



Title	How does being bilingual influence children with autism in the aspect of executive functions and social and communication competence?
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## 論文内容の要旨

氏 名 ( Li, HiuKei )

## 論文題名

How does being bilingual influence children with autism in the aspect of executive functions and social and communication competence? (バイリンガルであることが自閉症児の実行機能と社交性とコミュニケーション能力におよぼす影響)

## 論文内容の要旨

## 〔 目 的 〕

Bilingual families with children with autism often struggle with the dilemma of language choice for their children as they are usually advised by professionals to use only one language to avoid the risk of language delay and confusion. However, there is no scientific base to such advice.

The aim of this research is to investigate how bilingualism would affect children with autism spectrum disorders (ASD) in the aspect of executive functions (EF) and social and communication competence.

## 〔 方法ならびに成績 〕

A total of 67 participants were separated into four groups according to their language use (bilingual/monolingual) and their developmental status (TD/ASD). The subjects were matched by the score of Raven Colored Progressive Matrices. Four computerized EF tasks were completed by the participants and two questionnaires on social and communication competence (SDQ and CCC-2) were completed by the participants' parents. Two-way ANOVA was used to analyze the accuracy and latency of EF tasks and the score of questionnaires.

Bilingual ASD children did not perform worse than monolingual ASD children. No significant differences were found between groups except between TD and ASD in the Japanese version of Stroop task and the scores of the social and communication competence questionnaires. Significant difference was found between the bilingual ASD and the Japanese monolingual ASD at the latency of the English version of Stroop task but stroop effect was not significantly different.

## 〔 総 括 〕

In addition to no extra delay in language development, this study suggests that being bilingual for children with ASD does not impede their EF and social and communication competence. Professionals should consider the family cultural background and language use before suggesting the 'one language only' advice as it can scar the family dynamics and deprive the child's opportunity to be fully involved in the family.

## 論文審査の結果の要旨及び担当者

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論文審査の結果の要旨			
<p>This study was to examine how does bilingualism influence children with autism in the aspect of executive functions and social and communication competence. We found that there was no significant difference between bilingual children with autism and Japanese monolingual children with autism which suggested that bilingualism doesn't have a negative influence to children with autism. However, such claim has to be made with caution, as there were few limitations in the study. First, the sample size was quite small thus the result could not be generalized. Second, it was advised by one of the examiners that basic research should be performed to obtain a better understanding of subjects' background and availability in order to formulate a more ideal research design. Last but not least, as this study was focused on children with high function autism, it is difficult to apply the result here to children with autism who have language impairment or with intellectual disability.</p> <p>This study, however, is still valuable because only very few research has been done on such field. As the examiners mentioned, studies on subject concerning bilingualism and autism is very important and urgent nowadays as not much has been known yet. However, the need is very high as there are more and more bilingual or multilingual families raising children with autism now. This study provided new and valuable insight to the research field; thus it should be considered to receive PhD degree.</p>			