to 10 years participated in current study. The experimental group underwent Traditional games intervention along with conventional Occupational therapy, whereas Control group was in conventional Occupational Therapy only. Statistical analysis was done with “t” test. **Results:** Statistical significance is present in experimental group than control group with regard to effect of role play children with ADHD. Statistically significance has been observed in experimental group $t = 16.2087$ **Conclusion:** Traditional games intervention provides significant improvement in social skills of Children with Attention Deficit and Hyperactivity Disorder.

Keywords: ADHD Children, Social Skills, Traditional Games, Occupational Therapy.

Attention Deficit and Hyperactivity Disorder (ADHD) is a neuro behavioural developmental disorder typically begins in childhood and persist in to adulthood. ADHD is characterised by developmentally inappropriate levels of inattention and impulsivity and hyper activity resulting in functional impairment in academic, family and social setting.

The prevalence in school aged children in estimated to between 8 and 11 percent, making it one of the common disorders of childhood. In the national survey children health (NSCH) the prevalence of parent – reported of ADHD among children aged 4 to 17 years of age in the united states was estimated to be 11 percent, ADHD is more common on boys than girls (male to female ratio 4:1 for predominantly hyperactive type and 2:1 for the predominantly in attentive type).

Research have found that the social challenges of children with ADHD include disturbed relationship with their peers, difficulty making and keeping friendship, and deficiencies in appropriate social behaviour. Long term outcome studies suggest that these problems

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continue in to adolescence and adulthood and impede the social adjustment of adult with ADHD.

Some researchers even think that impairment of social functioning is so pronounced for children with ADHD that it should be considered a core deficit (Marshall, Evan, Eiraldi, Becker, & Power, 2014). Even without being seen as one of the core deficits, however, social impairment remains an important associated feature of ADHD and has been observed in 52 to 82 percent of all children with the disorder (Staikova et al., 2013).

Social problems for those with ADHD have been reported by their peers, teachers, and parents, sometimes as early as preschool age (DuPaul, McGoey, Eckert, & VanBrakle, 2001). Social impairment in children with ADHD often results in family problems and neglect or rejection by peers (Marshall et al., 2014).

Group play activities give student the opportunity to assume the role of a person or act out a given situation. These roles can be performed by individual students in pair or in groups which can play out a more complex scenario. Playing traditional games in social context engage student real life situation. Traditional games are also useful in learning and practicing social skill.

Children with ADHD often encounter problem in social interaction with peers and are confronted with peers rejection and social isolation. Hence social skills need to be addressed in order to manage their social skill deficits. Traditional games are effective in improving social skills. Many studies revealed that games are effective in social and communication skills but only few studies were identified for children with ADHD. Hence this study has been attempted to improve social skills of ADHD children with traditional games.

Aim

To determine the effect of Traditional games on social skill of children with attention deficit hyperactivity disorder (ADHD).

Objectives

1. To assess the level of social skill among the children with ADHD.
2. To evaluate the effect of Traditional games on developing social skill among the children with ADHD.

Alternative hypothesis

There will be significant changes in social skills of children with ADHD after Traditional Games intervention.

Null hypothesis

There will be no significant changes in social skills of children with ADHD after Traditional Games intervention.

Smitha V.S. et al (2014)., The purpose of the study is to find the effects of social skills training in a group of ADHD children by minimize behaviour problems and improve positive behaviour 31 children between the age 7 and 10 years were selected through purposive random sampling. strength and difficulties questionnaire (SDQ) were used to assess the variable under study. Ten weekly social skill training session were conducted. The

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result showed that There is significant improvement in the areas of emotional management, peer relations, conduct problems and pro-social behaviour in children with ADHD through social skills group training.

Rebecca Mccord (2015)., This study tested the hypothesis that problem solving skills mediate the relation between ADHD symptoms and social impairment in children. Problem solving skills were evaluated by the Test of Problem Solving 3 – Elementary Version (TOPS). ADHD symptoms were assessed through the parent report of the Disruptive Behaviour Disorder Scale (DBD). Social impairment was assessed through the parent report of social skills using the Social Skills Improvement System (SSIS). Three hundred seventy-two (372) children between the ages of eight and ten years old and one of their parents or guardians participated in this study. The results found that the subscale problem solving mediated the relation between ADHD symptoms and social skills ($ab = -.06$, 95% CIs = $-.00$ to $-.14$). These results provide partial support for the hypothesis.

Kathryn K. Klein (2014)., A social skills intervention program was implemented for 5 boys and 1 girl, aged 7-9, with Attention Deficit Hyperactivity Disorder. This intervention was comprised of two weekly sessions focusing on targeted skills like joining a group, solving problems, following rules and sharing. Half of the six students were on medication for ADHD and the other half were not on medication. Students were given a baseline interview and blind observation within social settings. All subjects showed improvement in social skill ratings within the classroom and within special areas. Changes were valid and teachers and students viewed the social skills interventions very positively.

Julia D. mocquade Betsy Hoza (2008)., This article extends previous reviews regarding the peer problems of children with Attention Deficit Hyperactivity Disorder (ADHD) in several ways. In addition to summarizing past and current literature regarding the social behaviours of children with ADHD, these behaviours are discussed in terms of subtype and gender differences and treatment implications. Given limited effectiveness of treatment options, whether it be medication, behavioural modification, or social skills training, there is a need to examine additional factors that may contribute to the social impairment of children with ADHD. Therefore, this review focuses on potential neuropsychological deficits, biased perceptions of social ability, and deficits in encoding and processing social information that may contribute to the social impairment of children with ADHD.

George J. Dupaul., This study the examine differences in home, school, and medical functioning between preschool-age children with attention deficit/ hyperactivity disorder (ADHD) and normal control children. A sample of 94 children (58 with ADHD, 36 normal controls) between 3 and 5 years old were participated. Dependent measures included parent and teacher ratings of problem behaviour and social skills, parent ratings of stress and family functioning, medical functioning data, observations of parent–child interactions and classroom behaviour, and a test of pre academic skills.

Erika Carpenter Rich (2009)., Social difficulties are a common feature of Attention-Deficit/Hyperactivity Disorder Although, social functioning was assessed in 379 children and adolescent using the Child Behaviour Checklist. Factor analysis and structural equation modelling revealed two factors. A factor reflecting ‘PDD risk’ was defined from eight items of a separate screening instrument for PDD and examined for its association with Peer Rejection and Social Immaturity. There was a significant association with both factors, but

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the association was much stronger for the Social Immaturity (Standardized Beta [β] = .51) than Peer Rejection (β = .29) factors. Social Immaturity was also associated with a greater number of hyperactive symptoms while high Peer Rejection was associated with increased aggression and lower IQ in the ADHD children.

Gerly M.De Boopeir J.M.Prins (2007)., Children with attention-deficit / hyperactivity disorder (ADHD) often encounter problems in social interactions with peers and are confronted with peer rejection and social isolation. The most common approach to social problems in children is social skills training. In this article the outcome of social skills training (SST) for children with ADHD are reviewed. Four experimental SSTs are detected and analyzed for potential mediators and moderators of treatment efficacy. Candidate mediators (social cognitive skills, parenting style and medication-induced reduction of key symptoms) are discussed within an empirical and theoretical context. Candidate moderators (subtype, co morbidity, gender and age) are evaluated for their empirical support. It is argued that, although fragmented, there is ample evidence and knowledge to adapt the SST-paradigm towards the specific needs of children suffering from ADHD and to guide future research towards more effective, “well established” interventions.

Kamerade, D (2011)., This study proposes group role-play as one possible teaching method in a large group of students, and aims to evaluate how it affects peer to peer interaction and its perceived learning benefits. The findings suggest that group role-play does encourage interaction between students and facilitates their understanding of the applicability of theories to practice. However, this study also found that group role-play should be mixed with a lecture, and that the tutor has to pay attention to time management and the motivation of a student to get involved.

METHODOLOGY

Research design

1. The study done with two group of pre-test and post-test of quasi experimental design.
2. Experimental group = pre-test (Conventional OT + Role play) Post test
3. Control group = pre-test (Conventional OT) post test

Sample size

Total numbers of 30 subjects have been taken in this study. The subjects were divided into two group as experimental and control group. The control group consist of 15 subjects, and experimental group consists of 15 subjects.

The sample consists of boys and girls who are diagnosed ADHD children of 8 to 10 years. Convenient sampling technique was adopted. In this study the Independent variable is Traditional Games. Dependent variable is Social skills of ADHD children. The duration of the study was 6 months. The study was conducted in occupational therapy foundation., Erode and Namakkal Districts.

Selection criteria

Inclusion criteria

1. Children between ages of 8 to 10years
2. Both boys and girls
3. Children Diagnosed as ADHD by Developmental pediatrician/ Psychiatrist/Clinical Psychologist.

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Exclusion criteria

1. Age group below 8 years and above 10 years
2. Associated medical conditions excluded.
3. Children under medication.

Measurement tools

Social skill rating system (SSRS).

Procedure

Convenience sample of 30 subjects were selected from the age group between 8-10yrs. The researcher obtained informed consent from the parents of the children participating in the study and Got approval from the director of Occupational Therapy Foundation. The 30 subjects were divided into two groups a control group and an experimental group. Social skill level assessed by SSRS scale. Pre test was done before intervention period and Post data were collected after the treatment with SSRS scale. Each group consist of 15 samples and samples were taken from occupational therapy foundation Erode and Namakkal Districts. The control group received only conventional Occupational Therapy whereas experimental group received Traditional Games along with conventional Occupational Therapy. The therapy was given for 1-month duration, weekly 3 sessions in alternative days, 45-minute sessions per day with 15 minutes of orientation and rehearsal.

Intervention

Traditional games are planned in both indoor and outdoor settings. Indoor games such as Aadu puliattam, Pallanguli, paramapatham, Dhayam and sathurangam. Outdoor games such as kho – kho., Kannamoochi, Goli, Thirudan police, Sillukodu, Kolattam and hop and catch. Sessions were planned initially with indoor games followed by outdoor games. Subjects were divided into small groups depends upon the norms of the game, if one session is completed with small group subsequent groups involved in following sessions. After intervention post test was conducted and scores were tabulated and analyzed statistically with “t” test.

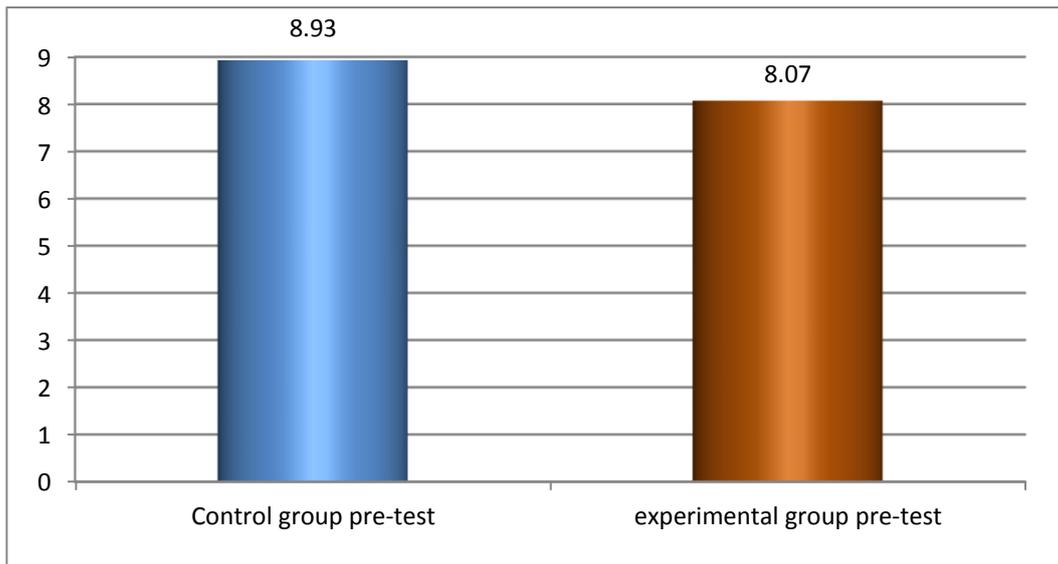
DATA ANALYSIS AND RESULT

Social skills

Table 1 Comparison between control group pre-test & experimental group pre-test values of social skills

Group	Mean	St. Deviation	‘t’ value	‘p’ value
Control group social skill pre-test	8.93	2.40	0.7914	0.4354
Experimental group social skill pre-test	8.07	3.49		

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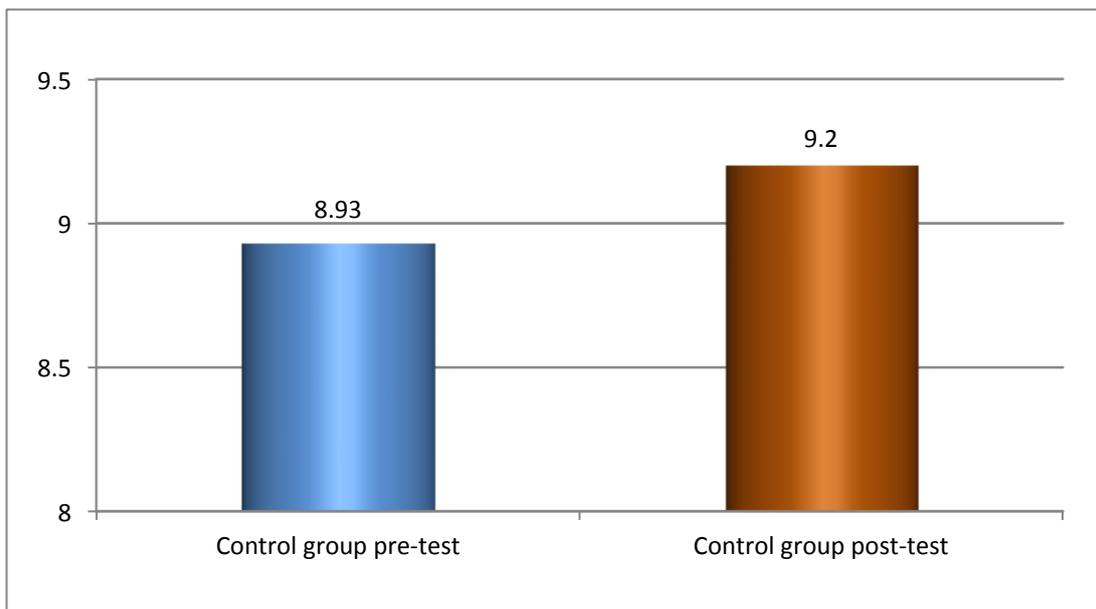


Graph 1 shows that comparison between the control group pre test and experimental group

Pre test score mean values are 8.93 and 8.07 and “t” values 0.7914 “p” values 0.4354. so, it is considered to be not statistically significant.

Table 2. Comparison between pre-test & post-test values of social skills in Control Group.

Group	Mean	St. Deviation	‘t’ value	‘p’ value
Control group social skill pre-test	8.93	2.40	2.2563	0.0406
Control group social skill post-test	9.20	2.24		



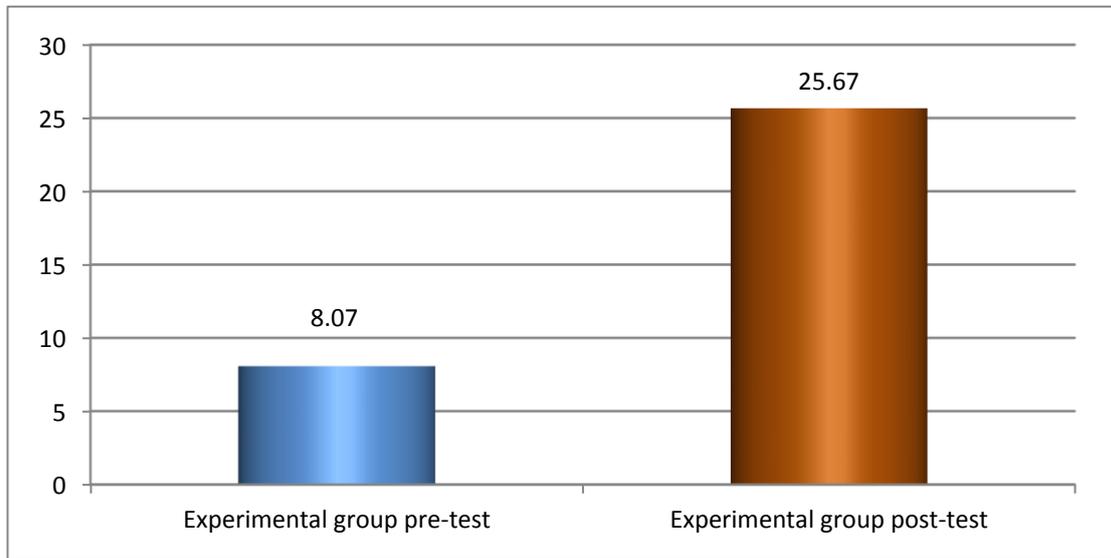
Graph 2 shows that comparison between the pre-test and post test scores of control group

Mean values are 8.93 and 9.2 and “t” value 2.2563 “p” values 0.0406. Hence it is considered to be not statistically significant.

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Table 3. Comparison between pre-test & post-test values of social skills in Experimental Group.

Group	Mean	St. Deviation	't' value	'p' value
Experimental group social skill pre-test	8.07	3.49	16.2087	0.0001
Experimental group social skill post-test	25.67	4.47		



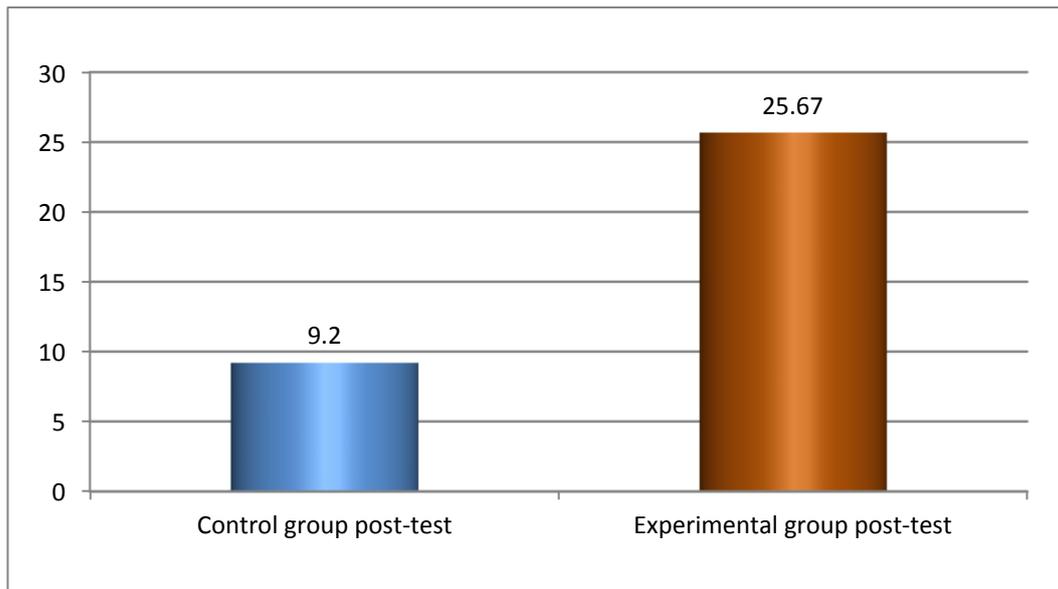
Graph 3 shows that comparison between the pre-test and post test scores of Experimental groups.

The mean values are 8.07 and 25.67 and “t” values 16.2087 “p” values 0.0001. Therefore, it is extremely statistically significant. It shows that experimental group has significant improvement.

Table 4. Comparison both control group & experimental group post-test values of social skills

Group	Mean	St. Deviation	't' value	'p' value
Control group social skill post-test	9.20	2.24	12.7599	0.0001
Experimental group social skill post-test	25.67	4.47		

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Graph 4 shows that comparison between the control group post-test and experimental group

Post test scores, mean values are 9.2 and 25.67 and “t” values 12.7599 “p” values 0.0001 so it is extremely statistically significant. It shows that experimental group has more improvement comparatively control group.

DISCUSSION

The purpose of the study is to find out the effect of Traditional games on social skill among children with ADHD. Initially the ADHD children are selected based on the inclusion criteria are assessed using the social skill rating system scale to get the pre test value. Traditional games are administered for one month, 3 session per week. 45 minutes session per day with 15 minutes of orientation and rehearsal and after one month the post test data were collected. Scores are statistically treated with paired and independent ‘t’ test.

In table I and graph I shows that comparison between pre test of both control and Experimental group. The mean values are 8.93 and 8.07 respectively the ‘t’ value is 0.7914 and p value is 0.4354. It shows there is no significant difference between two groups. And also indicates the unanimity of both the group.

In table II and graph II shows that comparison between pre test and post test of control group. The mean values are 8.93 and 9.20 respectively, the ‘t’ value is 2.2563 and p value is 0.0406. It indicates there is no significant improvement in control group.

In table III and graph III shows that comparison between pre test and post test of experimental groups the mean values are 8.07 and 25.67 respectively ‘t’ value is 16.2087, p value is 0.0001. It indicates that there is significant improvement in social skills of experimental group. Also, the table value is greater than calculated value the study rejects null hypothesis.

In table IV and graph IV shows that comparison between post test of both control and Experimental group. The mean values are 9.20 and 25.67 respectively and the ‘t’ value is

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12.7599 and p value is 0.0001.it shows the significant differences between the control and experimental group.

Based on the results the researcher accepting alternative hypothesis and rejecting null hypothesis. Hence these finding are showing that Traditional games intervention has significant effect on improving social skills among ADHD children.

CONCLUSION

From this study, based on statistical results it is concluded that Traditional games provides significant improvement in social skills of Children with Attention Deficit and Hyperactivity Disorder.

Limitations

1. Study is done on small sample size
2. Study is done for confined age group
3. Not compared with gender
4. Study was done with 6-month duration

Recommendations

1. Study can be done on larger sample size
2. Study can be done different age group
3. The study can be repeated with comparison between the genders
4. Study can be done for longer duration

REFERENCES

- Assia Zidouni(2014). Adapting role play as a teaching technique to develop student speaking skill.
- Dr.T.V.Sunish.(2013)., Effect of role play on developing communication skills of children with moderate mental retardation. Cognitive discourses international journal ISSN 2321-1075 volume: 1 issue 1 (2013).
- Julia D Mcquade Betsy Hoza(2008)., “Peer problem in attention deficit hyperactivity disorder. Current status and future directions. Willy online library.
- Kathryn E. Klein (2014)., “The effect of social skills group on student diagnosed with attention deficit hyperactivity disorder. State university of New York at Fredonia.
- M.S.Bhatia (2014)., Essentials of Child Psychiatry.
- Michelle k. Demaray, Stacey L, Ruffalo, John Carlson R, T. Busse, Social skill assessment a comparative evaluation of six published rating scale, school psychology review. Volume 24, no 4 (1995)
- Niraj Ahuja (2011)., A Short Text book of psychiatry, 20th Edition.
- Pat Pratt Jane Case-Smith (1996)., “Occupational therapy for Children”, 3rd Edition.
- Smitha V.S. Varghese Paul k, Dennis Pim Vinayan K.P. Effect of social skill group training in children with attention deficit hyperactivity disorder, Amrita journal of medicine volume 10, No. 2 (2014)
- Storeboo J Skoog M. Dam D. Thomsen PH. Social skill training for attention deficit hyperactivity disorder (ADD) in children aged 5 to 18 year (pubmed).

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Conflict of Interest

The author declared no conflict of interest.

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