This study was carried out to investigate non-literal understanding in 2 high functioning autistic (HFA) children aged 8 and 11 years old respectively. This group was then compared with 2 normal children matched by the same chronological age and gender. Another 6-year-old normal child was also included in this study to match the receptive language age of the HFA group. A play-based methodology was used to carry out the current study. The child listens to a tape-recorded story into which 10 idiomatic expressions were embedded. The child then acts out the story as it is played again, sentence by sentence. The play is video recorded and transcribed. Actions for each idiom are categorized and then analyzed. The results indicate that the children with HFA did, as a group, demonstrated fewer appropriate idiomatic interpretations and more inappropriate interpretations than of the normal group. However the higher response for inappropriate scores reflected more fuzzy responses than the literal ones. This may indicate awareness among these children that the literal meaning is inappropriate in the absence of adequate idiom vocabulary. It may also reflect difficulty in retrieving known idioms from memory and/or selecting the most appropriate meaning from several possibilities in context. Besides that, it is also worth noting that, although other language structures develops fairly well in the HFA group, non-literal understanding of this group was at the level of a six year old normal child. It is suggested that the characterization of children with high functioning autism as predominantly literal needs to be revised. Rather than seeking a blanket characterization of non-literal understanding in an essentially heterogeneous group, it may be more useful to consider that literalization strategy adapted for idiom comprehension in these children is a secondary manifestation of semantic and/or pragmatic difficulties.