

Evaluating four and five-year old children's
responses to interactive television programs.

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I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

.....
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ABSTRACT

While it is commonly believed that ‘interactive’ media provides benefits to young children not obtained from ‘non-interactive’ media, there has been little research examining this issue, or the kinds of interactivity that elicit these benefits. The present study examined the attention, comprehension, and enjoyment of young children viewing different kinds of interactive television programs compared with those of children viewing the control prototype (non-interactive) programs. Three interactive prototypes and one control prototype of *Dora the Explorer*, *Hi-5*, and *Play School* were examined on these outcome measures. The interactive prototypes allowed participants to make simple choices about program content using a television remote control. Four hundred and ninety eight children aged four (49.4%) and five (50.6%) years individually viewed one of the prototypes, and the children’s attention, comprehension, and enjoyment were examined. Participants were boys (49.7%) and girls (50.3%) drawn from Government (64.9%), Catholic (27.6%) and Independent (7.4%) schools in Perth, Western Australia. Significantly higher attention, comprehension, or both were found for children interacting with two of the prototypes allowing increased viewer participation compared to children viewing the control prototype prototypes. Interactive prototypes allowing participants to repeat sections of program content also elicited significantly higher comprehension than control prototypes. However, interactive prototypes allowing participants to customise aspects of the program did not result in differences in the outcome measures compared with control prototypes. It was also found that interactive prototypes offering participants narrative choices were associated with significantly lower attention, comprehension or enjoyment for either interacting or non-interacting participants compared to the control prototypes. It is argued that interactivity, per se, does not bestow any benefits, with only specific models of interactivity resulting in higher comprehension or attention. In fact, some applications allowing young children

to make choices about program narrative appears to disrupt program comprehension. It is concluded that successful interactivity builds upon the features of well-designed traditional children's television; opportunities for increased participation, and the repetition of content.

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