# ACADEMIC EXPERIENCES OF UNIVERSITY STUDENTS WITH AUTISM SPECTRUM DISORDERS: AN INTERPRETATIVE ANALYSIS OF REPORTS<sup>1</sup>

Experiências Acadêmicas de Estudantes Universitários com Transtornos do Espectro Autista: uma Análise Interpretativa dos Relatos<sup>2</sup>

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ABSTRACT: Given the growing rate of adults with Autism Spectrum Disorders (ASD) entering university, this study sought to describe the academic experience of six students with this diagnosis, regularly enrolled in a public university in the state of São Paulo. Individual interviews were conducted to identify topics related to undergraduate entry, permanence, accessibility, relationships and suggestions for improvements in the university context. Based on the precepts of the Historical-Cultural Psychology, we used the qualitative analysis of the reports, especially the core of meaning, which constituted the initial establishment of preindicators, followed by the agglutination of this content into indicators, and the construction of the Core of Meaning. As a result, poor interactional experiences were verified during Basic Education. At the university, the controversies between interest in undergraduate studies and lack of preparation in the university context appeared as factors that generate anguish and anxiety associated with barriers to permanence and the need to complete the course within the regulatory period. It was identified the need for adjustments both in the singular and in the academic social context, with emphasis on the participation of students with ASD, which is still little debated and recognized, and the adaptations to the environment, which fall mainly to the subject, against the precepts of educational inclusion.

KEYWORDS: Autism. Autistic Spectrum Disorder. University. Inclusion. Disability.

RESUMO: Diante do crescente índice de adultos com Transtornos do Espectro Autista (TEA) que ingressam na universidade, este estudo buscou descrever a experiência acadêmica de seis estudantes, com esse diagnóstico, regularmente matriculados em uma universidade pública no estado de São Paulo. Foram realizadas entrevistas individuais que buscaram identificar tópicos relacionados ao ingresso na Graduação, permanência, acessibilidade, relacionamentos e sugestões de melhorias no contexto universitário. Pautado nos preceitos da Psicologia Histórico-cultural, utilizou-se da análise qualitativa dos relatos, em especial dos Núcleos de Significação, que se constituiu no estabelecimento inicial de pré-indicadores, seguido pela aglutinação desse conteúdo em indicadores, e a construção dos núcleos de significação. Como resultados, foram verificadas pobres experiências interacionais durante o Ensino Básico. Na universidade, as controvérsias entre o interesse pela Graduação e o despreparo do contexto universitário apareceram como fatores geradores de angústia e ansiedade associados às barreiras de permanência e à necessidade da conclusão do curso no prazo regulamentar. Identificou-se a necessidade de ajustes tanto no âmbito singular quanto no contexto social acadêmico, com destaque para a participação de estudantes com TEA, que ainda é pouco debatida e reconhecida, e para as adaptações ao meio, que recaem majoritariamente ao sujeito, na contramão dos preceitos da inclusão educacional.

PALAVRAS-CHAVE: Autismo. Transtorno do Espectro Autista. Universidade. Inclusão. Deficiência.

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## 1 Introduction

Autistic Spectrum Disorder (ASD) is considered to be a neurodevelopmental disorder that spans a spectrum characterized by impairments in social interaction and communication, as well as the presence of restricted interests and repetitive behaviors (American Psychological Association [APA], 2013). It is heterogeneous in many forms, including its developmental trajectory: while most children with a diagnosis of ASD continue to experience substantial social difficulties in adulthood, a subset may no longer meet the diagnostic criteria (Gillberg, Helles, Billstedt, & Gillberg, 2016). In mild cases, language delays are not identified, as in this area of development the differences are due to pragmatic changes and pedant speech (Lopes-Herrera & Almeida, 2008) with changes in prosody pattern, which may interfere with passage of important messages for human communication (Globerson, Amir, Kishon-Rabin, & Golan, 2015; Olivati, Assumpção Junior, & Misquiatti, 2017). Although some parameters help delineate certain facets of the disorder, there is still no consensus on a theory that could be considered universal to explain this condition. However, as suggested by Ita Frith (2008), there are "five big ideas" about Autism.

The first refers to a gap in meta-representational capacity, called "theory of mind," which makes it impossible for people with ASD to infer other people's mental states. As a result, people with ASD have a hard time understanding other people's beliefs, emotions, desires, perceptions, and intentions. The second big idea encompasses a special category of neurons called mirror neurons, which are active when an action is performed and observed. The hypothesis of its dysfunction proposes an explanation of the deficit in social skills in people with ASD. The third, called the "social motivation hypothesis", proposes that people with ASD do not have the inherent social impulse, which would help them to explore the learning opportunities needed to develop knowledge in social cognition. The fourth idea, called "weak central coherence", considers people with ASD with a different, detail-oriented cognitive functioning. Thus, these people tend to process information locally rather than globally, which makes context perception difficult. Finally, the fifth refers to the executive dysfunction hypothesis, in which people with ASD have problems associated with functions such as planning, flexibility, inhibition and working memory (Bolis, Balsters, Wenderoth, Becchio, & Schilbach, 2017).

In numerical terms, the prevalence of ASD is estimated to be around 1% among the adult population (Brugha et al., 2011). However, studies carried out with the child age group report that one in 59 eight-year-old children has the diagnosis of the disorder (Baio et al., 2018).

The international literature states that, in recent decades, there has been a significant increase in the rates of diagnosis of ASD (Myers et al., 2018). This rise eventually reflects the demand of this public at various levels of education, including the demand for young people with ASD to enter university. However, this number is still small, considering that about one third of this audience attended college in the first six years after High School completion in the American reality (Shattuck et al., 2012). A fact that draws attention is that among these students, 38.8% can complete the undergraduate studies (Newman et al., 2011). Nevertheless, the number of studies that have proposed to understand the university experiences of students with ASD is still limited (Rosa, 2015), particularly from their own perspective (Bolourian, Zeedyk, & Blacher, 2018).

In Brazil, data collected by the National Institute for Educational Studies and Research Anísio Teixeira ([INEP], 2018) in the face to face and distance education modalities, indicated that 754 students with Autism Spectrum Disorders (378 diagnosed with Child Autism and 376 with Asperger) were enrolled in Higher Education out of a total of 39,855 enrollments of self-declared students with a disability (1.9%). Particularly to the State of São Paulo, where this research is inserted, data from INEP (2018) indicate that 197 students diagnosed with ASD enrolled; number that has been growing when analyzing the same reports of previous years.

In normative terms, the National Policy on Special Education in the Perspective of Inclusive Education ([PNEEPEI], 2008) points out as target audience of Special Education, among other categories, students with Global Developmental Disorders - that started to receive the nomination ASD with the publication of the DSM-5 in 2013. In relation to Higher Education, this policy underlines that transversal actions that promote access, permanence and participation of its public must be guaranteed. These actions involve the planning and organization of resources and services for the promotion of architectural accessibility, communications, information systems, didactic and pedagogical materials, which should be made available in the selection processes and in the development of all activities involving teaching, research and extension (PNEEPEI, 2008).

In 2012, Law no. 12,764, of December 27, 2012, known as the Berenice Piana Law and regulated by Decree no. 8,368, of December 2, 2014, which established the National Policy for the Protection of the Rights of Persons with Autistic Spectrum Disorder. Since its promulgation, for legal purposes, this social group has been designated as a person with disabilities (Decree no. 8,368, 2014). The legal support has been seeking to suppress any setbacks experienced by students with ASD at various levels of education, including Higher Education. The entry into Higher Education is marked by several changes, ranging from the configuration of educational practices to the experiences among students and, considering the unique characteristics of these students, this group may be facing social, emotional, independent living, self-defense challenges and communication, both inside and outside the classroom (Adreon & Durocher, 2007).

When reading these data, it can be inferred that public policies that have guided and valued inclusive educational practices end up promoting greater access for students with ASD to higher levels of education. Thus, there is a need to reflect on the possibility of a change in the ideals, values, old beliefs and practices directed to this social group. A transformative look at the constitutive differences of the subject can be based on respect for human difference, with attention to the revision of its idiosyncrasies, that is, what is often considered strange and abnormal should be seen as a difference in a list of so many others, for example. Given these considerations, this paper seeks to report the findings of a research that aimed to describe the academic experience of six students diagnosed with ASD, regularly enrolled in a public university in the state of São Paulo, Brazil.

#### **2 METHOD**

This section discusses research participants, instruments, and procedures for data collection and analysis.

#### 2.1 Participants

It is worth mentioning that the research actions outlined were approved by the Ethics Committee and are registered at *Plataforma Brasil*, under Protocol CAAE 48308815.0.0000.5398. At the beginning of the study, participants received information about the research and, to sign the participation, signed the Informed Consent Form, prepared in accordance with Resolution CNS 466/2012 of the National Health Council.

The sample was then made up of six students from a public university in the state of São Paulo, self-reported with Autistic Spectrum Disorders, at the time of initial or ongoing enrollment. The selection of the sample occurred through consultation with the institutional system of registration of the Undergraduate courses. Contact with this public was authorized by the responsible instances at the university and took place via email or telephone.

In order to confirm the diagnosis, the Autistic Trace Assessment (ATA) scale was applied. The ATA scale (Assumpção Júnior, Kuczynski, Gabriel, & Rocca, 1999) consists of 23 subscales, each of which is divided into different items. It is considered a standardized test that provides the profile of the conduct of the person, based on different diagnostic aspects of ASD. It can be applied from the age of two. The scale is scored based on the following criteria: each test subscale has a value from 0 to 2; score zero in cases where no item is present; 1, if there is only one item; and 2 if there is more than one item. The arithmetic sum of the points obtained is performed, with a cut-off value of 23, which indicates that the person may have ASD. The scale does not allow to verify degrees of ASD, although it is possible to identify the profile of the symptoms. Table 1 allows the visualization of the information regarding the characterization of the participants.

Participant	Sex	Age	Age at diagnosis	Course	Course time until interview	ATA score
P1	Male	30	28	Industrial Wood Engineering	12 years	27
P2	Female	22	19	Biological Sciences	4 years	35
Р3	Male	26	18	Marine Biology	2 years	36
P4	Male	24	21	Mechanical Engineering	6 years	11*
P5	Male	37	7	Mathematics	4 years	35
P6	Male	23	13	Social Sciences	4 years	35

**Table 1.** Characterization of participants.

#### 2.2 Instruments

The instruments used in the research were:

Sample characterization form: specially designed for the study; this material consisted of
personal identification issues such as date of birth, age, sex, course, year of entry, among
others.

Source: The authors based on the research data.

\* Despite the lower score than the cut-off score. P4 was incl

<sup>\*</sup> Despite the lower score than the cut-off score, P4 was included because he presented a medical report with the diagnosis of ASD at the time of the interview.

• Interview guiding script: for data collection, an interview guiding script was used, adapted from the studies conducted by Branco (2015) and Silva (2016) that aimed to investigate various aspects related to university experience according to the perceptions of people with disabilities attending this type of education.

In this applied version, the questions were organized into ten thematic categories: 1 - Reasons for entering the undergraduate program; 2 - Information about the condition of ASD in the selection process; 3 - Adaptations performed during the selection process; 4 - Undergraduate accessibility conditions; 5 - Relationships in the University context; 6 - Adaptations in the teaching and learning process; 7 - Factors related to the permanence and completion of the course; 8 - Demands arising from the diagnosis; 9 - Importance of the undergraduate course; 10 - Suggestions for improvement at the University.

#### 2.3 Data collection procedure

Data collection took place in individual face-to-face meetings, which began with the request to fill in the characterization/identification form, followed by the application of the ATA, previously described. The application of this scale was performed through questions contained in the instrument, whose characteristics reported by participants should correspond to the time of data collection.

Still in the same meeting, the interviews continued, when the questions of the guiding script were presented. All interviews were recorded in audio files and lasted 90 minutes on average.

#### 2.4 Data analysis procedures

Initially, the obtained audios were transcribed in text documents. Subsequently, the reading of the reports obtained in the interviews was performed for the initial apprehension of the content and organization of the material. Subsequently, qualitative methodological procedures, denominated Core of Meaning (Aguiar & Ozella, 2006), were used to assist in the interpretation of the participants' reports, in order to achieve access to superior psychic processes, in the interpretation of the senses and meanings attributed to them to certain phenomena. This type of analysis, which is based on Historical-Cultural Psychology, starts from the words inserted in the context that give it meaning, in such a way that the context encompasses the narrative of the subject, allied to the historical-social conditions that constitute it (Aguiar & Ozella, 2013).

The operationalization of the analysis occurred in compliance with the criteria pointed out by the authors, namely: a) establishment of pre-indicators, - which are configured in words, absences or incompleteness, selected according to their importance for understanding the research objective; b) agglutination of this content into indicators (by similarity, complementarity or opposition); c) elaboration of the core of meaning, through the process of articulation of the indicators and their subjects organized and named according to the essence of the contents expressed by the subject (Aguiar & Ozella, 2006). In the process of seeking to

interpret such contents, the interlocution and attentive eyes of two researchers involved with the study were necessary.

Since this approach is based on the analysis of axioms, it is pertinent to resume that the meaning of a word depends on the individual understanding of the word as a whole and on the internal structure of personality. According to Vygotsky (1987), "it is the aggregate of all psychological factors that appear in our consciousness as a result of the word" (p. 276). In this regard, sense is no longer understood as the strict meaning of the word in context, to be considered as a psychic unit of consciousness organized in the processuality of language (Rey, 2011). In other words, when making use of the Core of Meaning, the researcher needs to understand that, in addition to the conceptualization of the concept, there is an interpretation of its own, unique to each subject.

## **3 RESULTS**

After repeated reading of the reports obtained in the transcribed interviews, the preindicators were firstly established, followed by the agglutination of this content into indicators, and the treatment was finalized with the construction of the core of meaning. Table 2 shows the pre-indicators, the respective established indicators and the numbers of participants who reported about it.

	Indicators	Pre-indicators and number of participants
1	Experiences in Basic Education under the condition of ASD	Good grades (5); difficulty with social interaction (4); difficulty concentrating (2); learning difficulty (2); very anti-social (2); certified by ENEM (2); difficulty in a discipline (2); many absences (2); change of schools (2); communication difficulty (1); bad grades (1); never fit in (1).
2	Bullying	They mocked me (3); They called me a retard (2); They isolated me (3).
3	Course Importance	Have always liked the area (5); followed the choice of classmates (2); Make the dream come true (2); Approaching normality (1).
4	Undergraduate admission and ASD	Had no adaptations (6); did not have the diagnosis (3); didn't want them to know (2); don't like pranks (2); did not know that Asperger was a disability (1); They asked me nothing (1); was bewildered (1).
5	University accessibility barriers	Information barrier (6); had no help (5); had accessibility group (3); Skilled professionals are lacking (3); There was no accessibility group (2); Campus is not accessible (2); did not request (2); They said that it did not exist (1); Building is accessible (1).
6	Struggle for University stay	Same teaching and evaluation criteria (6); As a normal student (6); Dependencies (5); Parents help (4); Learning disability (3); Absences (2); Lack of follow-up (1); removal (1).
7	Professor unpreparedness	Bad judgment (5); were warned (3); Humiliated me (2); They do not understand (2); He said I have no capacity (1); Certification on how to act (1); There is nothing to do (1); Bullying action against me (1); They despised what I asked (1).
8	Complicating factors related to the condition of ASD	Difficulty with social interaction (6); Difficulty in maintaining friendships (5); Difficulty with concentration (4); Strange behavior (3); Persecution (3); Very intense brain activity (2); Stereotyped movements (2); Difficulty dealing with change (2); have no empathy (2).

	Indicators	Pre-indicators and number of participants
9	Socio-emotional factors	Fights (4); People's conduct (4); Compel to leave University (3); Mask (3); Seizures (2); I was always anti-social (2); I felt normal (2); Chubby (2); I couldn't stand it (2); Hell (2); They did not want to accept (1); never fit in (1); Traumatized (1); was terrified (1).
10	University Improvement Suggestions	Professor with more affinity (1); More empathy and patience of professors (1); Clear access to materials (1); Orientation on both sides (1); Understand the student's difficulty (1); Awareness (1).

**Table 2.** Indicators, pre-indicators and interview numbers in which they appear. Source: The authors based on the research data.

Legend: ENEM (National High School Exam – exam taken once a year for university entrance).

From the indicators presented in Table 2, three cores of meaning were constructed, according to their respective contents, which are arranged in Table 3.

Core of meaning	Indicators that compose it	
Basic Education: Academic heterogeneity and poor interactional experiences	Indicator 1 - Experiences in Basic Education. Indicator 2 - <i>Bullying</i> . Indicator 7 - Unpreparedness of professors. Indicator 8 - Complicators related to ASD condition. Indicator 9 - Socio-emotional factors.	
Controversy between interest in undergraduate studies and unpreparedness of university context	Indicator 2 – <i>Bullying</i> .  Indicator 3 - Importance of the course.  Indicator 4 - Admission to undergraduate studies and ASD.  Indicator 5 - University accessibility barriers.  Indicator 6 - Struggle for permanence at the University.  Indicator 7 - Unpreparedness of professors.  Indicator 9 - Socio-emotional factors.	
Needs for change in the singular and social sphere	Indicator 2 – <i>Bullying</i> . Indicator 8 - Complicators related to ASD condition. Indicator 9 - Socio-emotional factors. Indicator 10 - Suggestions for improvement at the University.	

**Table 3.** Core of meaning and indicators that compose them.

Source: The authors based on the research data.

Thus, the participants' reports were classified into three cores of meaning, which organized thematically the main points addressed in the interviews, namely: 1) Basic Education: academic heterogeneity and poor interactional experiences; 2) Controversy between the interest in undergraduate studies and the lack of preparation of the university context; 3) Need for change in the singular and social sphere.

In the first core of meaning - Basic Education: academic heterogeneity and poor interactional experiences - the reports mostly include facilities regarding the academic content in Basic Education (five of the six participants did not present marked difficulties with the approval, obtaining very satisfactory concepts, in most curricular subjects). However, of these five participants, four reported difficulties in specific areas (such as Math and Arts), requiring

assistance (two participants) or being retained in some subjects (two participants). Regarding the presence in class factor, three of the six participants reported major problems with absence due to difficulties in social interaction. This was mentioned by all participants and even became the reason for obtaining High School completion in distance education for two participants (P2 and P6). P4's account allows us to observe some of these aspects: "Elementary School I was doing well. But, there was always this part of difficulty in social interaction. But, the student gets a good grade, causes no trouble, why will the school worry?".

The second core of meaning - Controversies between the interest in undergraduate studies and the unpreparedness of the university context - allowed us to reflect on the nuances that university students with ASD can experience in the academic context, after entering undergraduate studies, in terms of P2: "I was doing something thinking of later working with botany, or ethnobotany that was my dream, but I couldn't finish the course there because of bullying. If I had only bullying but could go on with the disciplines, I would continue. But I couldn't deal with both of them".

In the analysis of this core, there are other elements to be highlighted. Three (P1, P2 and P4) out of the six participants were diagnosed with ASD when they were already undergraduate; thus, there was late identification of its condition. In these cases, the academic (P1, P2 and P4) and emotional (P2 - "anxiety crises" and P4 - "depression") difficulties culminated in the search for answers with professionals outside the University, which were explained by obtaining the diagnosis. When aware of the situation, the three participants sought support from the professors and the undergraduate technical staff.

P1 made the request to extend the deadline for completion of the course, due to the fact that it lacked approval in 15 subjects and was already about to fail. After some bureaucratic difficulties in this regard, including the need to resort to the Dean to obtain the benefit, he managed to extend the term for the payment of credits. P1 at the time of the interview was studying for the third time the last remaining discipline for the completion of his degree in Industrial Wood Engineering.

Upon receipt of the diagnosis, P2 reported that her mother drove to the university and informed the undergraduate session about her condition. According to her, all the professors of the Biological Sciences course were aware of the situation; however, no solutions were presented so that she could obtain approval in the ten subjects in which she had to retake the disciplines. The following excerpt seeks to illustrate the importance of completing the course for P2: "It was all I wanted. So much that with all the retaking disciplines I insisted for 4 years. I did everything. I researched ways of learning, tried to ... tried to look for other types of therapy. I started doing physical exercises like this. Everything you imagine I could do to try to complete this course I tried." When asked if there was support offered by the institution, the answer was: "Not from the university".

Studying Mechanical Engineering, P4 had the multidisciplinary support of a team of professionals outside the university to progress academically. The professionals intervened with the undergraduate technical section, advising on how pedagogical practices could be adjusted to favor student learning. However, P4 reported that the guidelines were exhausted on the theoretical level. He also reported that, by his own will, he would not disclose the diagnosis

even if it prevented him from obtaining the legal benefits to which he is entitled: "So, not to have quarrels with the professor, many times I ended up, I also ended up hiding a little of that from the academy".

Another important aspect to be highlighted refers to the accessibility barriers faced in the academic trajectory, among which is the lack of services and the aid provided to this public, reported by all participants. To P2, for example: "The only thing was that the professors did not provide much material, there was no coursebook. Many do not provide the slides and ... this I found difficult". P6, still with respect to the information provided by professors, pointed out: "They don't offer you anything, they don't even talk about their research group".

The third and final Core of Meaning - "Needs for change in the singular and social sphere" - gathered considerations about changes in the context due to the particularities of students with ASD (faced with difficulties with social skills, concentration and executive functioning/planning), as well as issues concerning professors and classmates. P6, enrolled in the Social Sciences course, spoke about this: "They lack preparation for them and for me; orientation on both sides. How am I going to Interact?".

Reports indicating difficulties of interaction in the singular context were associated by participants with difficulties in detecting the mental states of their interlocutors. P3 mentioned in relation to the behavior of others: "That sometimes I do not understand. I don't, I don't understand things". P4, in turn, reported absence in the behavior of "empathy". Regarding cognitive skills, P2 and P5 discussed the difficulty in organizing the content to be studied for the tests; and P1, P2, P5 and P6 reported concentration deficits during the classes. About this topic, P2 described: "No, practically, I could not learn with any professor. Because it was all on slide and it was so fast and I couldn't focus on either in the speaking or in the slides or take notes". In addition, one factor mentioned by P4 was that he was "slow to write". To him, an extra time for completing tests would be essential.

Concerning the necessary adaptations or adjustments in the university context, the reports pointed mainly to the change of attitude of the professors who, according to the participants, could better understand the peculiarities of each student and offer more punctual assistance in accessing the content taught in the disciplines.

As for classmates, P2 mentioned: "awareness that these autistic students or even others are people. I consider normal people who have some peculiarities and that you can establish friendships with them and everything. I think that's it". This reveals that these students are open and want to establish social interactions within the context of common life.

#### 4 Discussion

Regarding the inclusion of children with ASD in the common basic education network, studies have pointed out several areas related to social skills, showing much lower results when compared to peers with typical development. Among these factors, we mention: disengagement and isolation during school break (Frankel, Gorospe, Chang, & Sugar, 2011); less likely to have reciprocal friendships (Bauminger, Solomon, & Rogers, 2010); more likely to be rejected (Locke, Kasari, Rotheram-Fuller, Kretzmann, & Jacobs, 2013); and greater chance

of having poorer relationships (Calder, Hill, & Pellicano, 2012). These factors corroborate the findings of this study, which focused on the difficulties with social interactions in Elementary School, remaining many of them until the higher level of education. However, the study conducted by Locke, Williams, Wendy, & Kasari (2017) highlighted that there are cases of children with ASD who are socially successful in schools (although most literature focuses on the other bias). Among the aspects that were associated with success in social relationships, the study mentioned the severity of symptoms and adult-mediated interaction, indicating the importance of specific interventions.

However, half of the sample investigated was only diagnosed later. One of the participants (P4) states that this fact may have influence due to their good academic performance, both conceptual and behavioral, masking their condition at this stage of development. In other words, such aspects possibly contributed to not alerting professors to ASD, as it deviated from the trivially popularized symptomatology of the disorder.

It is worth mentioning that late diagnosis has been the focus of scientific studies and has shown positive applications regarding its knowledge by the individual with ASD (Olivati & Leite, 2017), so that feelings of relief with the confirmation of the diagnosis are reported, having given that some unexplained aspects of the past made sense (such as university bullying, job difficulties, persistent anxiety, and problems with friendships and love relationships) (Hickey, Crabtree, & Stott, 2017).

Regarding the academic performance of participants with ASD during Basic Education, it was found that only one of the six participants had significant difficulties with school performance: "To tell the truth I don't think I even learned [...], I did the disciplines, but in a mechanical way". For the others, this was not considered a problem, as the reports even focused on the ease of obtaining good grades without the need for much effort. However, specific difficulties have been identified in some areas of concentration (such as Mathematics, Physics and Arts). Therefore, it is possible to verify that the participants with ASD presented a diversified profile, with specific areas of weaknesses and strengths, corroborating the findings of Keen, Webster and Ridley (2016).

That being said, it is possible to infer that if the educational system were more attentive to the special needs and interactional aspects of this population, offering both pedagogical support and the proposition of alternative forms of teaching, favoring the establishment of interactional exchanges, such students could benefit significantly from inclusion in regular education. This is an important subject to be considered in accordance with the precepts of inclusive education, especially given that there are reports that children with ASD who remained in the common classes had better academic performance than those who switched to the Special Education classes (Kim , Bal, & Lord, 2018), although staying in schools is still a challenge due to recurrent social barriers and bullying in everyday school life (Rosa, 2015).

The difficulties with social interaction reported by all participants proved to be a complicating factor in staying at university. These difficulties have been observed and reported in the literature (Gelbar, Shefcyk, & Reichow, 2015; Olivati & Leite, 2017) and are compatible with ASD diagnostic characteristics (APA, 2013). These aspects, related to the pragmatic language deficits (Trevisan & Birmingham, 2015) are subject to training and intervention and

can improve the communicative profile of adults with ASD (Ferreira, Teixeira, & Britto, 2010) contributing, consequently, to the success of these people in their college experience.

It is important to consider that difficulties related to prosody (Globerson et al., 2015; Olivati et al., 2017), changes in gesture communication (de Marchena et al., 2019), semantic and pragmatic skills (Trevisan & Birmingham, 2016), in the metaphorical comprehension of some sentences and expressions and the incessant speech about a favorite subject (Klin, 2006), can interfere in the establishment of social relations and, although these characteristics should not be generalized, all students should be contemplated in their singularities in an educational proposal that adjectives itself as inclusive. In this regard, we can reflect that bullying, present in the reports of all participants and observed in the three meaning cores, may be more related to stigma and social rejection associated with a given condition of disability (disabilities) and not to characteristics of the ASD itself (McLeod, Meanwell, & Hawbaker, 2019).

Another fundamental factor identified in the interviews refers to learning difficulties associated with organizational (P2 and P4) and attentional (P1, P2 and P5) skills. It is well known in the literature that cognitive flexibility is one of the areas of executive functioning that poses learning challenges for students with ASD. Mental adaptation is difficult and, therefore, they may have difficulty transitioning from one concept to another, which can make it difficult to maintain attention and complicate reading and understanding of the curriculum contents expressed in Higher Education. Hence, it is inferred that the lack of attentional focus on a given object or situation, associated with problems with speed in the execution of classroom tasks, can lead to the difficulty of concept appropriation, as observed by Gobbo and Shmulsky (2014), which agrees with the reports of P2 and P4. Given the identification of such special demands, it is appropriate to recall that the State itself regulates the guarantee of an educational and egalitarian system at all levels, providing for modification and methodological adjustments in teaching (Decree no. 7,611, November 17, 2011).

Regarding accessibility issues, all participants indicated the information barrier as the main aspect found in their respective university units. The study conducted by Pereira, Lima and Oliveira (2016), at a Federal University, analyzed how access to information can assist people with disabilities in accessing and staying in Higher Education. Preliminary findings corroborate the statements of the participants of this study, considering that the authors understand this aspect as far from being ideal. They add that at least three types of information can be found: information that is available to the academic community through books and scientific papers - found in libraries; the informational content passed on in the classroom by professors through discussions with peers; and, finally, the set of information conveyed by the University about its sectors, services, rights and duties within the unit (Pereira, Lima, & Oliveira, 2016) should use more varied forms, adjusting to the uniqueness of the students; it must therefore be in formats accessible to them.

It was evident in the participants' reports the need for more capable professors able to deal with differences, even though more than 20 years have passed since the promotion of inclusive education in the Brazilian scenario. This aspect was also observed in similar studies (Costa & Marin, 2017; Souza, Santos, Teodoro, & Fabiano, 2018), although the existence of collaborative assistance by professors has already been found, which impacts, in a positive way,

the process of student participation with ASD (Donati & Capellini, 2018). Another important factor to be considered is that all participants preferred to conceal the diagnosis - due to fear of judgments - from being considered "poor thing" (P5) or being seen "with an apologetic look because he is autistic" (P6), which may make it impossible to implement supports in the educational sphere (Anderson, Carter, & Stephenson, 2018). It is worth mentioning that professors, due to unawareness, often face challenges in the relationship with such students, so that they find student's difficulties to meet the demands of the course and observe the presence of behaviors considered as unethical, arrogant and aggressive (Donati & Capellini, 2018) and therefore deserve special attention.

The preference in veiling the diagnosis, mentioned by all participants, has already appeared in scientific research reports (Anderson, Carter, & Stephenson, 2018; Gelbar, Shefcyk, & Reichow, 2015). Thus, individuals with ASD are unlikely to disclose their condition in pairs, for fear of withdrawal or retaliation by them, largely because of the myths surrounding the disorder - such as subjects in this condition not fond of making friends, are weird, aggressive - going to those who misclassify it as a disease. This indicates that there is much to discuss about ASD or other deficiencies in an educational sphere responsible for training future professionals. The university must be committed to the academic education of those who will be the professionals of the future and, therefore, it is up to the institution to enable the idea of a plural individual to be something to be considered and respected, breaking with the logic of a single subject.

Given these changes suggested by the participants, it is important to mention that the implementation of inclusion programs in public universities in the country is already observed, such as the Including Program (*Programa Incluir*, 2013), which aims to consolidate accessibility centers in Federal Higher Education units, which are responsible for the organization of institutional actions that ensure the integration of people with disabilities into academic life, eliminating behavioral, pedagogical, architectural and communication barriers (*Programa Incluir*, 2013). However, this was not the reality found by the participants of the present study, who, in their entirety, reported the absence of support centers at the university, perhaps due to the administrative nature of the investigated university, which belongs to the State sphere, and therefore not contemplated in the Program, or because of its multicampi character, making it difficult to establish a nucleus in all its units.

In general, the university support offered was incipient, and when it occurred, the support was due to individual requests from students. As an example of interventions to be proposed in this context, literature reports and weekly meetings to plan social activities around the interests of students with ASD, improve organizational skills, target specific social skills, and rely on a mentor during social activities have increased the number of participants in social events, extracurricular activities, peer interactions, better academic performance and greater satisfaction with their university experience (Ashbaugh, Koegel, & Koegel, 2017). In addition, the availability in the academic environment of professionals with technical and scientific competence in dealing with students with ASD can contribute to the relationship between school and family, so as to respect the individual needs of students and provide a space to accommodate their demands and their family's (Costa & Marin, 2017).

### **5 CONCLUSION**

Many of the scientific papers used to discuss the results presented here refer to publications in the international literature, given the still restricted choice of studies conducted with university students with ASD in the national territory - although studies on this topic are already found. This is a piece of information to be highlighted, especially considering the growing number of students with ASD entering the country's universities due to public policies that encourage this initiative (Martins, Leite, & Lacerda, 2015).

Autism is often described as an invisible condition, because people living with autism of any kind are like everyone else, but do not conform to social norms. Here is an excerpt from Baron-Cohen, a researcher who works with the social factors of stigmatization and isolation that people with ASD experience: "For me, the turning point was when a man told me that having autism was like being a fresh water fish in salt water. In that environment, they are disabled. In the right environment, the disability reduces and they not only blossom but can fulfill their potential" (Baron-Cohen as cited in Morgan, 2015, p. 967). The message is clear enough - being different is not a cause of social exclusion; there are ways and means for people living with autism to thrive in a society capable of receiving diversity (Morgan, 2015).

By using the Cores of meaning, it was possible to understand the aspects related by the participants to their academic trajectories, as well as the influence of the university environment in this stage of life, in the light of how the singular subject relates to man's own understanding of how to be generic. Students with ASD presented important reports about difficulties with social interactions, socio-emotional factors and academic challenges that impacted their stay at university. The interest in participating in a Higher Education course marked by persistence in the face of social, methodological and individual obstacles faced demonstrates the importance of completing the course for this population.

The support offered by the institutions was deficient, both in identifying special educational needs and in proposing facilitating strategies that contributed to the success of these students at the university. These results demonstrate the difficulty of Higher Education professionals in breaking with a homogeneous practice, that is, providing unique conditions. In addition, the guarantees of curricular adjustments should be provided and applied when necessary, from the entrance to the end of the courses, even though the admission to the public university in Brazil is fundamentally meritocratic. In other words, educational inclusion in Higher Education in the country is still at a slow pace, and it is not uncommon for the university community to be amazed at the presence of students with disabilities in the classroom. Ensuring that the student with ASD has equal conditions in their academic experience, as any other student, is still a challenge, because what is perceived is that the subject is to blame for their condition of (negative) difference, and the strangeness perpetuated. In this sense, many subjects with ASD, as the participants of this study, choose to keep the diagnosis veiled, even in a context that is proclaimed as plural, the public university.

#### REFERENCES

- Adreon, D., & Durocher, J. S. (2007). Evaluating the college transition needs of individuals with high-functioning autism spectrum disorders. *Intervention in School and Clinic*, 42, 271-279.
- Aguiar, W. M. J., & Ozella, S. (2006). Núcleos de significação como instrumento para a apreensão da constituição dos sentidos. *Psicologia Ciência e Profissão*, 2(26), 222-245.
- Aguiar, W. M. J., & Ozella, S. (2013). Apreensão dos sentidos: aprimorando a proposta dos núcleos de significação. *Revista Brasileira de Estudos Pedagógicos*, 94(236), 299-322.
- American Psychiatric Association. (2013). Manual Diagnóstico e Estatístico de Transtornos Mentais DSM-5-TR. Porto Alegre: Artmed.
- Anderson, A. H., Carter, M., & Stephenson, J. (2018). Perspective of University students with Autism Spectrum Disorder. *J Autism Dev Disorder*, 48(3), 651-665.
- Ashbaugh, K., Koegel, R., & Koegel, L. (2017). Increasing social integration for college students with Autism Spectrum Disorder. *Behav Dev Bull*, 22(1), 183-196.
- Assumpção Júnior, F. B., Kuczynski, E., Gabriel, M. R., & Rocca, C. C. (1999). Escala de avaliação de traços autísticos (ATA): validade e confiabilidade de uma escala para a detecção de condutas artísticas. *Arquivos de Neuro-Psiquiatria*, 57(1), 23-29.
- Baio, J., Wiggins, L., Christensen, D. L., Maenner, M. J., Daniels J., Warren, Z., ... Dowling, N. (2018). Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014. MMWR Surveill Summ, 67(6), 1-23. DOI: 10.15585/mmwr.ss6706a1
- Bauminger, N., Solomon, M., & Rogers, S. J. (2010). Externalizing and internalizing behaviors in ASD. *Autism Research*, 3(3), 101-112. DOI: 10.1002/aur.131
- Bolis, D., Balsters, J., Wenderoth, N., Becchio, C., & Schilbach, L. (2017). Beyond autism: Introducing the dialectical misattunement hypothesis and a Bayesian account of intersubjectivity. *Psychopathology*, 50(6), 2017. DOI: 10.1159/000484353
- Bolourian, Y., Zeedyk, S. M., & Blacher, J. (2018). Autism and the University Experience: narratives from students with Neurodevelopmental disorders. *J Autism Dev Disord*, 48(10), 3330-3343. DOI: 10.1007/s10803-018-3599-5
- Branco, A. P. S. C. (2015). Análise das condições de acessibilidade no ensino superior: um estudo com pós-graduandos (Master's thesis). Universidade Estadual Paulista, Faculdade de Ciências, Bauru, São Paulo, Brazil.
- Brugha, T. S., Mcmanus, S., Bankart, J., Scott, F., Purdon, S., Smith., ... Meltzer, H. (2011). (2011). Epidemiology of autism spectrum disorders in adults in the community in England. *Arch Gen Psychiatry*, 68(5), 459-65. DOI: 10.1001/archgenpsychiatry.2011.38
- Calder, L., Hill, V., & Pellicano, E. (2013). 'Sometimes I want to play by myself': Understanding what friendship means to children with autism in mainstream primary schools. *Autism*, 17(3), 296–316. DOI: https://doi.org/10.1177/1362361312467866
- A., Marin, A. H. inclusão adulto Costa: (2017).Processo de do com de Barbarói, Síndrome Asperger no ensino superior. 49. 258-285. DOI: http://dx.doi.org/10.17058/barbaroi.v0i49.6355

- Decree no 7,611, November 17, 2011. Dispõe sobre a educação especial, o atendimento educacional especializado e dá outras providências. Retrieved on September 20, 2019 from de http://www.planalto.gov.br/ccivil\_03/\_Ato2011-2014/2011/Decreto/D7611.htm
- Decree no 8,368, December 2, 2014. Regulamenta a Lei nº 12.764, de 27 de dezembro de 2012, que institui a Política Nacional de Proteção dos Direitos da Pessoa com Transtorno do Espectro Autista. Retrieved on September 20, 2019 from http://www.planalto.gov.br/ccivil\_03/\_ato2011-2014/2014/decreto/d8368.htm
- Donati, G. C. G., & Capellini, V. L. M. F. (2018). Consultoria colaborativa no Ensino Superior, tendo por foco um estudante com Transtorno do Espectro Autista. *Rev Ibero-Americana de Estudos em Educação*, 13(2), 1459-1470. DOI: https://doi.org/10.21723/riaee.v13.nesp2.set2018.11655
- Ferreira, P. R., Teixeira, E. V. S., & Britto, D. B. O. (2010). Relato de caso: descrição da evolução da comunicação alternativa na pragmática do adulto portador de autismo. *Rev CEFAC*, *13*(3), 559-567. DOI: http://dx.doi.org/10.1590/S1516-18462010005000135
- Frankel, F. D., Gorospe, C. M., Chang, Y. C., & Sugar, C. A. (2011). Mother's reports of play dates and observation of school playground behavior of children having high-functioning autism spectrum disorders. *J Child Psychol Psychiatry*, 52(5), 571-579. DOI: 10.1111/j.1469-7610.2010.02318.x
- Frith, U. (2008). Autism: a very short introduction. Oxford: Oxford University Press.
- Gelbar, N. W., Shefcyk, A., & Reichow, B. (2015). A comprehensive survey of current and former college students with Autism Spectrum Disorders. *Yale Journal of Biology and Medicine*, 88(1), 45-68.
- Gillberg, I. C., Helles, A., Billstedt, E., & Gillberg, C. (2016). Boys with Asperger Syndrome grow up: Psychiatric and neurodevelopmental disorders 20 years after initial diagnosis. *Journal of Autism and Developmental Disorders*, 46, 74-82. DOI: 10.1007/s10803-015-2544-0
- Globerson, E., Amir, N., Kishon-Rabin, L., & Golan, O. (2015). Prosody recognition in adults with high-functioning autism spectrum disorders: from psychoacoustics to cognition. *Autism Res*, 8(2);153-63. DOI: 10.1002/aur.1432
- Gobbo, K., & Shmulsky, S. (2014). Faculty experience with college students with autism spectrum disorders: A qualitative study of challenges and solutions. *Focus on Autism and Other Developmental Disabilities*, 29, 13-22. DOI: https://doi.org/10.1177/1088357613504989
- De Marchena, A., Kim, E. S., Bagdasarov, A., Parish-Morris, J., Maddox, B. B., Brodkin, E. S., & Schultz, R. T. (2019). Atypicalities of gesture form and function in autistic adults. *J Autism Dev Disord.*, 49(4), 1438-1454. DOI: 10.1007/s10803-018-3829-x
- Hickey, A., Crabtree, J., & Stott, J. (2017). 'Suddenly the first fifty years of my life made sense': Experiences of older people with autism. *Autism*, 22(3), 357-367. DOI: 10.1177/1362361316680914
- Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. (2018). Sinopse Estatística da Educação Superior 2017. Brasília: Inep. Retrieved on March 22, 2019 from http://portal.inep.gov.br/basica-censo-escolar-sinopse-sinopse
- Keen, D., Webster, A., & Ridley, G. (2016). How well are children with autism spectrum disorder doing academically at school? An overview of the literature. *Autism*, 20(3), 276-94. DOI: 10.1177/1362361315580962.
- Kim, S. H., Bal, V. H., & Lord, C. (2018). Longitudinal follow-up of academic achievement in children with Autism from age 2 to 18. *J Child Psychol Psychiatry*, 59(3), 258-267. DOI: 10.1111/jcpp.12808

- Klin, A. (2006). Autismo e Síndrome de Asperger. *Rev Bras Psiquiatr*, 28(Supl I), S3-11. DOI: http://dx.doi.org/10.1590/S1516-44462006000500002
- Lei nº 12.764, de 27 de dezembro de 2012. Institui a Política Nacional de Proteção dos Direitos da Pessoa com Transtornos do Espectro Autista; e altera o & 3º do art. 98 da Lei nº 8.112, de 11 de dezembro de 1990. Retrieved on September 20, 2019 from http://www.planalto.gov.br/ccivil\_03/\_Ato2011-2014/2012/Lei/L12764.htm
- Locke, J., Kasari, C., Rotheram-Fuller, E., Kretzmann, M., & Jacobs, J. (2013). Social Network Changes Over the School Year Among Elementary School-Aged Children with and Without an Autism Spectrum Disorder. *School Mental Health*, *5*(1), 38-47. DOI: https://doi.org/10.1007/s12310-012-9092-y
- Locke, J., Williams, J., Wendy, S., & Kasari, C. (2017). Characteristics of socially successful elementary school-aged children with Autism. *J Child Psychol Psychiatry*, 58(1), 94-102. DOI: 10.1111/jcpp.12636
- Lopes-Herrera, S. A., & Almeida, M. A. (2008). O uso de habilidades comunicativas verbais para aumento da extensão de enunciados no autismo de alto funcionamento e na síndrome de Asperger. *Pró-Fono Revista de Atualização Científica*, 20(1), 37-42. DOI: 10.1590/S0104-56872008000100007
- Martins, D. A., Leite, L. P., & Lacerda, C. B. F. de. (2015). Políticas públicas para acesso de pessoas com deficiência ao ensino superior brasileiro: uma análise de indicadores educacionais. *Públicas em Educação*, 23(89), 984-1014. DOI: http://dx.doi.org/10.1590/S0104-40362015000400008
- McLeod; J. D., Meanwell, E., & Hawbaker, A. (2019). The experiences of college students on the Autism Spectrum: a comparison to their neurotypical peers. *J Autism Dev Disord*, 49(6), 2320-23-36. DOI: 10.1007/s10803-019-03910-8
- Morgan, J. (2015). Simon Baron-Cohen: cultivating diversity. *The Lancet Psychiatry*, *2*(11), 967. DOI: https://doi.org/10.1016/S2215-0366(15)00461-7
- Myers, S. M., Voigt, R. G., Colligan, R. C., Weaver, A. L., Storlie, C. B., Stoeckel, R. E., ... Katusic, S. K. (2019). Autism Spectrum Disorder: Incidence and time trends over two decades in a population-based birth cohort. *J Autism Dev Disord*, 49(4), 1455-1474. DOI: 10.1007/s10803-018-3834-0
- National Policy on Special Education from the Perspective of Inclusive Education. (2008).

  Retrieved on September 20, 2019 from http://portal.mec.gov.br/index.php?option=com\_docman&view=download&alias=16690-politica-nacional-de-educacao-especial-na-perspectiva-da-educacao-inclusiva-05122014&Itemid=30192
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., Wei, X. (2011). The post-high school outcomes of young adults with disabilities up to 8 years after high school. A report from the National Longitudinal Transition Study–2 (NCSER 2011-3005). Menlo Park, CA: SRI International.
- Olivati, A. G., & Leite, L. P. (2017). Trajetória acadêmica de um pós-graduando com transtorno do espectro autista. *Psicol. Estud. Maringá*, 22(4), 609-621. DOI: 10.4025/psicolestud.v22i4.37665
- Olivati, A. G., Assumpção Junior, F. B., & Misquiatti, A. R. N. (2017). Análise acústica do padrão entoacional da fala de indivíduos com Transtorno do Espectro Autista. *CoDAS*, *29*(2), 1-10. DOI: http://dx.doi.org/10.1590/2317-1782/20172016081
- Pereira, G. M., Lima, I. F., & Oliveira, M. J. F. (2016). O acesso à informação e os alunos com deficiência da UFPB. Pesquisa Brasileira em Ciência da Informação e Biblioteconomia, 11(1), 33-43.
- Programa Incluir (2013). Documento orientador: Programa Incluir Acessibilidade na Educação Superior SECADI/SESu. Retrieved on September 20, 2019 from http://portal.mec.gov.br/index.

- php?option=com\_docman&view=download&alias=12737-documento-orientador-programa-incluir-pdf&category\_slug=marco-2013-pdf&Itemid=30192
- Rey, F. G. (2011). Sentidos subjetivos, lenguaje y sujeto: avanzando en una perspectiva postracionalista en psicoterapia. *Revista di psichiatria*, 46(5-6), 310-314.
- Rosa, F. D. (2015). Autistas em idade adulta e seus familiares: recursos disponíveis e demandas da vida cotidiana (Doctoral dissertation). Universidade Federal de São Carlos, São Carlos, São Paulo, Brazil.
- Shattuck, P. T., Narendorf, S. C., Cooper, B., Sterzing, P. R., Wagner, M., & Taylor, J. L. (2012). Postsecondary education and employment among youth with an Autism Spectrum Disorder. *Pediatrics*, 129(6), 1012-1049.
- Silva, K. C. (2016). Condições de acessibilidade na universidade: o ponto de vista de estudantes com deficiência (Master's thesis). Universidade Estadual Paulista, Faculdade de Filosofia e Ciências, Bauru, São Paulo, Brazil.
- Souza, B. R., Santos, V. L. M. R., Teodoro, D. C., & Fabiano, M. A. (2018). Universitários autistas: considerações sobre a inclusão de pessoas com T.E.A nas IES e sobre a figura do docente nesse processo. *Revista Educação em Foco*, 9, 140-153.
- Trevisan, D., & Birmingham, E. (2016). Examining the relationship between autistic traits and college adjustment. *Autism*, 20(6), 719-29. DOI: 10.1177/1362361315604530
- Vygotsky, L. S. (1987). Thinking and speech. In R. Rieber, & A. Carton (Eds), *The collected works of L. S. Vygotsky* (pp. 39-285). New York: Plenum Press.

#### APPENDIX A

#### Interview Guide

Questions adapted from Branco (2015) and Silva (2016)

• Tell us a little about your school trajectory (Basic Education).

#### **Undergraduate study Admission**

- · Why did you choose to do this degree? (Why this course? Why this campus? How did you come to this decision?)
- When you took the college entrance exam, were you favored with adaptations? (At the exam venue, type of desk, resources such as online or other favoritism, which)?
- If so, did you request for it? What did you think of the support received? If not, why do you think you didn't? And what did you think of that?
- Have you declared yourself with a disability in the enrollment process?
- Do you know if the university offers specialized support services for students with disabilities? Do you use any resources and/or make use of any services? Which? Exemplify some situations of use of these services? Who finances and/or promotes their access to support?
- After you were approved in the course, did you notice that there were changes on campus to suit your needs? Which ones?
   Did you request for them?

#### Accessibility

- Do you attend and/or use the different university spaces (library, computer lab, leisure areas, canteen, etc.). Do you consider
  that there are accessibility barriers?
- How do you analyze accessibility conditions in relation to your undergraduate achievements?
- Which people do you relate to in the undergraduate course, and how is your relationship with them?
- How is your relationship with classmates? Professors? And the university professionals?
- Do all professors know and/or consider your educational needs and consider them in planning classroom activities? Do you
  notice any situation that is favorable or not for your learning?
- How is your classroom learning assessed? Is it the same as other classmates? Talk about it.
- How is your relationship with your advisor?
- How do you feel in the classroom and in the course? Does the professor organize his/her activities differently according to your needs?
- What is your evaluation process like? Like the other classmates? What do you think about that?
- When it comes to your Specific Needs, is there any kind of barrier on campus where you are taking your undergraduate studies? If so, what are they? If not, what would need to be done?
- How do you rate accessibility today on the campus you study at? Are there difficulties in accessing and/or removing barriers?
   Why do you think this happens?
- · How do you rate the accessibility conditions of the university. Do you consider that your needs are met? Why?

#### Facilities or difficulties encountered in the university context

- Do you find facilities or difficulties in fulfilling your administrative and academic activities (system enrollment, document delivery, photocopy material location, etc.)?
- Can you follow all the activities offered by the university (extension courses, lectures, meetings, etc.)? Report any strategies
  you consider favorable/unfavorable for your learning.
- Do you follow course subjects on time? Do you think there is any facility and difficulty to attend classes at the university?
   Do you use any specific features?
- Do you have difficulty performing your research? If so, which ones? (access to participants, institution etc.).
- Do you think you will complete the undergraduate course on time?
- Would you like to comment on something that was not asked? What?
- Do you get any support for university? If so, what is the purpose?
- What were the positive points your entry into the university made possible? And how important is the completion of this
  undergraduate training for you?
- What is your work intention after completing the course?
- Would you like to highlight any positive and/or negative aspects to complete Higher Education?<sup>5</sup>

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