A comparison of different technological interfaces and activities on autistic children’s social play with peers

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Background and Aims

- Technology can inspire social interaction in autistic children [1-3], contradicting concerns from parents and professionals [4]
- How can we best use technology to foster interaction and social play in autistic children?

Method

- We observed 4 children playing with different types of technologies, including a range of interfaces and apps
- We coded social play using Howes’ Peer Play Scale [5]
- 36 video clips, each containing 5 minutes of observation, were included in the analysis with 20 minutes/session
- Design-based iterations were led by autism practitioners to explore whether the environment influenced play

Participant Information

<table>
<thead>
<tr>
<th></th>
<th>Oliver (10)</th>
<th>Harry (11)</th>
<th>Laura (8)</th>
<th>Jack (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current spoken language</td>
<td>Non-verbal</td>
<td>Fluent</td>
<td>Fluent</td>
<td>Non-verbal</td>
</tr>
<tr>
<td>Social Responsiveness</td>
<td>84</td>
<td>71</td>
<td>68</td>
<td>89</td>
</tr>
<tr>
<td>Vineland Adaptive Behaviour</td>
<td>36</td>
<td>59</td>
<td>65</td>
<td>39</td>
</tr>
<tr>
<td>Wing's Subgroup</td>
<td>Aloof</td>
<td>Active but odd</td>
<td>Active but odd</td>
<td>Aloof</td>
</tr>
</tbody>
</table>

Conclusions

- Technology can support social interaction and play
- Children respond to digital cues for collaboration, and find more opportunities to engage using tangible interfaces (blended physical-digital)
- Providing communal areas for technology use increases social engagement

Key Findings

- Highest levels of social play, and play with peers, was observed on iPads.
- The most social play with adults was observed on Osmo.

For more details see [www.dart.ed.ac.uk/research/autism-tech-play](http://www.dart.ed.ac.uk/research/autism-tech-play)

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References


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Thankyou!