

1501252 - EAEC6002	Autistic Spectrum Disorder		Social Stories
Picture Exchange Communication System (PECS)	Introduction	NAS (2017) states that social stories are used to support children in understanding certain events or situation in life. It is tailored to give out specific information about a topic that a child may come across and attempt to support the child in understating social skills and behaviour linked to the topic. Golzari, Alamdarloo and Moradi (2015) states that children can learn appropriate behaviour for social situation, therefore they can keep and maintain friends by understanding how the relation works through social stories. However the stories must be accurate and spoken in a reassuring manner as not to confuse or overwhelm the child (Karkhaneh, 2010). As well as having accurate information in the stories, Watts (2008) states that perspective sentences are also used to specifically assist children with ASD to understand why a person may feel different emotions to themselves and why they might think and believe differently. However if the stories are not carried out consistently then it may not be effective as the child may forget what to do in social situations. Although perspective sentences may be used Watts (2008) also states that some stories may be too directive, this could be a barrier in the strategy as social stories are meant to give the child a freedom of choice after being informed on what to expect in social situations. This could also limit the child in their learning as they will be directed into using specific behaviour or thinking exactly what the story has portrayed rather than giving them the opportunity to discuss and come to their own conclusion. Rota (no date) also supports this as social stories should help teach children not direct them. On the other hand, Bozkurt and Vuran (2014) states that it can remove barriers in understanding as it provides visual pictures in the stories to prompt the children in remembering and understanding appropriate behaviour. However, Foster (2015) states that a limitation to this strategy could be the lack of observation on the adults part, adults need to ensure they know which story to use as each story is specific to certain situations. Therefore, adults must understand and know what story will be beneficial to the individual child. Mohr (2013) states that strategies, such as social stories should be used to promote inclusion and equal opportunities in schools. However it depends whether or not if the strategy is effective on the child. social stories can assist children in being part of a social group , this will ensure they are given the same opportunities as other children as the children with ASD are being prepared beforehand. Davidson (2015) also includes that children with ALN should be able to participate in an enriched environment that will support them in enhancing their skills and development. By using social stories it can allow children to be included as they are given the opportunity to develop their social and emotional skills.	
Tien (2008) states that PECS is mostly used for children with ASD, who have very limited communication skills. It is aimed to build their skill in speech and language and promote spontaneous communication. It also supports them with behaviour issues as well, as it is a good intervention to lessening problem behaviour. Tien (2006) informs us of the 6 phases of using PECS. These phases are stated by Vicker (2010) to support those children who already attempt to communicate but need extra support. However, for those children who do not try communicating or cannot must build a bond with an adult to ensure they understand each others gestures and body language before they start using PECS. Charlop- Christy et al. (2002) states that PECS can assist children in initiating conversation. Instead of using verbal words they can use the picture exchange and not feel frightened or anxious of using verbal words. However, with this strategy children do not have to make eye-contact, this may not support them in their social skills as making eye contact is important in socialising and communicating (Pessah, 2012). NAS (2013) states that PECS can support children in making a choice and gaining general knowledge about their environment, this can overcome the barrier of feeling lost and overwhelmed in a class as they can use the strategy to communicate what they need/want. However, it is important for adults to update the child’s PECS book as the child may be limited in communication due to the lack of pictures to exchange and use (Bondy, 2001). PECS can ensure that there is a decrease in problem behaviour as children with ASD will have the opportunity to communicate through the picture exchange (Charlop- Christy et al, 2002). However if the child has visual impairments or their fine motor skills are not developed, then the child will struggle to use the strategy as they may not be able to see the pictures very well, and they may not be able to pick and take the pictures from the books (Anderson, no date).PECS ensures children with ASD are given an equal opportunity, as it supports their right to expression which is article 13 in the UNCRC and it covers children with disability (article 23) (UNICEF, 2010). Charlop – Christy et al (2002) states that PECS does not require training as it is very easy to learn how to use. Therefore children in the mainstream class can learn how to use the strategy, which would then support the children with ASD to feel included. It can also promote friendship and communication development within the child (Woronko and Killoran, 2011).	Barriers to learning		
	Although intervention can support children with ASD. There are also barriers to learning that must be overcome. Denning and Moody (2013) states that some children with ASD can find it challenging to work and be in a classroom environment. As they may struggle to take in information and not be able to work effectively. This could make them feel lost and overwhelmed. A lack of communication and language development could also assist in making the child feel overwhelmed (Charman, 2004). All Together Now (no date) states that, lack of communication and language could link to children with ASD to have behavioural problems. As they may feel frustrated due to the inability to communicate their feelings and words. NHS Trust (2006) also includes that a lack of eye-contact could be part of the reason why children struggle with communicating, this may extend to the child’s behaviour as well. As NHS Trust (2006) also states that problem behaviour could be a child’s form of communication to state the way they are feeling such as frustration. Other barriers to learning children with ASD could face are barriers linking to social skills and development. All Together Now (no date) states that language and communication skills affects children’s social and emotional development as well. This is due to the inability to communicate back to people. Children may feel a low level of self-esteem due to being unable to create relations with their peers, as they may feel anxious. NAS (2017) includes that some children can also be held back as part of ASD includes being unable to understand other peoples reactions, emotions and beliefs. Due to the inability to understand others emotions, some children may struggle in making friends. This could prevent them in learning how to create and keep relations. Social skills are assumed to limiting children with ASD in the mainstream class, this in turn could prove to be a big barrier in their learning (Knott, Dunlop and Mackay, 2006).		
	Conclusion	References	
Overall, PECS and social stories provide children with ASD an opportunity to develop their communication, language, social and emotional skills. Although there are limitations such as how far the intervention/strategies can support children, they still provide positive outcomes. As Malhotra (2010) states that 60% of children are positively impacted by the strategies. The strategies ensure that the children are receiving intervention to support them in later life. As Davidson (2015) has discussed children with ALN have a right to take part in mainstream classes and they have a right to education as UNICEF (2010) states. Therefore by implementing the two strategies can ensure the children are gaining the best intervention to assist them in life.		- NAS. (2017) ‘Social Interaction for Children’ http://www.autism.org.uk/about/communication/social-children.aspx [Accessed: 16th May 2018]. - Boyd, B. and Shaw, E. (2010) ‘Autism in the classroom: A group of students changing in population and presentation’, <i>Preventing School Failure</i>, Volume 54. [On-line]. Available at: https://search.proquest.com/docview/748881406?pq-origsite=gscholar [Accessed: 16th May 2018].	

References

- All Together Now. (No date) 'Why communication is important?' https://www.thecommunicationtrust.org.uk/media/2147/all_together_now_-_section_2.pdf [Accessed: 16th May 2018].
- Amaral, D. (2017) 'Examining the causes of Autism', *Cerebrum*, January. [On-line]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5501015/> [Accessed: 16th May 2018].
- Anderson, L. (No date) 'Picture Exchange Communication System for Individuals with Autism Spectrum Disorders', *Journal of the American Academy of Special Education Professionals*. [On-line]. Available at: <https://files.eric.ed.gov/fulltext/EJ1137366.pdf> [Accessed: 18th May 2018].
- Autism Society. (2015) 'Causes' <http://www.autism-society.org/what-is/causes/> [Accessed: 16th May 2018].
- Bondy, A. (2001) 'PECS: Potential Benefits and Risks', *The Behaviour Analyst Today*, Volume 2. [On-line]. Available at: <http://psycnet.apa.org/fulltext/2014-43975-009.pdf> [Accessed: 17th May 2018].
- Boyd, B. and Shaw, E. (2010) 'Autism in the classroom: A group of students changing in population and presentation', *Preventing School Failure*, Volume 54. [On-line]. Available at: <https://search.proquest.com/docview/748881406?pq-origsite=gscholar> [Accessed: 16th May 2018].
- Bozkurt, S. S. and Vuran, S. (2014) 'An Analysis of the Use of Social Stories in Teaching Social Skills to Children with Autism Spectrum Disorders', *Educational Sciences: Theory and Practice*, Volume 14. [On-line]. Available at: <https://files.eric.ed.gov/fulltext/EJ1050428.pdf> [Accessed: 18th May 2018].
- Centre for Development and Disability. (No date) 'Visual Supports for Children with ASD' <https://www.cdd.unm.edu/autism/pdfs/Visual%20Supports%20PHT%20Parent%20Handout.pdf> [Accessed: 18th May 2018].
- Chamberlain, B., Kasari, C. and Rotheram- Fuller, E. (2007) 'Involvement or Isolation? The Social Networks of Children with Autism in Regular Classrooms', *Journal of Autism Developmental Disorder*, July. [On-line]. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.9620&rep=rep1&type=pdf> [Accessed: 18th May 2018].

- Charlop- Christy, M., Carpenter, M., Le, L., LeBlanc, L. and Kellet, K. (2002) 'Using the Picture Exchange Communication System (PECS) with Children with Autism: Assessment of PECS Acquisition, Speech, Social-Communicative Behaviour, and Problem Behaviour', *Journal of Applied Behaviour Analysis*, Volume 32. [On-line]. Available at: <https://www.pecs-unitedkingdom.com/documents/articlePECS.pdf> [Accessed: 17th May 2018].
- Charman, T. (2004) 'matching preschool children with Autistic Spectrum Disorders and comparison children for language ability: Methodological challenges', *Journal of Autism and Developmental Disorders*, Volume 34, February. [On-line]. Available at: <https://link.springer.com/content/pdf/10.1023/B:JADD.0000018075.77941.60.pdf> [Accessed: 16th May 2018].
- Davidson, A. (2015) 'The Effectiveness of Strategies that Promote the Inclusion of Children with Autism in Mainstream Classes', *The Step Journal*, Volume 2. [On-line]. Available at <file:///C:/Users/1501252/Downloads/263-Article%20Text-719-2-10-20150914.pdf> [Accessed: 18th May 2018].
- Denning, C. and Moody, A. (2013) 'Supporting students with Autistic Spectrum Disorders in inclusive settings: Rethinking instruction and design', *Electronic Journal for Inclusive Education*, Volume 3. [On-line]. Available at: <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1153&context=ejie> [Accessed: 16th May 2018].
- Foster, J. (2015) 'A Review of the Effectiveness of Social Stories Among Children and Adolescents with Autism Spectrum Disorders', *University of New York*. [On-line]. Available at: https://digitalcommons.plattsburgh.edu/cgi/viewcontent.cgi?article=1003&context=psychology_theses [Accessed: 18th May 2018].
- Golzari, F., Alamdarloo, H. G. and Moradi, S. (2015) 'The Effect of a Social Stories Intervention on the Social Skills of Male Students with Autism Spectrum Disorder', *Sage*, December. [On-line]. Available at: <http://journals.sagepub.com/doi/pdf/10.1177/2158244015621599> [Accessed: 18th May 2018].
- Hill, A., Zuckerman, K., Hagen, A., Kriz, D., Duvall, S., Santen, J., Nigg, J., Fair, D. and Fombonne, E. (2014) 'Aggressive Behaviour Problems in Children with Autism Spectrum Disorders: Prevalence and Correlates in a Large Clinical Sample', *Res Autism Spectrum Disorders*, Volume 8. September. [On-line]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4160737/> [Accessed: 18th May 2018].

- Hilton, L. (2015) 'Assessing the effectiveness of a picture exchange communication system on increasing manding and vocal speech in identical twin adults with autism', *Dissertations*, May. [On-line]. Available at: <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?referer=https://www.google.co.uk/&httpsredir=1&article=1522&context=dissertations>
- Howlin, P., Gordon, K., Pasco, G., Wade, A. and Charman, T. (2007) 'The effectiveness of Picture Exchange Communication System (PECS) training for teachers of children with autism: a pragmatic, group randomised controlled trial', *Journal of Child Psychology and Psychiatry*, Volume 48. [On-line]. Available at: https://s3.amazonaws.com/academia.edu.documents/44259543/The_effectiveness_of_Picture_Exchange_Co20160331-15408-k6w5xo.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1526826175&Signature=VCWCzGj%2B%2FH%2BPUKuw3TDj7etDIlg%3D&response-content-disposition=inline%3B%20filename%3DEffectiveness_of_the_Picture_Exchange_Co.pdf [Accessed: 18th May 2018].
- Karkhaneh, M., Clark, B., Ospina, M., Seida, J., Smith, V. and Hartling, L. (2010) 'Social Stories to Improve Social Skills in Children with Autism Spectrum Disorder', *Sage*, Volume 14. [On-line]. Available at: <http://journals.sagepub.com/doi/pdf/10.1177/1362361310373057> [Accessed: 18th May 2018].
- Knott, F., Dunlop, A. and Mackay, T. (2006) 'How do children and their parents assess their difficulties with social interaction and understanding?', *SAGE Publications*, Volume 10. [On-line]. Available at: <http://journals.sagepub.com/doi/pdf/10.1177/1362361306068510> [Accessed: 15th May 2018].
- Kouzlin, A., Gindis, B., Ageyev, V. and Miller, S. (2003) *Vygotsky's Educational Theory in Cultural Context*. New York: Cambridge University Press.
- Malhotra, S., Rajender, G., Bhatia, M. and Singh, T. (2010) 'Effects of Picture Exchange Communication System on Communication and Behavioural Anomalies in Autism', *Indian J Psychol Med*, Volume 32. [On-line]. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3122547/> [Accessed: 17th May 2018].
- Mohr, S. (2013) 'Critical Review: Are Social Stories Effective at Decreasing Maladaptive Behaviours in Children with Autism?', *School of Communication Sciences and Disorders*. [On-line]. Available at: https://www.uwo.ca/fhs/lwm/teaching/EBP/2012_13/Mohr_S.pdf [Accessed: 18th May 2018].
- NAS. (2013) 'Visual Supports' [file:///C:/Users/1501252/Downloads/Visual%20supports%20June%202013%20\(1\).pdf](file:///C:/Users/1501252/Downloads/Visual%20supports%20June%202013%20(1).pdf) [Accessed: 17th May 2018].
- NAS. (2017) 'Social Interaction for Children' <http://www.autism.org.uk/about/communication/social-children.aspx> [Accessed: 16th May 2018].
- NAS. (2017) 'Social Stories and Comic Strip Conversations' <http://www.autism.org.uk/about/strategies/social-stories-comic-strips.aspx> [Accessed: 18th May 2018].

- Nelson, J. (2013) 'Avram Noam Chomsky and his Cognitive Development', *Arkansas Tech University*, June. [On-line]. Available at: <https://files.eric.ed.gov/fulltext/ED543301.pdf> [Accessed: 18th May 2018].
- NHS Trust. (2006) 'Understanding and Managing Behaviour Problems in Children and Young People with Autistic Spectrum Disorders' http://sociallyspeakingllc.com/my-mission-for-socially/free-pdfs/understanding_behavioral.pdf [Accessed: 16th May 2018].
- Ozdemir, S. (2008) 'The effectiveness of social stories on decreasing disruptive behaviours of children with autism: three case studies', *Journal of Autism Developmental Disorder*, March. [On-line]. Available at: <http://web.b.ebscohost.com.ezproxy.grifols.com/ehost/pdfviewer/pdfviewer?vid=1&sid=8d5e27e8-b269-43ae-84ca-5ec726513191%40pdc-v-sessmgr01> [Accessed: 18th May 2018].
- Perepa, P. (No date) 'Classroom and Playground: Support for children with autism spectrum disorders' [file:///C:/Users/1501252/Downloads/Classroom_and_playground%20\(1\).pdf](file:///C:/Users/1501252/Downloads/Classroom_and_playground%20(1).pdf) [Accessed: 17th May 2018].
- Pessah, D. (2012) 'Clinician-Perceived Bridges and Barriers to Parental Implementation of Picture Exchange Communication System (PECS): An Evaluation', *Faculty of Centre of Applied Disability Studies*. [On-line]. Available at: <http://boostbehaviour.com/wp-content/uploads/2015/07/Bridges-and-Barriers-to-PECS.pdf> [Accessed: 17th May 2018].
- Plimley, L., Bowen, M. and Morgan, H. (2007) *Autistic Spectrum Disorders in the Early Years*. London: Sage Publications.
- Pyramid Educational Consultant. (No date) 'PECS and the Pyramid Approach' <https://www.pecs-unitedkingdom.com/documents/infobrochure-UK-web.pdf> [Accessed: 18th May 2018].
- Rickets, J., Jones, C., Happe, F. and Charman, T. (2013) 'Reading Comprehension in Autistic Spectrum Disorders: The Role of Oral Language and Social Functioning', *Journal of Autism and Developmental Disorders*, Volume 43, April. [On-line]. Available at: <https://link.springer.com/article/10.1007/s10803-012-1619-4> [Accessed: 16th May 2018].
- Rota, M. (No date) 'Use of Social Stories with Students in an Inclusive Kindergarten Classroom: An Action Research Study', *University of Rochester*. [On-line]. Available at: <file:///C:/Users/1501252/Downloads/Rota%20dissertation%20final.pdf> [Accessed: 18th May 2018].

- Russell, G., Kelly, S. and Golding, J. (2009) 'A qualitative analysis of lay beliefs about the aetiology and prevalence of autistic spectrum disorders', *Child: child, health and development*, May. [On-line]. Available at: <https://pdfs.semanticscholar.org/a875/7d6d60f8321aef9cc28fcde230eaa693d052.pdf> [Accessed: 16th May 2018].
- Scattone, D., Tingstorm, D. and Wilczynski, S, (2006) 'Increasing Appropriate Social Interactions of Children With Autism Spectrum Disorders Using Social Stories', *Focus on Autism and Other Developmental Disabilities*, November. [On-line]. Available at: <file:///C:/Users/Nehar/Downloads/ScattoneSocialStories.pdf> [Accessed: 18th May 2018].
- The National Autistic Society. (2016) 'What is Autism?' <http://www.autism.org.uk/about/what-is/asd.aspx> [Accessed: 15th May 2018].
- Tien, C. K. (2008) 'Effectiveness of the Picture Exchange Communication System as a Functional Communication Intervention for Individuals with Autism Spectrum Disorders: A Practice- Based Research Synthesis', *Education and Training in Developmental Disabilities*, Volume 43. [On-line]. Available at: <https://pdfs.semanticscholar.org/82e8/25359bc8a78cd25917574126603be92c2760.pdf> [Accessed: 17th May 2018].
- UNICEF. (2010) 'The Summary of the UN Convention on the Rights of the Child' https://downloads.unicef.org.uk/wp-content/uploads/2010/05/UNCRC_summary.pdf [Accessed: 17th May 2018].
- Vicker, B. (1998) 'Behavioural Issues and the Use of Social Stories' <https://www.iidc.indiana.edu/pages/Behavioral-Issues-and-the-Use-of-Social-Stories> [Accessed: 18th May 2018].
- Vicker, B. (2010) 'Successfully using Pecs with children with ASD' <https://www.iidc.indiana.edu/pages/Successfully-Using-PECS> [Accessed: 17th May 2018].
- Walter, M. (2014) 'Effectiveness of Pictorial Representations on the Decrease of Undesirable Behaviours in Children with Autism Spectrum Disorder', *Kalamazoo College*. [On-line]. Available at: <https://cache.kzoo.edu/bitstream/handle/10920/29461/Marley-WalterSIP.pdf?sequence=3> [Accessed: 18th May 2018].
- Watts, K. (2008) 'The Effectiveness of a Social Story Intervention in Decreasing Disruptive Behaviour in Autistic Children', *Ohio State University*. [On-line]. Available at: https://etd.ohiolink.edu/rws_etd/document/get/osu1207928140/inline [Accessed: 18th May 2018].

- Woronko, D. and Killoran, I. (2011) 'Creating Inclusive Environments for Children with Autism', *From Genes to Environment*, September. [On-line]. Available at: http://cdn.intechopen.com/pdfs/19205/InTech-Creating_inclusive_environments_for_children_with_autism.pdf [Accessed: 17th May 2018].
- Zandt, F., Prior, M. and Kyrios, M. (2007) 'Repetitive behaviour in children with high functioning autism and obsessive compulsory disorder', *Journal of Autism Developmental Disorder*, July. [On-line]. Available at: <https://pdfs.semanticscholar.org/d1bb/dd23714d9d14fbe3780d88699911c83e754d.pdf> [Accessed: 18th May 2018].