



# Does the table top role-playing game activity enhance quality of life in children with autism spectrum disorder ?

Kohei Kato<sup>(1)</sup>, Hiroshi Fujino<sup>(2)</sup>

(1)The United Graduate School of Education Tokyo Gakugei University

(2)Tokyo Gakugei University



## Introduction

We focused on small-group activities using a table top role-playing game (TRPG) as a method for promoting social interaction among children with high-functioning autism spectrum disorder (ASD). TRPG is an interactive game played using a pencil, paper and dice, instead of a computer. The aim is to create fictional stories through dialogues. Previous studies have shown that leisure activities using TRPG promote intentional communication and cooperative interaction among children with ASD(Kato,et al.,2012; Kato,et al.,2013). This study investigated the efficacy of TRPG activity to enhance quality of life (QOL) in children with ASD.

## Methods

The participants were 51 teenage children (41 male and 10 female) with ASD (average chronological age: 14 years old, average FIQ score: 101). The measure was the Japanese version of the Kid-KINDL Questionnaire (Furusho, 2009). The participants answered the questionnaire before and after participation in five sessions of TRPG activity. The amount of change in the scores before and after the intervention period was statistically compared using t-test.

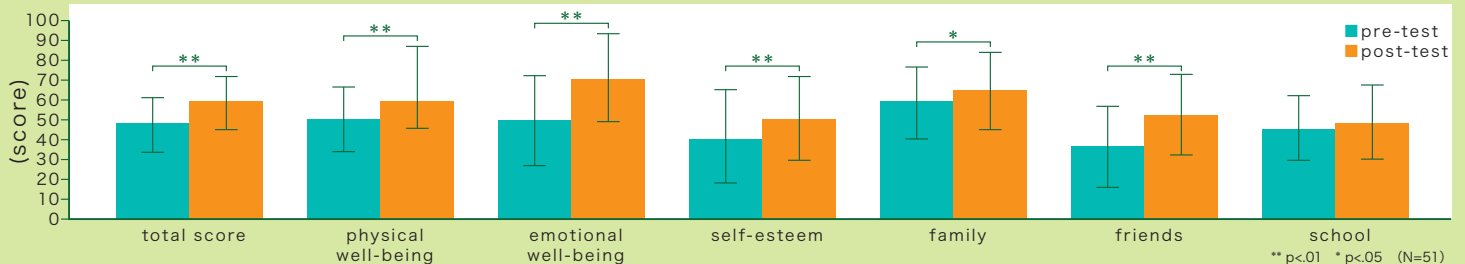
## Results

There was a significant improvement in the total scores of QOL. The effect size (r) of the subscales in each outcome measure were as follows: 'physical well-being' 0.56 (large); 'emotional well-being' 0.62 (large); 'self-esteem' 0.38 (medium); 'family' 0.31 (medium); 'friends' 0.55 (large) and 'school' 0.15 (small).

Mean scores on the subscales in Kid-KINDL

	pre-test(SD)	post-test(SD)	t	p	r	effect size
total score	46.96 (13.43)	59.07 (13.33)	-5.82	p<.01	0.64	large
physical well-being	50.00 (16.20)	66.30 (20.88)	-4.80	p<.01	0.56	large
emotional well-being	49.14 (21.83)	71.08 (22.18)	-5.57	p<.01	0.62	large
self-esteem	41.42 (21.72)	50.86 (21.72)	-2.94	p<.01	0.38	medium
family	58.70 (17.90)	64.83 (18.91)	-2.34	p<.05	0.31	medium
friends	36.64 (20.77)	52.57 (20.28)	-4.62	p<.01	0.55	large
school	45.83 (16.75)	48.77 (18.67)	-1.04	ns	0.15	small

(N=51)



\*\* p<.01 \* p<.05 (N=51)

## Conclusions

These results suggest that leisure activity involving TRPG has the potential to enhance QOL (in particular, 'emotional well-being' and 'friends' ) and relationships with peers in teenagers with ASD.