

The Indices of Friendship Observation Schedule (IFOS)

The assessment of friendship skills

An essential characteristic of autism is a deficit in developing, maintaining, and understanding friendships. To date, we do not have standardized tests of a child's friendship abilities. However, the IFOS is based on the first two of the four stages of friendship for typical children (Attwood, 2007; Rubin 2002), that is stage 1 three to six years, and stage 2, six to nine years.

Stage 1 of Friendship

By Prof Tony Attwood (Excerpt from the *Complete Guide for Asperger's Syndrome*, 2006)

The developmental stages in the concept of friendship for typical children

Before the age of three years, typical children will interact and play with members of their family, but their conceptualization of their peers is often one of rivalry for possessions and adult attention rather than friendship. If another child comes to the home, the typical child may hide a favourite toy. However, some basic sharing, helping and comforting can occur after the first year, the first building blocks of friendship. There may be parallel play and curiosity about what is interesting to other children and subsequent copying of what other children are doing, but primarily because it may be interesting, enjoyable and likely to impress a parent. We know that typical children in this age group do have preferred companions and may choose to play alongside a particular child. As children with Asperger's syndrome are usually diagnosed after the age of five years, they have usually progressed beyond the level of friendships associated with very young children.

Stage one of friendship – three to six years

Typical children from the ages of three to six years have a functional and egocentric conceptualization of friendship. When asked why a particular child is his or her friend, a typical child's reply is usually based on proximity (lives next door, sits at same table) or possessions (the other child has toys that the child admires or wants to use). Toys and play activities are the focus of friendship and the child gradually moves from engaging primarily in parallel play to recognizing that some games and activities cannot happen unless there is an element of sharing and turn-taking. However, cooperative skills are limited, the main characteristics that define a friend being one-way and egocentric (he helps me or she likes me). Conflict is usually associated with the possession and use of equipment and the violation of personal space, but in the last year or two of stage one, conflict can be over the rules of games and who wins. Conflict resolution, from the child's perspective, is often achieved by ultimatums and use of physical force. An adult may not be asked to adjudicate. Children may have some suggestions to comfort or help a distressed friend, but consider emotional repair as the function of a parent or teacher rather than themselves.

If children from three to four years are asked what they did today, they tend to describe what they played with, while over the age of about four years they start to include whom they played with. Social play gradually becomes more than just the construction and completion of the activity. However, friendships are transitory and the child has a personal agenda of what to do and how to do it.

Very young children with Asperger's syndrome have a clear end product in mind when playing with toys; however, they may fail to effectively communicate this to a playmate, or tolerate or incorporate the other child's suggestions, as this would produce an unanticipated outcome. For example, the child with Asperger's syndrome may have in mind while playing with construction equipment the mental image of the completed structure, and be extremely agitated when another child places a brick where, according to the mental image, there shouldn't be a brick. The typical child, meanwhile, does not understand why his or her act of cooperation is rejected.

The young child with Asperger's syndrome often seeks predictability and control in play activities while typical peers seek spontaneity and collaboration. In her autobiography, Liane Holliday Willey explains about her early childhood:

Like with my tea parties, the fun came from setting up and arranging things. Maybe this desire to organize things rather than play with things, is the reason I never had a great interest in my peers. They always wanted to use the things I had so carefully arranged. They would want to rearrange and redo. They did not let me control the environment. They did not act the way I thought they should act. Children needed more freedom than I could provide them. (Willey 1999, pp.16-17)

Other children often consider that the child with Asperger's syndrome, who often prefers to play alone, does not welcome them. When other children are included, the child with Asperger's syndrome may be dictatorial, tending not to play by conventional rules and considering the other child as subordinate. Such behaviour is perceived by other children as being bossy and sounding and behaving more like a teacher than a friend. Thus, the child with Asperger's syndrome, who is eventually avoided by other children, inadvertently becomes unpopular. Opportunities are then lost to use and develop friendship skills.

Programs for stage one

An adult acting as a friend

For the young child with Asperger's syndrome, who is probably not interested in playing with peers, but who may be motivated to interact with adults, social play can be taught by an adult who 'plays the part' of an age peer. In much the same way that actors in a theatre play learn how to act, and rehearse their roles, the child can be taught how to engage in reciprocal play. The adult 'friend' in this situation will need to adjust his or her abilities and language to resemble that of the child's peers. The intention is to encourage reciprocal play between equals with neither 'friend' being dominant.

A class teacher has a designated and relatively fixed role, being an adult not a friend. However, an adult who provides support to facilitate integration into the kindergarten or pre-school can sometimes act the role of 'friend'. This adult 'friend' can act as a mentor, or stage director, giving guidance and encouragement to the child in social situations. Games or equipment that are used at school and are popular with other children of the same age may be borrowed or bought to assist in making the interactions more comparable with real social situations with peers.

It is important that adults, especially parents, observe the natural play of the child's peers, noting the games, equipment, rules and language. The strategy is for the parent to play with the child using 'child speak' - the typical utterances of children of that age - and to be equal

and reciprocal in terms of ability, interests and cooperation. The adult can demonstrate specific social cues, and momentarily stop and encourage the child to see or listen to the cue, explaining what the cue means and how he or she is expected to respond.

The adult can vocalize his or her thoughts when playing with the child - a commentary of thoughts. This will enable the child with Asperger's syndrome to actually listen to the other person's thoughts rather than be expected to know what the other person is thinking from the context, or by having to interpret facial expressions and body language.

It is important that the adult role plays examples of being a good friend, and also situations that illustrate unfriendly actions, dominance, teasing and disagreements. Appropriate and inappropriate responses can be enacted by the adult, to provide the child with a range of responses and the ability to determine which response is appropriate and why.

Taking turns and asking for help

In stage one of friendship, a good friend is someone who takes turns and helps. It is important that when the adult is acting a friend, he or she models and encourages turn-taking. For example, when completing an inset board, the adult and the child should take turns in placing each of the pieces in the puzzle; if looking at a book, the adult first points to one of the pictures and makes a comment or asks a question, and on the next page the child points and asks the adult a question. If the child enjoys being pushed on the swing, the next activity is for the child to push the adult on the swing. The two 'friends' take turns in each activity and in being the leader.

To encourage helping someone, the adult will need to deliberately make a mistake or not be sure what to do in order to solve a problem. The adult then asks the child for help, with the comment that asking for help is the smart and friendly thing to do when you have a problem. The adult will need to ensure that his or her own ability on a task is comparable to that of the child with Asperger's syndrome. Such children may perceive themselves as small adults, and become extremely disappointed or agitated if their level of ability is obviously less than that of their playmate. The adult is also modelling that it is okay to make mistakes.

A dress rehearsal with another child

An adult can easily modify the pace of play and amount of instruction and feedback. After sufficient practice in such a setting, the child can progress to a 'dress rehearsal' with another child. This might be an older sibling, or perhaps a mature child in the class, who can act as a friend to provide further guided practice before the skills are used openly with a peer group.

A video recording of children playing

Children with Asperger's syndrome often enjoy watching the same movie many times. This is a common preferred activity of typical children but the child with Asperger's syndrome may be unusual in terms of the number of times the film or program is watched. This is not necessarily a self-stimulatory behaviour, as suggested in some of the behaviourist literature on autism, but in my opinion a constructive way of learning without the confusion and effort of having to socialize or talk. Parents can be concerned that watching the same program so many times is a waste of time; however, the problem may not be what the child with Asperger's syndrome is doing, but what he or she is watching.

I recommend that video recordings be made of the social experiences of the child with Asperger's syndrome, for example, the child and peers playing in the sandpit, 'show and tell'

time in class, or playing with cousins at home. The child can then replay, perhaps many times, the ‘social documentary’ to better understand the social cues, responses, sequence of activities, actions of peers and the child’s role as a friend. An adult can use the freeze-frame or pause facility to focus on a specific social cue, identify friendly behaviour and point out what the child with Asperger’s syndrome did that was appropriate.

Pretend games

Typical children in stage one of friendship often play make-believe or pretend games based on popular characters and stories from books, television programs and films. The play of the child with Asperger’s syndrome can also be based on characters and events in fiction, but may be qualitatively different in that it is usually a solitary rather than shared activity. It may be an exact re-enactment with little variation or creativity, and may include other children, but only if they follow the directions of the child with Asperger’s syndrome and do not change the script. The interaction is not as creative, cooperative or reciprocal as would occur with typical peers. However, the child with Asperger’s syndrome can have a remarkable memory and knowledge of popular characters and films, and happily replay scenes for many hours. The child will need to be encouraged to be more flexible in his or her ‘imaginative’ play, especially when playing with other children. The principle is to learn that something is not wrong if it is different.

Activities to encourage flexible thinking and the ability to engage in pretend play can include games where the objective is to invent as many uses as possible for a given object, that is, to think beyond the most obvious, functional use of that object. For example, how many uses can be thought of for a brick, a paper clip, a section of toy train track, and so on? The section of train track could become the wings of an aeroplane, a sword or a ladder, for example. This will encourage the ability to ‘break set’ when problem-solving and be more comfortable when involved in pretend play with other children.

The adult can act a friend in make-believe games, using the phrase ‘let’s pretend that ...’, thus encouraging flexible thinking and creativity. Children with Asperger’s syndrome can be very rule-bound and need to learn that when playing with a friend, it is possible sometimes to change the rules and be inventive, yet still have an enjoyable experience, and that this is not necessarily a cause for anxiety. The child may benefit from a Social Story™ (see page **) that explains that in friendships, and when solving a practical or intellectual problem, trying another way can lead to an important discovery. Trying to find a quicker way to sail to India led to the European discovery of America.

Once the child with Asperger’s syndrome is more comfortable with flexible thinking, the adult and peers can encourage him or her to engage in reciprocal imaginative social play. I have found that when the child discovers the intellectual and social value of being imaginative, the level of creativity can be astounding.

Encouragement for being friendly

When discussing childhood social experiences with young adults with Asperger’s syndrome, I have listened to many descriptions of social confusion, and how, very often, the response of adults was criticism of social mistakes but rarely praise for what was appropriate. The child often assumed that at the end of an interaction, a lack of criticism, sarcasm or derisory laughter meant the interaction was successful but had no idea what he or she had done that was socially appropriate. As one young adult said of his childhood, ‘The only comments I had were when I did it wrong but no one told me what I was doing right.’

If the child were completing a mathematics activity, the teacher's tick or cross would indicate what was right or wrong. When completing a jigsaw puzzle or construction with building blocks, the child knows he or she has achieved success when all the pieces fit together or the construction is complete and robust. The problem in social situations is that success may not be obvious, and there may be a relative lack of positive feedback. I strongly recommend that when an adult, peer or friend is interacting with a young child with Asperger's syndrome, a conscious effort should be made to point out and comment on what the child did that was appropriate.

For example, if the child was observed playing soccer with other children during the lunch recess, he or she could be informed at the end of the game which actions were friendly and why. Positive feedback could be: 'I noticed that when the ball got lost in the tall grass, you helped to find the ball. Excellent! Helping to find something is a friendly thing to do'; or, 'When Joshua fell over and you came up to him and asked if he was okay, that was a caring and friendly thing to do'; or, 'When Jessica scored a goal and you went up to her and said "Great goal", that was a nice compliment, and a friendly thing to do'.

The child can have a friendship diary, which records the times during the day or week when he or she demonstrated friendship abilities. The diary can take the form of a 'boasting book' or provide a means of recording friendship 'points' for a particular act of friendship. The diary can record what was done or said and why it was an example of friendship. Memorable acts of friendship could achieve public recognition and an appropriate reward.

Social Stories™

Another strategy to learn the relevant social cues, thoughts, feelings and behavioural script is to write Social Stories™, which were originally developed by Carol Gray in 1991, not from the academic application of a theoretical model of social cognition, but from Carol working directly and collaboratively with children with autism and Asperger's syndrome (Gray 1998). Preparing Social Stories™ also enables other people (adults and peers) to understand the perspective of the child with Asperger's syndrome, and why his or her social behaviour can appear confused, anxious, aggressive or disobedient. Carol Gray (2004) has recently revised the criteria and guidelines for writing a Social Story™ and the following is a brief summary of the guidelines.

A Social Story™ describes a situation, skill or concept in terms of relevant social cues, perspectives and common responses in a specifically defined style and format. The intention is to share accurate social and emotional information in a reassuring and informative manner that is easily understood by the child (or adult) with Asperger's syndrome. The first Social Story™, and at least 50 per cent of subsequent Social Stories™, should describe, affirm and consolidate existing abilities and knowledge and what the child does well, which avoids the problem of a Social Story™ being associated only with ignorance or failure. Social Stories™ can also be written as a means of recording achievements in using new knowledge and strategies. It is important that Social Stories™ are viewed as a means of recording social knowledge and social success.

One of the essential aspects of writing a Social Story™ is to collaboratively determine how a particular situation is perceived by the child with Asperger's syndrome, abandoning the assumption that the adult knows all the facts, thoughts, emotions and intentions of the child. The structure of the story comprises an *introduction* that clearly identifies the topic, a *body* that

adds detail and knowledge and a *conclusion* that summarizes and reinforces the information and any new suggestions.

For younger children, the story is written in the first person perspective, using the personal pronoun 'I', or the child's name if that is how the child refers to himself or herself, and should provide the child with information that can be personalized and internalized (Gray 2002). For teenagers and adults, the Social Story™ can be written in the third person perspective, 'he' or 'she', with a style resembling an age-appropriate magazine article. The term Social Story™ could then be changed to Social Article. For example, one of the expectations of friendship and teamwork abilities for employment as a young adult is the ability to give and receive compliments. A magazine style article of 16 pages, with cartoon illustrations, was written by Carol Gray to explain to adults with Asperger's syndrome why compliments are expected in friendships, in the relationship with your partner, and with colleagues or customers at work (Gray 1999).

If the person has a special interest, this interest can be incorporated in the text. For example, if the child's special interest is the sinking of the Titanic, then scenes from the film or personal recollections in history books or documentaries can be used to illustrate and emphasize some of the key information in the Social Story™ (Gagnon 2001).

Social Stories™ use positive language and a constructive approach. The suggestions are what to do rather than what not to do. The text will include *descriptive sentences* that provide factual information or statements, and *perspective sentences*, which are written to explain a person's perception of the physical and mental world. Perspective sentences, which are one of the reasons for the success of Social Stories™, describe thoughts, emotions, beliefs, opinions, motivation and knowledge. They are specifically included to improve Theory of Mind abilities. Carol Gray recommends including *cooperative sentences* to identify who can be of assistance, and *directive sentences* that suggest a response or choice of responses in a particular situation. *Affirmative sentences* explain a commonly shared value, opinion or rule, the reason why specific codes of conduct have been established and why there is the expectation of conformity. *Control sentences* are written by the child to identify personal strategies to help remember what to do. Carol Gray has developed a Social Story™ formula such that the text describes more than directs. The Social Story™ will also need a title, which should reflect the essential characteristics of the story.

Carol Gray's original work on Social Stories™ has now been examined by many research studies and found to be remarkably effective in improving social understanding and social behaviour in children with autism and Asperger's syndrome. (Hagiwara and Myles 1999; Ivey, Heflin and Alberto 2004; Lorimer 2002; Norris and Dattilo 1999; Rogers and Myles 2001; Rowe 1999; Santosi, Powell Smith, and Kincaid 2004; Scattone *et al.* 2002; Smith 2001; Swaggart *et al.* 1995; Thiemann and Goldstein 2001).

Social Stories™ can be an extremely effective means of learning the relevant social cues at all stages of friendship, but particularly at stage one. Young children will need guidance to understand the thoughts and feelings of the other person and the role or actions expected in a particular situation. For example, the following is part of a Social Story™ on gestures of reassurance:

Sometimes children hug me. They do this to be friendly. Yesterday, I made three spelling mistakes in the class test. When my friend Amy saw my test paper and three mistakes, she thought I would be sad and I was sad. Amy put her arm around me and said, 'It's okay Juanita.' Amy is my friend. She gave me a hug to help me feel better. For some people, having a hug makes them feel better. Having a hug can make Amy feel better. When I have a hug from Amy it is because she knows I am sad and she wants me to feel better. I can say thank you after she has given me a hug.

In the situation described above, the reason for the behaviour of Amy, namely putting her arm around Juanita, may need to be explained to a child with Asperger's syndrome. Such children have difficulty understanding the thoughts, feelings and intentions of others, which can make the behaviour of other people appear illogical and confusing. A gesture of reassurance can repair feelings, not spelling mistakes. Only when the child understands that the action was a gesture of reassurance, intended to repair her feelings of distress, will the behaviour of Amy seem logical and not a cause for confusion and rejection.

After the Social Story™ is written, other people in the child's every day world will need to know how they can help the child successfully implement the new knowledge and strategies. The child may create a Social Stories™ folder to keep the stories as a reference book at home or school, and have copies of some stories that may be kept in a pocket or a wallet to read again in order to refresh his or her memory just before or during a time when the Social Story™ is relevant.

Other topics for Social Stories™ in stage one of friendship include entry and exit skills (i.e. how to join in and leave an activity), when and how to provide help, and the importance of sharing and accepting play activities suggested by another child. The ability to successfully join a group of children is a particularly difficult skill for children with Asperger's syndrome. The general advice for typical children is to watch, listen, move closer and then ease in (Rubin 2002). Each stage in the entry process may need a Social Story™; for example, the child may need help to recognize and understand the entry signals to ease into a group, such as a welcome look or gesture, the natural pause in conversation or the transition between activities - the 'green light' signals.

The social signals activity

I use a metaphor of a car driver to explain the consequences of not noticing or knowing the social signals. We have developed road signs and driving codes to prevent injuries and damage. A teacher or parent is asked to imagine a driver who does not see or understand the road signs and goes through a red light, exceeds the speed limit or drives too close to another vehicle, any of which can cause an accident.

The child with Asperger's syndrome has difficulty recognizing and knowing how to respond to the social signals that prevent social accidents. When the teacher utters a loud 'Ahem' sound as though clearing his throat, a typical child will know this could be a warning sign similar to the road sign that informs the driver there are traffic lights ahead. The child needs to look at his face as though looking at traffic lights - if he is smiling, a 'green light' expression, it means you can carry on with whatever you are doing. If he has a frown, but is staring at someone else, this is an 'amber light' face, meaning be careful, you may have to stop. If he is staring at you with an angry expression, a 'red light' face, it is the clear signal to stop what you are doing or there will be consequences. The child with Asperger's syndrome, however, may interpret the

‘Ahem’ simply as indicating that the teacher has a dry throat and needs a throat lozenge or a drink.

Children with Asperger’s syndrome may not understand the ‘no tailgating’ signs and encroach on someone’s personal space; the ‘road closed’ sign that indicates ‘this will lead nowhere’; or the ‘men working’ sign that signals ‘do not disturb’. In not responding as expected to these social signs, the child with Asperger’s syndrome is not being deliberately reckless and provocative, but demonstrating his or her lack of understanding, and will thus be prone to social accidents that damage feelings.

The Social Signals activity uses Social Stories™ to explain the reason for a particular ‘rule of the road’, and provides clear examples of the signals, and practice in how to respond. The concept of facial expressions as traffic lights can be explored by having a large picture of traffic lights and some pictures of facial expressions. The child with Asperger’s syndrome sorts through the pictures and decides which traffic light is associated with each expression. Is this a green light face, an amber face or a red light face? The activity includes explaining appropriate comments or questions that the child can use when he or she sees a particular amber or red light facial expression, such as ‘I’m sorry’, ‘Are you angry with me?’, or ‘What should I do?’; or when confused as to what the social signal means, questions and comments to prevent further social accidents, such as ‘Did I do something wrong?’ or ‘I am confused’

Stage 2 of Friendship

Stage two of friendship – six to nine years

At this stage in the development of friendships, typical children start to recognize that they need a friend to play certain games and that their friend must also like those games. Children accept and incorporate the influences, preferences, and goals of their friends in their play. Typical children become more aware of the thoughts and feelings of their peers and how their actions and comments can hurt, both physically and emotionally. The child is prepared to inhibit some actions and thoughts, to ‘think it, not say it’, or to tell a ‘white lie’ in order not to hurt someone’s feelings. There is greater reciprocity and mutual assistance expected in friendships at this stage.

A friendship may develop because both children have similar interests. Aspects of a friend’s character rather than possessions are recognized (he’s fun to be with, we laugh together). The concept of reciprocity (she comes to my party, and I go to hers), the genuine sharing of resources and being fair in games become increasingly important. When managing conflict, the child’s view is that the offender must retract the action and a satisfactory resolution is to administer equal discomfort, or ‘an eye for an eye’. The concept of responsibility and justice is based on who started the conflict, not what was subsequently done or how it ended. Around the age of eight years, the child can develop the concept of a best friend as not only his or her first choice for social play but also as someone who helps in practical terms (he knows how to fix the computer), and in times of emotional stress (she cheers me up when I’m feeling sad). However, not every child has a ‘best friend’ at this stage.

In stage two of friendship, children develop greater cooperation when playing with their peers and develop more constructive means of dealing with conflict. It is important that the autistic

child learns the theory of, and gains practice in, various aspects of cooperative play using Social Stories™ and role-play activities. These can provide practice in aspects of cooperative play such as giving and receiving compliments, accepting suggestions, working towards a common goal, being aware of personal body space, proximity, and touch, coping with and giving criticism, and recognizing signs of boredom, embarrassment, and frustration and when and how to interrupt. The role-play and modelling of aspects of social interaction such as giving compliments can be recorded on video to provide practice and constructive feedback.

In situations of conflict or disagreement, the autistic child will need encouragement to seek an adult as an adjudicator, rather than act as the person to determine who is at fault and administer the consequences. Social Stories™ and role-play activities can focus on aspects such as the benefits of negotiation and compromise, being fair and the importance of an apology. Issues of control can be a problem. If the child tends to be autocratic, or dominant or to use threats and aggression to achieve his or her goal, other approaches can be explained and encouraged. You are more likely to get what you want by being nice to someone.

In stage two of friendship, I have noted that there can be different ways of acquiring friendship skills by autistic girls in comparison to autistic boys. Autistic girls are more likely to be interested observers of the social play of other girls and to imitate their play at home using dolls and imaginary friends or adopt the persona of a socially able girl. These activities can be a valuable opportunity to analyze and rehearse friendship skills.

Autistic girls can develop a special interest in reading fiction. This also provides an insight into thoughts, emotions and social relationships. An autistic boy can be encouraged to play with figures, usually masculine action heroes, but to re-enact everyday experiences rather than movies, and to read fiction, perhaps based on a special interest, for example, a book such as *The Railway Children* if the child is interested in trains.

One of the common replies of typical children at this stage in the development of friendship to the question ‘What makes a good friend?’ is ‘We like the same things’. Shared interests are a basis for friendship. I know an autistic child who had a remarkable interest in and knowledge of insects, especially ants. His peers tolerated his enthusiasm and monologues on ants, but he was not regarded as a potential friend as there was a limit to their enthusiasm for the topic. He was learning friendship skills such as how to have a reciprocal conversation, waiting for the other person to finish what he or she was saying, and how to give and receive compliments and show compassion. When he used these social skills with his class peers, they were achieved by intellectual effort and guidance and were perceived by other children as somewhat contrived and artificial. He had few genuine friends.

By chance, another autistic child lived close by, and also had an interest in ants. Their parents arranged a meeting of the two young entomologists; when they met, the social rapport between the new friends was remarkable. The two boys became regular companions on ant safaris, shared knowledge and resources on insects, made a joint ant study and regularly contacted each other with long and genuinely reciprocal conversations about their latest ant-related discoveries. When observing their interactions, it was clear that there was a natural balance to the conversation, with both children being able to wait patiently, listen attentively,

show empathy and give compliments at a level not observed when they were with their typical peers.

How to use the Indices of Friendship Observation Schedule (IFOS)

The schedule is divided into stage one and stage two of friendship. In the left-hand column, there is a list of friendship skills for each stage and the adjacent column has a list of more specific friendship skills within each friendship skill.

The rating of friendship or team skills section can be used by an observer of the child's social play and interactions with peers to rate each specific friendship skill. The rating of the friendship ability is from 1, limited to 4, age-appropriate.

The ratings can be used for successive observations and can provide a baseline of friendship skills and a measure of potential improvement due to programs designed to develop friendship skills.

There is a section to write any comments or observations related to friendship skills, for example, any relevant factors such as whom the child was playing with.

The IFOS can be used when developing the child's social curriculum at school and with their family to identify those friendship abilities that are naturally occurring and to provide positive compliments and reinforcement to ensure they are maintained and to identify the abilities that need to be addressed by guidance and Social Stories™.

References

- Attwood, T. (2007) *The Complete Guide to Asperger's Syndrome*. Jessica Kingsley Publishers
- Gray, C. (2010) *The New Social Story Book* Future Horizons.
- Rubin, K. (2002) *The Friendship Factor* Viking, The Penguin Group.