

1. Facts & figures

- Autism spectrum disorder first **emerges during childhood**. The term “spectrum” refers to the large variety in expression.
- The classification in subtypes (such as classic autism and Asperger syndrome) has been abandoned. The **umbrella term** that is used nowadays is autism spectrum disorder.
- Characteristic features are the **difficulties in social communication and social interaction**, and **restrictive/repetitive behaviors and interests**.
- Symptoms **vary with age**. Adults still experience difficulties with:
 - **social interactions and responses to social signals**. Initializing social contact, exchanging interests or emotions, and interpreting other people’s intentions and expectations is difficult. This does not imply that individuals with autism spectrum disorder have no empathic abilities or sense of unexpressed thoughts or emotions whatsoever. In controlled settings they perform at an equal level as their peers.
 - **noticing and understanding non-verbal signals in communication**. Both a correct interpretation of body language, intonation, facial expressions and gestures and a correct use of non-verbal communication is difficult.
 - **understanding and maintaining social contacts and relationships**. There is a need for social contact, but making friends and maintaining friendships is not easy. Despite great efforts the numbers of close friends and the social network often remains small.
 - **new situations and unexpected changes**. Quickly and intuitively knowing how to behave in new situations or in case of unexpected changes is difficult. Unexpected changes also cause great stress and agitation. How to present yourself in new situations is often source of great consideration and reflection which is very demanding. Structure and routine is soothing.

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- **dosing focus and intensity for interests.** Having specific interests is very common. These are usually characterized by an abnormal focus and intensity.
- **processing sensory input.** Being overly sensitive for or apathetic to certain sensory input such as noise, light, smell, taste and/or touch is very distracting which may lead to confusion, anxiety, and fatigue.
- About **0,6 to 0,7%** of the general population has autism spectrum disorder. In Flanders about 38.000 individuals are diagnosed with autism spectrum disorder.
- Autism spectrum disorder is **more common in men**. For every woman, there are three to four men with autism spectrum disorder.
- Autism spectrum disorder often presents itself in combination with dyslexia or depression. This is called **comorbidity**.
- They have **atypical global and local information processing abilities**.
 - **The weak global information processing abilities** prevent perceptions from being linked to available information and knowledge. As a result information is perceived less coherently, leading to difficulties in discriminating key issues from side issues and transferring of what is learned to other settings. The difficulties with communication (e.g. conveying incoherent and elaborate messages and interpreting information too literally -without taking the context into account) can be linked to this weak global information processing.
 - **The strong local information processing abilities** enhance a strong focus on details and the ability to get into topics with great depth. An extraordinary sentience, analytical ability and a strong memory for facts and details can be linked to this local processing ability. As such, this local information processing also induces specific strengths.
- It is thought that the **interaction** between local and global processing works in an atypical manner and this atypical functioning is suggested to be more

influenced by preference that by deficit. Provided that the necessary efforts and adjustments are being made, individuals with autism spectrum disorder do achieve a certain level of global information processing. It does, however, require more effort and is less spontaneous.

2. Focus points, tips & tricks

Attending classes

Focus points

- Because of difficulties in discriminating key issues from side issues and finding coherence in information, the outline of the lecture can sometimes be missed. This can lead to difficulties with taking notes.
- Hypersensitivity to specific noises or visual input can provoke concentration problems and cognitive overload.
- Asking lecturers individual questions and sensing when the time is right to ask questions can be difficult.
- Spare hours during the day are perceived as annoying and are not used efficiently due to problems with time management and strained contact with peers.

Tips and tricks

- Carefully considering the seating location in the classroom can minimize unwelcome input considerably. Using external aids, such as ear plugs, can also eliminate background noise.
- By using clear, unambiguous language, providing structured course materials with well-defined learning goals, and providing the PowerPoint slides in advance, classes become predictable which facilitates the discrimination between key issues from side issues and note taking.

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- The use of a **laptop** and a **training in note taking** can help to take more structured and complete notes, which facilitate the processing of the study content.
- Explicitly **verbalizing the link** between the study content and the work field facilitates the transfer between theory and practice.
- Information and practical agreements on **the course of the lecture and the rules of conduct and communication** can play an effective supportive role (how to contact the lecturer with questions during and after class, through email, ...). Most often there is a preference to communicate via email.
- Classes in **small groups** are more accessible.
- **Video recordings of lectures** provide the opportunity to process the lecture at an individual pace and go back to difficult passages.
- **Breaks** and a **quiet room** to retreat between classes can play an effective supporting role.

Planning and organizing study-related activities

Focus points

- Getting a **clear overview on all study activities** can be difficult. This can hinder efficient **planning and time management** (such as prioritizing) which can result in procrastination.
- Study content that is in **the field of interest** often gets too much attention. As a consequence other study content is neglected, leading to disharmonious study results.

Tips and tricks

- Providing an **overview of all assignments and tasks** helps to create an overview and make an efficient study plan.

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- Study coaching can be useful to help set up a realistic and efficient study plan, prioritize in study tasks, evaluate the maximum amount of time spent on tasks, how and when to incorporate breaks, ...

Processing and rehearsing study materials

Focus points

- The focus on **details** is often too large when processing and rehearsing study content. As a result, the outline of the course is missed and the **coherence** within the course material is less clear.
- **Abstract materials and practical applications** are perceived as more difficult. Information is likely to be interpreted **literally**.
- **Self-testing strategies** are possibly less well developed.

Tips and tricks

- Stating the **learning goals** very explicitly and providing **sample questions** can be useful to help process the content and enhance self-testing strategies
- **Explicitly verbalizing** the link between the learning content and the work field on a regular basis can help make the transfer between theory and practice.
- **Study coaching** can be meaningful to help develop strategies to discriminate key issues from side issues.

Assignments

Focus points

- Interpreting **instructions of an assignment** correctly and **defining the expectations** can be difficult. Information is likely to be interpreted very **literally**.

- Applications can be hard. Large assignments such as **bachelor or master theses** can be overwhelming.
- The very detailed and meticulous way of working can prevent student from **making deadlines**.
- **Participating in group assignments** and **giving oral presentations** can create barriers and cause large amounts of stress.
- **Conveying a message** in a concise and coherent manner can be a focus point.

Tips and tricks

- Giving **clear and unambiguous** instructions can play an effective supportive role in helping understand the assignment and identify the expectations.
- Instructions on **the extensiveness of the assignment**, for example how many pages are required, help to make the expectations more concrete.
- Besides elaborating on the assignment in class, the instructions are also best given **in writing**.
- **Agreements** should be made on how to contact the lecturer in case of questions (after class, via email, digitally, ...).
- Postponing **deadlines** can be necessary in some cases.
- For large assignments such as a bachelor- or master theses extra **intermediate and explicit feedback** can be necessary. Breaking down the assignment and providing extra clarification for each of the components can also play an effective supporting role.
- For **oral presentations** it is best to implement a growth path (e.g. at the beginning of the study program the recording of the presentation on video, in a next step before a small group, finally in a larger group).

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- In case of **group assignments**, groups are best assembled by the lecturers. Frequently checking up on the groups to identify support needs is also advisable.

Exams

Focus points

- Correctly **interpreting instructions** of an assignment and defining the expectations can be difficult.
- Problems with both discriminating key issued from side issues and conveying a consistent message can lead to **a lack of conciseness in responses**.
- Hypersensitivity towards specific sounds or visual input can lead to **concentration problems and/or cognitive overload**.
- **Oral exams** can cause additional stress.

Tips and tricks

- Using **ear plugs** can help minimize background noise. Making exams in a **smaller room** or being assigned to a **specific location in the exam room** can help prevent overstimulation.
- Providing **sample questions and responses** can help to prepare for an exam.
- Formulating **clear and unambiguous questions** helps to understand the question.
- Guidelines on the **expected length of the exam or the response** help concretize the expectations.
- **Rephrasing questions** helps verify whether the question is understood correctly.
- **Extra preparation time** at an oral or written exam allow to compensate for the atypical information processing.

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- An additional oral presentation at a written exam can help to clarify the responses and eliminate ambiguities.
- In **oral exams** making agreements on the order of appearance can play an effective supporting role.
- An **optimal spread of exams** within an exam period can help accommodate for the cognitive overload and slower information processing.

Internships

Focus points

- Adjusting to the **new setting with its specific expectations** can be very demanding on aspects of both study content and social contact.
- **Having to apply study content** to other settings might require more external control and explanation.
- **The need to reflect** on situations and take different perspectives can be quite challenging.
- The hypersensitivity for sound or visual input in addition to the translocation to and from the internship location can lead to concentration problems and/or cognitive overload.

Tips and tricks

- The **specification of the expectations of the internship** and getting acquainted with the setting of the internship beforehand can play an effective supporting role. Uncertainties can be clarified and additional information can be requested.
- **Explicitly verbalizing the link between the study content and the work field** on a regular basis can play an effective supporting role.
- It can be helpful to **monitor the progress** during the internship on a regular basis and provide clear and explicit feedback. Learning points

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that are formulated very concretely provide more learning opportunities.

- Putting effort in organizing **more practice time** results in more opportunities for learning.
- **Spreading the internship** over a longer period of time can be helpful.
- An **accessible internship location** and a **quiet room** at the facility where the student can retreat can play an effective supporting role.

Student life

Focus points

- **Social contact** with peers and **participation in student activities** can be challenging.
- **Establishing routines and structure in daily activities** (grocery shopping, cooking, studying, ...) and establishing a social network takes a lot of time.
- These challenges can have an impact on the **emotional wellbeing** of the students. Fatigue, stress, anxiety and loneliness are possible.

Tips and tricks

- **Student representation** gives the opportunity to take up well defined tasks in a broad network. Student unions organize a lot of low profile activities.
- The **exploration of activities within the field of interest**, give extra opportunities to establish a social network.
- **Meetings** for student with autism spectrum disorder and **mentoring programs** (where students are assigned a mentor) can play an effective supporting role.
- Support in the development of new routines and structure in **daily activities** can make a great difference.

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- A fixed contact person in the study program can help monitor the load limit and help look for solutions in case of difficulties.
- Staff members of student facilities provide for coaching in case of psycho-social problems.