

Different methods of IQ tests and the effects on improving behavioral skills of Autistics

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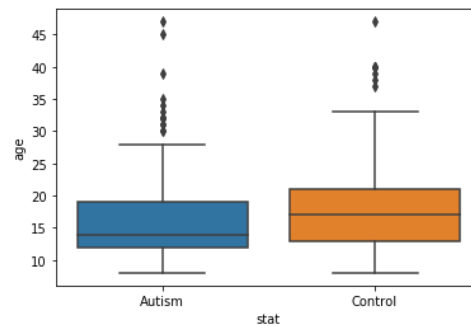
Abstract

Recent studies have suggested that people with autism perform better than matched controls on some iq related tasks and can improve their behavioral skills through more practical tests than normal people.

Background

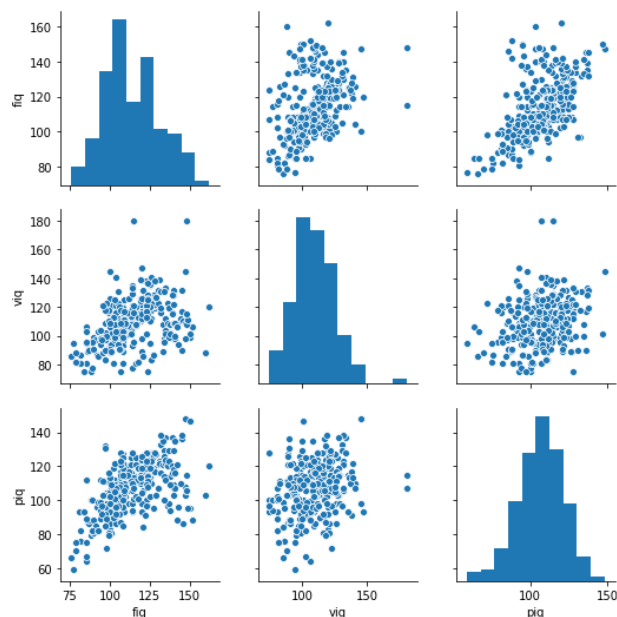
This study assessed whether these findings are true for different age groups. 301 participants are divided into 2 groups, 155 autistics and 146 control. Before applying 3 different iq methods (fiq, viq and piq) which each also has 3 sub methods, score of behavioral skills was measured. Then after these methods were applied again the behavioral skills were measured through 6 tests. The sum is comparable with the past results.

Age	Autism	Control
0-10	34	18
11-20	93	93
21-30	18	23
31-40	8	11
41+	2	1

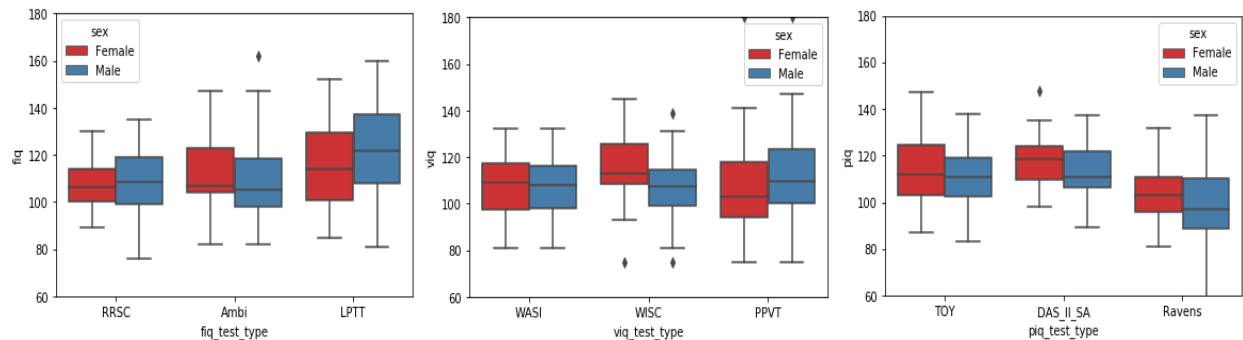


Method	Sub-Method	Autism	Control
fiq	Ambi	16	23
	LPTT	71	73
	RRSC	68	50
viq	PPVT	56	81
	WASI	62	52
	WASC	37	13
piq	DAS_11_SA	37	13
	Ravens	56	81
	TOY	62	52

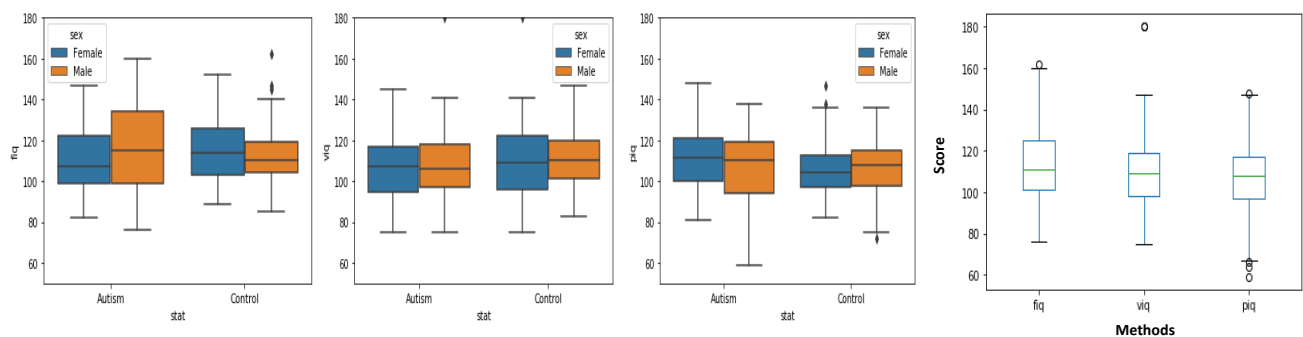
fiq method has a higher positive correlation with piq method (0.57). Also there is a positive correlation of (0.40) between fiq and viq methods, but the correlation between viq and piq is insignificant.



The box plots below show the distribution of each Methods and its Sub-Methods based on gender. There is a slight difference between the result of each methods, besides in some sub methods there is difference between the scores for males and females.

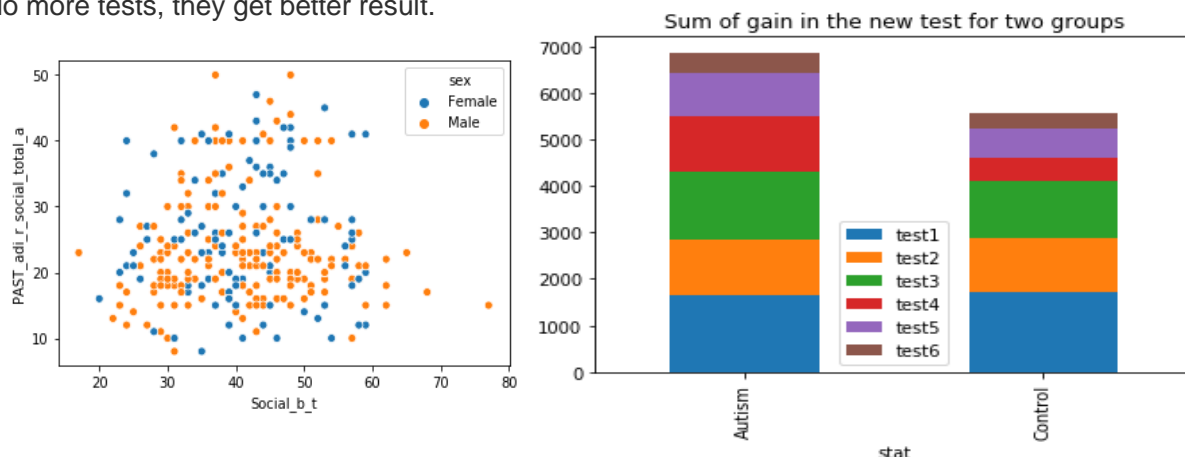


The distribution of scores from the three iq methods don't have any significant difference. Just the fig test has more variation, this variation is more belong to male autistics.



Findings

The average of past test for autistics and control were 20.16 and 28.75 respectively. After the participants got involve in doing the tests (6 tests), they gained on average 16.93 points (24.168 for autistics and 9.253 for Control). As the graphs shows the result of the past and new test are not correlated on total (0.029). However, result of the control group is more correlated to the past result (0.347) compare to autism group (0.071). The gain for autistics was significantly higher and as they do more tests, they get better result.



Conclusion

- The control people have more history of the past as their results of their previous tests and new tests were correlated. But this is not the case for participants with autism.
- Autistics can gain much better result as they focus and do more tests. However, the participants in control group after the test number 3 gained significantly less points and it seems they get tired sooner than autistics.