

Atypie Friendly: A University Inclusion Program for Students With Autism Spectrum Disorder (ASD) in France

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Abstract: Students with ASD in higher education present multiple difficulties in the different spheres of their university life. Certain measures can be offered, however, to support them. The objective of this study was to evaluate student satisfaction with the atypical-friendly system. Twenty-two students with ASD completed a satisfaction questionnaire. The results showed higher overall satisfaction among students registered in the system ($n = 15$) compared to those who were not ($n = 7$), particularly with regard to educational aspects and the accommodations provided by the university in their daily lives. The supports offered were used differently and satisfaction between supports tended to vary. While helpful actions were clearly identified regarding educational arrangements and support, needs were indicated in terms of teaching methods. The system may therefore have a positive impact on students with ASD.

Key words: Autism Spectrum Disorder, university, inclusion

1. Atypie Friendly: A University Inclusion Program for Students With Autism Spectrum Disorder (ASD) in France

Currently, Autism Spectrum Disorder (ASD) affects between 0.9% and 1.2% of births, meaning that approximately 8,000 autistic children are born each year in France. Consequently, INSERM (the French National Institute of Health and Medical Research) estimates that in the current population there are nearly 600,000 autistic adults and around 100,000 young people under the age of 20 with ASD. However, only about 500 are enrolled in higher education.

According to the DSM-5, Autism Spectrum Disorder is a neurodevelopmental disorder characterized by diagnostic criteria that include difficulties in communication and social interactions, stereotyped behaviors, and restricted interests. These symptoms must be present from early developmental periods and must significantly impair daily functioning in various life contexts such as school, family, or work, and cannot be better explained by intellectual disability or global developmental delay (APA, 2013).

The Aspie-Friendly initiative is a national program designed to make higher education inclusive for individuals with Autism Spectrum Disorder (ASD). Created in 2018, the project “Building an Aspie-Friendly University” aims to enhance the inclusion of autistic students without intellectual disabilities in higher education and to support their social and professional integration. Initially, around fifteen universities in France participated in the project. The program has since expanded its scope and efforts to other neurodevelopmental disorders,

starting with Attention Deficit Hyperactivity Disorder (ADHD) and learning disabilities. Consequently, the program was renamed “Atypie-Friendly” (AF) as of July 2023 and is now implemented in about thirty universities. To take inclusion into account, several actions are carried out, but above all, the educational pathway of the student participating in the program is somewhat different from that of other students. The hosted student receives information on existing systems during specific information meetings. The student then goes through the disability service or health service, both of which are trained in autism by AF local or national teams in universities participating in the AF program (hereinafter “AF Universities”). At this point, the student undergoes a tailored needs assessment interview for autistic students and a medical consultation. The disability service then proposes accommodations that are tailored to autistic students compared to what is provided for all students with specific needs. Complementary support resources are also offered by AF (e.g., university work methodology tools, university social skills groups, contact with other autistic students for mutual support via online chat or associations ...). Lastly, the AF team assists in transmitting the information to the pedagogic team, implements individual follow-up of the students, offers awareness training for the educational and administrative staff, as well as possibly providing individualized support for the educational team.

Currently, an increasing number of young autistic adults are pursuing higher education. However, they face numerous challenges that negatively impact their university experience and may lead them to abandon their studies. These complications arise from difficulties with executive functioning, sensory issues, and mental health problems such as anxiety or depression. Many studies have addressed inclusion at university. According to White et al. (2016), autistic students struggle particularly with developing relationships, self-advocacy, and navigating the complexities of university life. Through focus groups and individual surveys, participants in their study reported significant difficulties with interpersonal skills, time management, and organization of materials. For example, autistic students find it challenging to manage academic demands and course expectations. They also reported a reduction in social support, academic stress, and difficulty managing intense emotions. Myrvold et al. (2021) added that these students face challenges in planning assignments, managing their time, multitasking, participating in group work, and understanding course expectations. Executive functions play a crucial role in academic success and students need to plan their schedules, balance their studies with personal life, and maintain independent living skills.

Other studies have highlighted several supports provided for autistic individuals to ease their university experience, such as on-campus activities and contacts (Shmulsky et al., 2015) or peer support (Littlefield, 2010). Mentoring has proven to be a particularly valuable solution, offering guidance on academic, social, and daily life aspects of university life (Bene et al., 2014). However, research on the benefits of mentoring for autistic students is limited, with only a few studies addressing this topic. These studies have shown improvements in grades and peer interactions (Ashbaugh et al., 2017), academic functioning, university experiences, and well-being of autistic students (Lucas & James, 2018). Mentoring can provide social support and help develop academic self-efficacy and self-determination skills (Schindler et al., 2015). Locke et al. (2023) also examined the university experiences of autistic students participating in a mentoring, organization, and social support program for autism inclusion on campus. They found that this program improved various skills, including socialization, executive functioning, academic work, and professional development. Additionally, the mentors, who were non-autistic students, emphasized the importance of being trained in autism as they faced challenges in responding to certain needs of autistic students.

In the light of the literature, it is important to assess the level of satisfaction of students with autism included in universities where the Atypie Friendly program is implemented.

2. Methodology

The study was registered with the Data Protection Officer of the university where the study was conducted, in order for the study to comply with the general data protection regulation laws. It complies with the ethical principles of the Declaration of Helsinki.

2.1 Participants

In total, 22 participants were included in the research (see Table 1). Participants were contacted at various universities in the network: the Université de Picardie Jules Verne, the Universities of Toulouse-II and Toulouse-III, the Université Claude Bernard Lyon 1, and the Université de Grenoble Alpes via the universities' disability centers, via the universities' Atypie Friendly referents and the distribution of recruitment messages in the universities' various Training and Research Units. To take part in the research, students with ASD could either be enrolled in the Atypie Friendly program or not. Psychiatric disorders, sensory disorders (e.g., blindness), motor disorders and first-entrant at the University (year 1) were non-inclusion criteria.

Table 1 Participants Characteristics

Group	N	Gender			Age mean (SD)	Age at Diagnosis	Current year of higher education: bachelor's degree (1 to 3), master's degree (4 to 5), doctorate (6 to 8)
ASD AF	15	4 ♂	10 ♀	1 Ø	24.1 (6.5)	18.5 (7.7)	2.5 (1.6)
ASD No AF	7	4 ♂	2 ♀	1 Ø	26.4 (9.5)	20.8 (12.3)	3.1 (1.2)

Note: ASD AF: participants with ASD followed by the Atypie Friendly (AF) program; ASD No AF: participants not followed by the program; SD: Standard Deviation.

Note that the group of students, whether part of the AF program or not, had a late diagnosis. One person in each group, a boy, was diagnosed at the age of 8, whereas the majority were diagnosed in their teens.

2.2 Material

Participants answered a questionnaire during a one-on-one interview with Master's psychology students. The questions related to their satisfaction with what was offered to them at the university in general and, for the students who were part of the AF program, their satisfaction with the program. The questionnaire comprised a total of 21 questions.

The questions were, for example: "Have you had any special educational arrangements or support for your disability (e.g., preparation before the start of the academic year, adjustments to the curriculum, examination conditions, tutoring, guidance, etc.)?" or "Have you taken the University Methodology module offered by Atypie-Friendly during your studies?". If they answered yes, they were asked to rate their level of satisfaction on a scale of 0 to 10. The sum of the responses gave an overall satisfaction score.

3. Results

Based on each student's answers to the various questions, we assigned a satisfaction score. With regard to the overall satisfaction score as a function of the number of participants, there was a significant difference between the groups, with a higher level of satisfaction for ASD students followed by the AF program ($t(20) = 3.27$, $p = .002$).

As the size of the groups differed, the figures show the number of satisfied students as a function of the number of students in each group, expressed as a percentage. Figure 1 and Figure 2 present respectively results concerning the satisfaction of students on pedagogical aspects and on the accommodations provided by the university in their daily life.

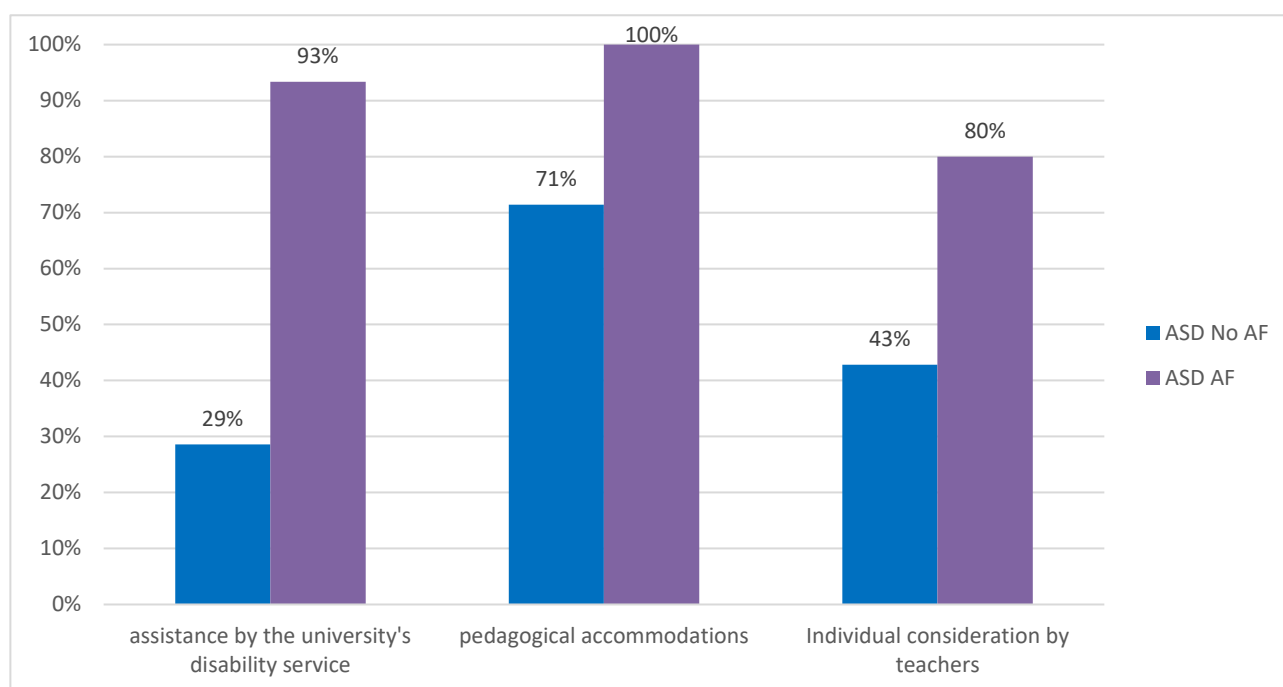


Figure 1 Percentage of Satisfied Students Concerning Pedagogical Support Proposed by Their University

Note: ASD AF refers to ASD students followed by the AF program and ASD No AF refers to students not followed by any program

This initial observation of the program is very encouraging, as only a small fraction of ASD students not supported by AF receive assistance from their university's disability service, compared to a large majority of those who are also supported by AF. When asked to rate their level of satisfaction with the way in which their disability was taken into account by staff at university health centers and disability services, no difference was found between the two groups (7.5/10 for ASD AF and 7/10 for ASD No AF). All AF-supported students had access to educational accommodations, compared to 71% of non-AF students. Their satisfaction with these arrangements was 7.35 out of 10 for AF-supported students, but only 5.4 out of 10 for the others. Only 20% of students in the Atypie Friendly program had taken courses about the methodology of university work proposed by the program, and reported an average level of satisfaction of 6.2/10. No satisfaction scores were available for ASD No AF, because even though all these resources are online, free and accessible to all students, they do not use them. Lastly, 80% of AF students reported that their disability was taken into account by the teaching staff against only 43% of

non-AF students. Among the participants who answered “Yes” to the question on individual consideration by teachers, the level of satisfaction was the same (7.7/10 for ASD AF and 7.3/10 for ASD No AF). Communication with the teaching staff about the program therefore appears to be satisfactory.

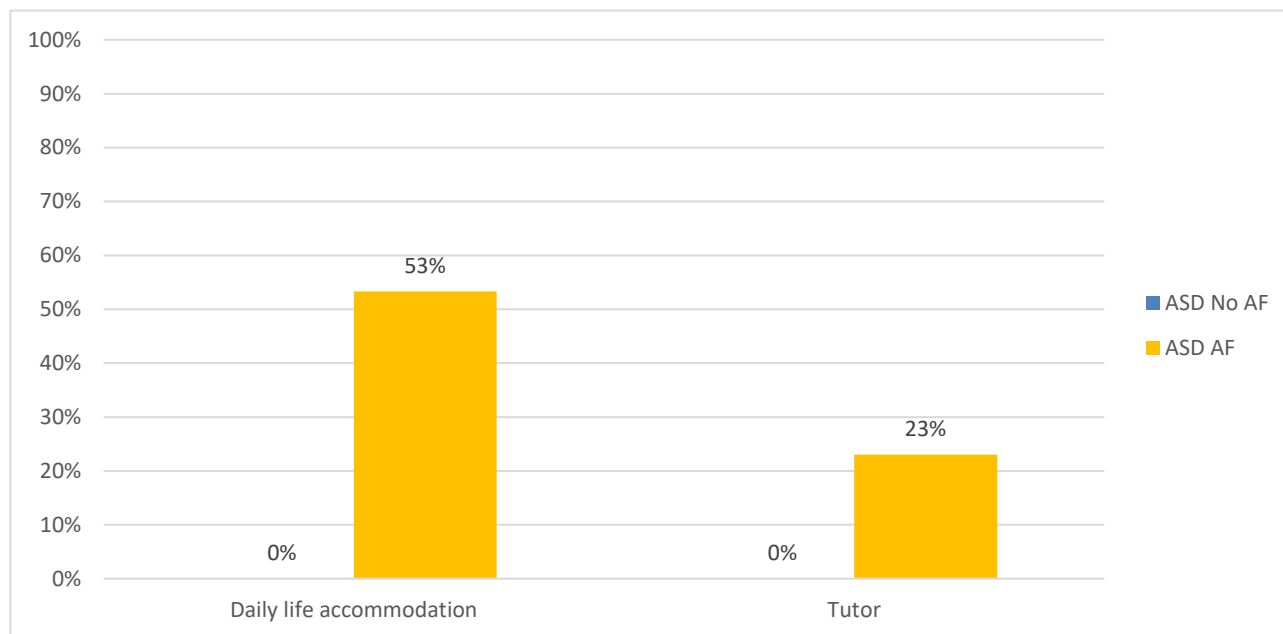


Figure 2 Percentage of Satisfied Students About Daily Life Accommodations Proposed by Their University

Note: ASD AF refers to ASD students followed by the AF program and ASD No AF refers to students not followed by any program

When asked about the support provided by the university in their daily life, 53% of AF-supported students reported that they were satisfied with what AF offers, compared to 0% for the others. Concerning daily life accommodations, AF-supported students reported a level of satisfaction ranging from 7 to 10 (on a scale of 10). Moreover, while only 23% of the AF program students had a student tutor 93% of them were satisfied, whereas conversely, no student outside the program had a tutor during the academic year. In answer to the question “Have you taken part in individual AF support relating to your difficulties?” 60% replied yes and 7.33% reported that they were satisfied with the support. This is also linked to the specific support provided by the program’s local advisor at their respective university: among the 86.6% who had seen their advisor, satisfaction ranged from 8.4 to 10. They report, for example, that this has enabled them to make contact with other students and lecturers, to access free sessions with psychologists, to undertake a training period in the army thanks to the program’s partnership with the French air force, and for one student, to receive monthly follow-up via video-conferencing during his training period.

To conclude, the answers by the ASD No AF students to the question “Since your arrival at the University, what have been the most helpful actions?” were as follows: “guidance with a psychologist”, “setting up a system that allows a student to write in my place as well as one third extra time for exams” and for others “none”, “no need for help”, “I’m not aware of any help set up”. For the ASD students followed by AF, some of the answers were similar: “part-time work, exam secretary, course support”; “course adjustments”. But they also gave very different answers, such as “autism awareness training”, “help with internship”, “help with finding student accommodation”, “group workshops in the program”, and so on. Among the needs identified, we find an

educational request for “course materials systematically provided” in advance, “optional participation in group work”, “real educational support”, the “possibility of studying remotely and not only in person” for certain training courses not accessible remotely.

4. Discussion and Conclusion

People with ASD, even when self-taught, have typically autistic cognitive strengths and strong learning abilities that attract the interest of employers. Despite these assets, however, people with autism have a lower rate of access to higher education than to high school, a success rate in higher education that is lower than expected, and significant limitations in accessing certain careers. For instance, people with ASD had the lowest rates of participation in employment compared with young people in other disability categories (Shattuck et al., 2012). Concerning schooling, autistic students find it particularly challenging to build relationships, advocate for themselves, and manage the complexities of university life (White et al., 2016). These problems were the impetus behind the Aspie Friendly program launched in France in 2018 and renamed Atypie Friendly in 2023. In fact, there is a need for comprehensive care that addresses the diverse characteristics affecting all components of student life. This includes consideration of housing, transportation, dining, and emotional well-being. Pedagogical approaches must be tailored to accommodate the wide range of personal situations, which can vary from exclusion to hyper-performance. However, it is important to take into account factors that may mask underlying difficulties, such as exhaustion and specific challenges in completing certain tasks such as internships and individual projects. This program offers a wide range of resources. For students, for example, there are courses tailored to their specific needs and online sessions. For teachers, there are teaching kits and training courses. For carers and families, there are information sessions; and for companies, there is a charter for instance which is a kind of best practice guide.

Five years after the creation of this program, we wanted to evaluate the satisfaction of students with the measures implemented to ensure their successful inclusion in university life. This initial observation is very encouraging for the program, as only 29% of ASD students not supported by AF are assisted by their university’s disability service, compared to 93% of those also supported by AF. This highlights the close connection between Atypie Friendly and the disability service, which is mandatory in all universities but, as we have seen, not necessarily known or used by students. Yet, this service provides them with access to administrative and pedagogical support that is essential for their success. All AF-supported students have access to this support. An example of a teaching tool created at national level is the theoretical and practical course on university work methodology, specially designed to take account of the specific cognitive characteristics of people with autism. This course addresses their planning difficulties by providing time management tools, for example.

Moreover, Atypie Friendly proposes some assistance with daily life, whereas universities do not implement any measures related to the quality of life of students with special needs. For instance, while only a small proportion of the program students had a student tutor, they reported being very satisfied. In contrast, no students outside the program had a tutor during the academic year. Peer support (Littlefield, 2010) and mentoring have proven to be valuable solutions, offering guidance on academic, social, and daily life aspects of university life (Bene et al., 2014). In the Atypie Friendly case, the good level of satisfaction with daily life assistance is certainly thanks to the support of the local AF advisor who enabled them to individualize or supplement the usual accommodations or assistance provided by the disability service. The students’ university advisers of the AF

program give them tips and inform them about the program's national and local initiatives. For example, every week there are online exchanges between students ("Online Café Aspie") in the presence of a teacher-researcher with autism. The serious game "Univ'Défis" offers new university entrants some adapted quests to prepare for their entry into university. The game was invented by ASD students for ASD students. Additionally, webinars and online pre-orientation days are provided, in connection with the national university enrollment platform in France, "ParcourSup". Finally we can cite university social skills groups on a variety of topics: making friends, working in a small group, etc. run by psychologists and social workers. At the local level, the University of Picardie Jules Verne offers students on health courses (medicine, pharmacy, etc.) the opportunity to participate in situational and theatrical improvisation workshops at the medical simulation center, Simu Santé®, of the Amiens University Hospital (Vasselin et al., 2023). This is available to all interested students, regardless of their access to the AF program. Additionally, a pedagogical project named COMPAF (Aspie Friendly Skills), which aims to highlight the specific interests of students, has been proposed by the local team to showcase the skills of ASD students in the program and incorporate them into their curriculum (Cilia & Vandromme, 2023). At the University of Toulouse Jean Jaurès, ASD students (whether AF or not) can be supported individually by students from the Autism and other neurodevelopmental disorders master's degree on personal, educational or social difficulties.

As suggested by Locke et al. (2023), we believe that the program has additional effects beyond the self-reported satisfaction presented here. In their study, they highlighted that this program enhanced various skills, including socialization, executive functioning, academic performance, and professional development. Obviously our study has limitations, in particular the number of participants which is low. We regret that despite joining the program, few students responded to our requests. It is possible that the fact that they had to answer a questionnaire during an individual interview could have dissuaded several of them. But we believe it is essential to have taken the time to meet the students to obtain more qualitative information on their level of satisfaction. This study would need to be supplemented by standardized questionnaires and by a content analysis of the interviews we conducted.

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