

Applying a public health approach into Danish special educational needs settings

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Editorial comment

This chapter describes the implementation of the ATLASS program (Autism Training with Low Arousal Support Services) in two special needs institutions in Denmark, a school and a residential and respite facility, for children on the autism spectrum and/or with severe Attention Deficit Hyperactivity Disorder (ADHD). ATLASS was developed by Andy McDonnell, Michael McCreddie and colleagues working at Studio III. The training program in ATLASS began in 2011, with a few facilitators from each institution being trained. These facilitators were to influence, challenge and ask questions about existing practice, which was often stress inducing. This article describes the ATLASS program, its implementation in both institutions at all staffing levels and discusses the expectations with regard to the implementation of the program.

Note: Autism is used within the paper to mean all the subgroups contained within the autism spectrum.

Setting the scene: 'Monday Morning at School'

Imagine yourself in the following situation:

You are a teacher and arrive at work on Monday morning. You have had a bad night, do not feel well rested and are easily agitated. Before you have even had a chance to take off your coat, you meet a bus driver who is in a hurry due to being caught in a traffic jam. He is busy emptying the bus of students, many of whom you will be teaching. His next appointment has called him and complained about his delay. One of the students, Martin, has fallen asleep on the long bus ride but is woken by the commotion caused by the driver's stressful outbursts. Martin starts crying and holds on tight to his seat. He then begins hitting himself on the chest, hard and rhythmically, while shouting, 'Not to school today, not to school today!' The bus driver asks you to remove the screaming child from his bus immediately. In your mind the situation is utter chaos and you believe his request is impossible. You have previous experience with Martin, and you know that he becomes compulsive and self-harms when he is in a stressful situation. This is due to his autism. He may be able to try to calm himself but you know that he requires visual guidance and plenty of time. It is crucial for Martin that he is able to leave the bus when he is ready without being forced. Otherwise his day will be 'ruined'. The driver turns on the engine. You can feel your pulse increase and the blood rush to your head. You can sense the irritation throughout your body, your heart beating, you feel stressed and exhausted.

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Conflict of interest

Both authors are certified ATLASS instructors and ATLASS facilitators.

Source of funding

This research did not receive any funding.

Acknowledgements

We thank all the participants on our ATLASS courses for their feedback, which has been an inspiration. Thanks to our consultant colleagues for discussions on the course topics. Thanks to Margit Mullarkey for reading and commenting on the paper and to Jo Moustgaard and Rikke Sylvest Vestergaard for helping us with the translation.

At Langagerskolen (Langager school, from now on referred to as The School), a school for children with special educational needs, we have more than 20 years of experience in offering a visual and structured special education. Here academic skills go hand in hand with social learning and training, and the focus is on the child's individual, cognitive learning styles. Children and adolescents on the autism spectrum and/or with severe Attention Deficit Hyperactivity Disorder (ADHD) can be referred to The School at their parent's request and after authorisation by their local authority. Currently, there are 160 children and adolescents between the ages of 6 and 17 years enrolled at the school.

Heimdal, working in collaboration with The School, offers day and respite care, residential and individual contact support services to students from the school itself, as well as to other children and adolescents with autism/ADHD between the ages of 6 and 18 years. Heimdal has existed for 10 years and has offered their services in a special educational framework focusing on wellbeing, development and life skills. There are currently 72 children and adolescents enrolled at Heimdal.

At both institutions, the staff consists of teachers and social educators, with at least 3.5 years of formal education (the equivalent of a Bachelor's degree). Furthermore, all members of staff undertake in-house training with a specific focus on autism/ADHD in both theory and practice. The underlying theoretical basis is taken from developmental psychology, neuropsychology, and cognitive theories, with inspiration from TEACCH and Studio III.

Stress and the working environment in Denmark

While implementing conflict management principles from a low arousal perspective via Studio III, it has become very clear to us that stress and emotion contagion are central concepts in special education practice. As described in the example above, we find ourselves in situations every day, both at The School and at Heimdal, with potential stress, emotions and challenges.

Stress can be considered from different frameworks of understanding. The underlying perspective will be of importance in how preventative and/or therapeutic actions are assessed and carried out. Is it the surroundings and the actual workplace that needs to be changed? Is it the behaviour of the employee, their personality or ability to cope that needs to be improved? Is it the way we talk about stress that should be changed (Andersen and Brinkmann, 2013)? Is it possible to direct focus on several areas simultaneously? ATLASS takes a holistic approach to understanding stress and how adaptive coping can come into effect. The holistic approach takes into account how individuals with autism/ADHD, parents and employees react to stress and the mutual impact it may have on them.

There is great uncertainty and ambiguity around the notion of stress. Stress is not a psychiatric diagnosis and is therefore not present in the diagnostic manuals, ICD or DSM (Andersen and Brinkmann, 2013). The ATLASS program takes its standpoint from the United Kingdom's National Health Service's definition:

'Stress is the feeling of being under too much mental or emotional pressure. Pressure turns into stress when you feel unable to cope. People have different ways of reacting to stress, so a situation that feels stressful to one person may be motivating to someone else.' (NHS, 2014)

In ATLASS, both healthy and unhealthy stress management is fundamental, bringing a cognitive and individual outlook on stress in relation to the context. In modifying the ATLASS program to fit the Danish context, we incorporate the working definition of stress by the Knowledge Center for Working Environment in Denmark. Here the distinction is made between short-term and long-term stress.

'Short term, acute stress is experienced when a situation is pressing and brings our body to a state of alarm. Short term stress is normal and beneficial.' (The Danish Knowledge Center for Occupational Health, 2014)

Short-term stress can be compared to what is described as healthy stress in the ATCLASS program. However, this type of stress can at some point develop into unhealthy stress or chronic long-term stress, which is defined as:

'When events and situations, which are stressful to us, do not disappear, but instead inhibit the body's ability to relax over longer periods of time.'
(The Danish Knowledge Center for Occupational Health, 2014)

Every day we work closely with parents of children and adolescents with autism/ADHD. We find that many of these children are overwhelmed with stress and anxiety on a daily basis. Research shows a close link between autism and stress (Lytle and Todd, 2009). In the same manner, we encounter many families that are heavily strained, resulting in high stress levels. Notably, mothers are at a high risk of experiencing social isolation and stress (Rothenborg and Rothenborg, 2012). This has a direct impact on their energy and interaction skills. When taking this into consideration, together with the knowledge of how stress affects people mutually, we find it highly relevant to consider stress as a transaction between individuals. It is implicit in ATCLASS that the learning potential of the individual is optimised as his or her ability to cope with stress is increased. In other words, learning and development is more likely in individuals who are experiencing a sense of wellbeing.

ATCLASS: a program or a new mindset?

Let us return to the example, 'Monday morning at school' for a moment. We assume that the next appointment the bus driver has will also be stressed. This affects the boy, Martin, and the teacher in a direct way. As a matter of fact, all the people in this situation are in some way affected by emotions and stress.

Various settings involving individuals with autism/ADHD are, according to Dr Michael McCreadie of Studio III, characterised by high emotionality and there is, therefore, a high risk of stress for all participants (McCreadie, 2014). ATCLASS uses Bronfenbrenner's bioecological model, which describes how human development is influenced by the interaction of a series of mutual processes (Bronfenbrenner, 1994). The

model illustrates how both parental and professional stress management and wellbeing has a direct impact on the development and wellbeing of the child/adolescent and vice versa. Here, the previous understanding of special educational practice, where the child was often in focus without any direct involvement in the processes surrounding them, is expanded.

'We need to put the oxygen mask on ourselves, before we can help anyone else' could be an ATCLASS metaphor. Although it is common sense, it has not been the explicit action seen in practice; thus highlighting the importance that we, as professionals, must have insight into our own stress management and how to handle it, in order for us to be good educators and to provide effective support to individuals with autism/ADHD, as well as to their networks.

Topics in the ATCLASS Program

ATCLASS gives insight into individual patterns of action and inspiration to use this knowledge constructively. Furthermore, ATCLASS offers insight into a wide variety of topics that are relevant to both the understanding of autism/ADHD and in the daily practice with autism/ADHD.

Autism can be described as affecting social communication along with restricted and repetitive behaviour (Frith 2010; American Psychiatric Association 2013). ADHD is characterised by core symptoms affecting attention, hyperactivity and impulsivity (Frith 2010; American Psychiatric Association 2013). Both diagnoses have social cognitive difficulties in common.

ATCLASS refers to the autism spectrum as a different way of being in the world. This is based on the cognitive theories of lack of theory of mind, weak central coherence and executive function (Frith, 2010), and from autobiographical accounts. The term 'spiky profiles' emphasises autism from its atypical, individual and unique perspective.

Children and young adults with ADHD have characteristics such as divergent attention, impulsivity, hyperactivity, and possible issues with executive functioning (Lambek et al., 2011).

Typical and atypical development

Within ATLASS, studies from developmental psychology and 'milestones' in typical development are discussed. A typical child is often defined as a socially competent individual from birth, who from day one is pre-programmed to form new relationships (Trevarthen, 2010). This is used as a starting point for discussing atypical developmental profiles and how staff appraise cognitive differences, sensations and emotions in relation to the behaviour they observe when cooperating with individuals with autism/ADHD. The purpose of this is to be aware of autism/ADHD as a different developmental profile, rather than a delay in typical development.

Sensation, perception and attention

Sensation and perception are subjective and should be viewed as such. Seen in that context, sensation and perception cannot be categorised as right or wrong. Inspired by the writings of Steven Shore, an adult with Asperger syndrome (Shore, 2004), ATLASS takes into consideration internal as well as external senses. Many people with autism/ADHD are challenged by their senses and their perception and often experience both hyposensitivity and/or hypersensitivity. Sensory diversity is explored to better understand and meet the needs of those with autism/ADHD. Furthermore, the diversity of the concept of attention in relation to neuropsychology and developmental psychology is discussed.

Knowledge of the brain

The understanding of neuropsychology in relation to typical development, atypical development and particularly autism/ADHD is paramount in ATLASS. Knowledge of the brain's development is illustrated by investigating terms such as pruning, frontal lobe function, attention, arousal, mirror neurons, limbic system functions and connections to the neo-cortex (Blakemore and Frith, 2007). This understanding of various functions within the brain is then related to autism/ADHD, together with hypotheses on various brain mechanisms such as mirror neurons (Oberman et al, 2005). In addition, knowledge of the brain is discussed in relation to stress and emotional contagion mechanisms.

Stress management

The core of ATLASS is stress management. In ATLASS a comprehensive approach to stress is framed based on several different levels:

1. Scientific level and physiological stress responses
2. Psychological level and subjective stress
3. Sociological level and environmental factors, that are assumed to increase or sustain stress

The scientific approach focuses, for example, on the fight or flight response, the stress hormone cortisol, changes in lifestyle such as sleep, physical exercise and diet. When a person is stressed, the body releases larger quantities of cortisol than normal. High cortisol levels for long periods of time increase the risk of health problems (Andersen and Brinkmann, 2013). ATLASS offers knowledge regarding the difference between typical and atypical stress responses in individuals with autism/ADHD (Lytle and Todd, 2009).

In the psychological approach, emphasis is put on Lazarus and Folkman's (1984) transactional stress model, which contains an element of appraisal. Here the individuals' subjective appraisal of a stressor as well as their ability to cope with the stressor is crucial in determining the level of stress achieved (Lazarus and Folkman, 1984). What stresses one person does not necessarily stress another. Rather, the other person can feel motivated or calmed. Stress and coping are inextricably linked and the way in which a person copes becomes significant. Lazarus works with emotion-focused coping and problem-focused coping, which is considered as healthy or unhealthy depending on the degree of control in the situation. The objective is that the individual with consciousness and self-awareness becomes able to switch between coping strategies in the situation. In ATLASS this is referred to as adaptive coping.

Stress reduction plans

Stress reduction plans in ATLASS have two purposes:

1. To analyse the subjective stressors in a child/adolescent with autism/ADHD for the staff to gain a greater insight into, and understanding of, the individual's needs, as well as to explore the person's underlying challenges and skills together with his or her cognitive profile.
2. To understand how to reduce stress in a given context and environment in which coping strategies might be needed, developed/learned and how the person may have an increased access to physical exercise. This includes practical tools adapted to meet everyday needs of individuals with autism/ADHD.

Low arousal

Low arousal is included in the Danish ATLASS as a concept from Studio III (McDonnell, 2010) to raise awareness of the staff's own arousal level in situations of conflict and stress in everyday life. Moving attention towards the staff and away from the behaviour, as such, requires a change of perspective. The aim is to avoid the effect of emotion contagion, to provide calmness and to obtain a supportive interaction with people with autism/ADHD.

Mindfulness

In the Danish version of ATLASS mindfulness exercises are included on a daily basis in order to raise awareness of mindfulness. Thus we involve both formal exercises like 'breathing space' and 'bodyscan', and informal exercises such as 'silent walks'. Mindfulness is concerned with consciously paying attention to the present moment and creating personal peace (Fjordback, 2012). Mindfulness is used in order to inspire the participants, through small exercises, to focus their attention on their breathing, moment by moment. In ATLASS, mindfulness can be considered a path to emotion-focused coping. As we are inspired by mindfulness, awareness and the conscious presence in the moment are essential elements of ATLASS.

OARS: Open-ended questions, Affirmations, Reflective listening and Summarising

OARS is based on motivational interviewing (Miller and Rollnick, 2004). The participants are trained in this interview technique and process in which they are actively listening, mentally present and where they support the motivation for behavioural change within the person being interviewed. OARS can be used in conversations with parents, colleagues and people with autism/ADHD, though it is our clinical experience that OARS requires an abstract cognitive level of the conversational partner. Furthermore, theories on resistance, seen as a natural emotional issue when confronted with change, are incorporated together with how resistance is handled within the framework of ATLASS.

Expectations of the impact of the ATLASS program

Now that we have completed the ATLASS program with over 100 staff participants, we can describe our expectations of its impact along with our own experiences and reflections on ATLASS.

Increased awareness is a crucial factor in ATLASS. The evaluations from participants indicate that they have become more aware of their own stress, appraisal and coping. With this increased awareness, adaptive coping becomes a possibility. This in itself is stress-reducing. Over time, we expect that sustained awareness on the ATLASS components will result in a decrease in perceived stress in the individual.

In addition, knowledge about the brain, specifically the pruning, mirror neurons and insight into contagion, is mentioned as an eye-opener. One of the emotion-focused coping strategies, which several participants have embraced, is the use of mindfulness exercises. They provide feedback on how significant it is to focus on their breathing in the moment and how it has been a suitable way to connect ATLASS with low arousal methods.

One participant said:

'By focusing my attention on my breathing, I was able to register and overcome my feeling of frustration and I was then able to cope in a manner that did not escalate the situation.'

The mindfulness exercises allow some of the participants to get access to an inner peace in their mind and body and in doing so increase their attention to bodily conditions and wellbeing. We expect that the exercises in breathing and being mindful will have an effect on some participants. Others will need to explore different ways in order to achieve greater calmness and presence. Regardless of which way makes sense to each participant we hope that the stress transaction between staff and children/adolescents with autism/ADHD will be diminished.

Consider for a moment the example 'Monday Morning at School'. If we imagine that the bus driver knew about stress, appraisal and coping, and would have been able to use the teacher's coping strategy, it would have reduced his feeling of stress, consequently reducing the risk of stress and affective contagion in relation to both the pupil and the teacher. Thus another coping style for the bus driver would have been healthy for all of them.

The process of filling in the stress reduction plans at the ATLASS course takes place in groups. In the group we often find a diversity of knowledge, requiring increased attention to questions and reflections such as 'what we do not know'. It is our expectation that the process of being familiar with the stress reduction plans may give rise to new reflections, a new language, and eye-opening moments. The group moves back and forth between the 'familiar' and the 'not knowing' perspective, creating movement in the participants' mindset.

At Heimdal, the stress reduction plans are used on a regular basis in the analysis of child/adolescent behaviour, wellbeing and individual needs. By extension, we find that the stress reduction plans increase awareness and attention to stress, appraisal and coping thus resulting in a change in the general use of language

among the staff. The change has emerged from a previous focus primarily on problems and narrow solutions to a focus on resources, opportunities and challenges that can be approached in several ways. Based on the idea that language creates reality, the language we construct is crucial. As we have seen, the culture of the workplace is affected in a positive direction following the ATLASS course. Thus positive changes in culture within the working environment are experienced due to ATLASS.

Increased knowledge and understanding of atypical development and the cognitive 'spiky' profiles fosters new reflections on the ATLASS course.

Some of the statements were:

'We need to see the child and person before the diagnosis; we need to look at the individual.'

'Compared to people with autism, we ought to move into their world as they are unable to empathise with ours.'

Thus, we expect the reduction of external stressors caused by personnel and environment to increase the wellbeing and health of children/adolescents with autism/ADHD over time.

Likewise, after gaining inspiration from OARS and mindfulness exercises, it is our belief that the staff will explore and listen to the perspectives of their colleagues as well as the children and adolescents before selecting solutions. We expect the implementation of OARS to have an impact on the collaborations towards more attentive and present dialogues as well as helping children/adolescents to experience a greater influence and control over their lives.

In order to evaluate the ATLASS program from a neutral and external perspective, Kjeld Høgsbro, Professor at the Department of Sociology and Social Work at the University of Aalborg, is preparing an evaluation report (in press) on a number of completed ATLASS courses as well as an ATLASS -family course.

ATLASS implementation and perspectives

Let us one last time turn our attention to 'Monday Morning at School'. When we take the teacher's point of view, we are satisfied with the teacher's reflections and appraisal of Martin, from his knowledge of Martin. Additionally, he manages to take his time to reflect on his own feelings and emotional state, and that he is about to run into a bad situation. If the teacher is then able to take a deep breath and calm himself, it will be a healthy coping strategy for himself and for Martin. Also the teacher will be able to find a solution, step by step, without expecting to be able to fix the situation here and now. What about the bus driver? He 're-appraised' the situation and realised that while the engine was running, the situation escalated. Therefore, he switched off the engine, and called a colleague who could carry out his next appointment.

Concluding comments: What does it take to develop reflective practice and to achieve changes in practice?

From our perspective, the implementation of the ATLASS program in institutions such as ours requires good management, explicit communication and attention to processes of change in organisations, in order for the implementation to be successful. Changes in organisations take time and the goals we expect at the outset will change during the process. We need to communicate the idea that change is by no means linear. Furthermore, continuous attention to the implementation process is important in order to support changes, and to avoid automatic pilot and business as usual.

One of the core issues is that the language is living, that it is translated into action, and that staff behaviour is different due to the initiated changes.

In ATLASS, the synthesis between health psychology and the current special educational practice has broadened and enriched our knowledge and understanding, with new theoretical connections, perspectives and main facets. With reference to ATLASS, we acquire a new common language, common understanding and common knowledge. ATLASS brings us a coherent and meaningful perspective on interactions between systems within the frame of health psychology.

The new mindset is to be understood as increased self-awareness and new coping strategies among the staff. In other words, we expect increased professionalism among staff. In conclusion, we expect ATLASS to be a dynamic program and mindset that is continuously in the process of improving quality of life and wellbeing for people with autism/ADHD.

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