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Blind students in higher education: what to do with possible obstacles?

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ABSTRACT. This study analyzed the obstacles or difficulties faced by blind people in higher education, proposing some strategies that can be undertaken by managers and teachers to overcome such obstacles to their inclusion. The study was anchored in a qualitative approach, taking the form of case studies, which initially aimed to identify which were the obstacles faced by the research subjects: eight blind people, five male and three female. Data were collected through narrative interviews and analyzed through a discursive textual process. The findings showed the existence of the following obstacles, and possible strategies were proposed to overcome them: 1) institutional, having as a strategy investing in admission process and permanence of the blind student in the university; 2) concerning the relationships with teachers, having as a strategy the adoption of pedagogies consistent with the inclusion of blind students in higher education.

Keywords: Educational Psychology, Higher Education, Special Education.

Estudantes cegos na educação superior: o que fazer com os possíveis obstáculos?

RESUMO. Este trabalho teve como objetivo analisar os obstáculos ou as dificuldades enfrentadas por cegos na educação superior, propondo algumas estratégias que podem ser empreendidas por gestores e professores para a superação desses obstáculos que dificultam a inclusão daqueles. A pesquisa ancorou-se em uma abordagem de natureza qualitativa, assumindo a forma de estudos de casos, nos quais, inicialmente, visou-se identificar quais eram os obstáculos enfrentados pelos sujeitos que dela participaram: oito pessoas cegas, cinco do sexo masculino e três do sexo feminino. Os dados foram coletados por meio de entrevistas narrativas e trabalhados por intermédio do processo de análise textual discursiva. Os achados mostraram a existência dos seguintes obstáculos, para os quais se propuseram possíveis estratégias de superação: 1) concernentes a aspectos institucionais, tendo como estratégia o investimento no ingresso e na permanência do aluno cego; 2) concernentes a relações com professores, tendo como estratégia a adoção de posturas pedagógicas condizentes com a situação de inclusão do estudante cego na educação superior.

Palavras-chaves: Psicologia da educação, Educação superior, Educação especial.

Estudiantes ciegos en la educación superior: ¿qué hacer con los posibles obstáculos?

RESUMEN. Este trabajo tuvo como objetivo analizar los obstáculos o las dificultades enfrentados por ciegos en la educación superior, proponiendo algunas estrategias que pueden ser emprendidas por gestores y profesores para la superación de tales obstáculos que dificultan la inclusión de aquellos. La investigación se basó en un abordaje de naturaleza cualitativa, asumiendo la forma de estudios de casos, en los cuales, inicialmente, se pretendió identificar cuáles eran los obstáculos enfrentados por los sujetos que de ella participaron, a saber, ocho personas ciegas, cinco del sexo masculino y tres del sexo femenino. Los datos fueron recolectados por medio de entrevistas narrativas y trabajados por intermedio del proceso de análisis textual discursivo. Los hallazgos mostraron la existencia de los siguientes obstáculos, para los que se propusieron posibles estrategias de superación: 1) concernientes a aspectos institucionales, teniendo como estrategia o inversión en el ingreso y en la permanencia del alumno ciego; 2) concernientes a relaciones con profesores, teniendo como estrategia la adopción de posturas pedagógicas condecentes con la situación de inclusión del estudiante ciego en la educación superior.

Palabras clave: Psicología de la educación, Educación superior, Educación especial.

Introduction

The need to discuss disabled students' participation in Brazilian higher education (Castro, 2011; Costas, 2014; Lorensi, 2014; Lavarda, 2014), mainly the inclusion of blind students[1] (Silva, 2013; Delpino, 2004; Caiado, 2003; Dias, Morais, Neto & Henrique, 2010; Masini & Bazon, 2005; Masini, Chagas & Covre, 2006; Mazzoni & Torres, 2005; Melo, 2011; Soares, 2011; Vargas, 2006; Reis, Eufrásio & Bazon, 2010; Oliveira, 2007; Pereira, 2008; Silva & Tauchen, 2012; Raposo, 2006[2]) implies not only that this process has not been thoroughly organized in higher education institutions, but also that lectures have failed somewhere in their pedagogical practice. Despite historical and legal milestones which account for the inclusion of people with disabilities and/or special educational needs (def/NEE)[3] and the increase in the number of students with some disability enrolled in higher education (Brasil, 2013)[4], why is it still so complicate for a blind person to take a college course?

The discussion that follows does not intend to answer the question above. This paper aims at carrying out an objective analysis of the obstacles or difficulties faced by blind people in higher education and at proposing some strategies that can be undertaken by managers and lectures so as to overcome the obstacles that hinder their inclusion. The debate about the inclusion of blind students in higher education requires a literature review directed towards some issues that are related to the objective of this paper, mainly the obstables the subjects have to face in their undergraduation courses. The studies, which are reviewed below, have identified some of these obstacles students had to face in higher education. Such obstacles were classified into two groups: a) attitudinal ones, which refer to the discriminatory treatment given to blind students by their lectures and classmates, to the lack of interest in pedagogical work which aims at blind students and to the insecurity in the personal relationship with visually impaired people; and b) architectural ones, which refer to physical barriers.

Regarding the group of attitudinal obstacles, results of researches carried out by Delpino (2004), Mazzoni and Torres (2005), Nuernberg (2009), Caiado (2003) and Masini and Bazon (2005) showed that one of the main attitudinal obstacles blind students have to face when they start college education is related to the 'discriminatory treatment given by many lectures and/or classmates'. According to Mazzoni and Torres (2005), classmates' and lectures' scarce knowledge of visually impaired people's specific needs has contributed to the development of false concepts and generated discriminatory attitudes and beliefs. The scarce knowledge refers precisely to individual specificities every subject has as the result of his/her sight: visual impairment may show itself either as blindness (in which visual acuity is equal or below 0.05 in the best eye, with the best optical correction) or as low sight (visual acuity between 0.3 and 0.05 in the best eye, with the best optical correction; cases in which the sum of measurements of the field of vision in both eyes is equal or below 60º; or the simultaneous occurrence of any of the previous conditions). It requires different assistive technologies (Brasil, 2004).

According to Nuernberg (2009), prejudiced attitudes adopted by lectures and sighted students refer to the denial of the fact that a blind student is able to learn scientific contents of a certain area and to become a professional in the area of certification. They also include the belief that the blind person is insecure, weak, dependent and defenseless, a fact that generates overprotection by classmates and lectures (or the opposite, i. e., the minimization of difficulties faced by the blind; as a result, no help is offered to the blind in different situations). Finally, belief in 'normal centrism' implies that a person must have full physical conditions to practice an occupation.

Barton (1998) states that the relationship between people and PWD, people with disabilities, (including the blind) has been basically influenced by two factors: past experiences that refer to this type of relations and the way they define (and face) disability. According to the author, the disabled have been the target of several offensive reactions, such as fright, horror, fear, anxiety, hostility, distrust, pity, overprotection and paternalism. All circumstances express the definitions and the concepts that certain individuals have regarding the blind; thus, they may affect the relation they establish with the blind in a discriminatory way.

'Some lectures' lack of interest in pedagogical work addressed to the blind student' is also another attitudinal obstacle in higher education. Masini and Bazon (2005) highlighted that some lectures' lack of knowledge and interest in teaching this group of college students may decisively affect their scientific

[1] The term blind, used by this study, agrees with the one proposed by the Brazilian legislation (Brasil, 2004)..

[2] To mention just a few studies.

[3] Different concepts are not synonyms for what has been exposed by the Política Nacional de Educação Especial na Perspectiva da Educação Inclusiva: "[...] school inclusion of students with disabilities, global developmental disorders and high abilities/giftedness" (Brasil, 2008, p. 14; Costas & Tambara, 2013).

[4] Disabled students' enrollment ranged from 5,078 in 2003 to 29,034 in 2013, an increase of 572% in this period (Ciantelli, 2015)..

development and, consequently, their future participation in the labor market. According to Rodrigues (2004), several diffifulties students with disabilities face to be successful in college are related to negative representations lectures have regarding how these students will be able to work in the professional field after finishing their courses.

Nuernberg (2009) suggests that 'some lectures are insecure concerning the way they should relate to blind students'. Insecurity can be translated into the following examples: lectures do not talk to the blind students; they neither read aloud nor dictate any topic, but write it on the board in class; and they do not try to develop students' sensitivity in order to identify their needs. A study carried out by Selau, Hammes and Damiani (2015) also reports this kind of behavior and refers to lectures' insecurity as a type of prejudice. The authors add that this behavior violates blind students' human rights:

> [and], once again, the principle of valorization of differences and diversities is believed to be violated, as well as the principle of equality of rights. The latter focuses on the need for equality in the orientation of relations among human beings (Selau et al., 2015, p. 111).

Concerning the group of architectural obstacles, several difficulties faced by blind students in the college environment are connected to 'lack of physical adequacy for those who have any sensory limitation'. College environments have privileged the access of people whose sight capacity is totally or partially intact. Architectural obstacles are represented by physical barriers that prevent blind students from moving around safely in college facilities. Results of investigations carried out by Dias et al. (2010), Delpino (2004), Mazzoni and Torres (2005) and Masini and Bazon (2005) pointed out some of the main barriers: uneven sidewalks, mobile and fixed objects left in inappropriate places (benches, motorcycles etc.) and drivers' and bikers' lack of respect for pedestrian crossings on the campus.

Having intertwined the literature review of obstacles faced by the blind in higher education and the data collected by this study, in the following item, the paper describes the methodological procedures that guided it. Afterwards, results are shown and discussed. Finally, some final remarks are made about the issue.

Methodological procedures

This study was based on a qualitative approach which produced case studies (Bogdan & Biklen, 1994; Lüdke & André, 1986). Participants[5] were five blind men (BM) and three blind women (BW), totalling eight subjects, who were described as follows: BM1 graduated in Juridical Social Sciences in 1999 and works as an attorney in Pelotas, RS; BM2 graduated in Languages in 1995 and used to work as a teacher in Pelotas, RS (he passed away after the data collection); BM3 graduated in Physiotherapy in 1983 and in Languages in 1994 and works as a physiotherapist in Curitiba, PR; BM4 graduated in Computer Sciences in 2006 and works as an IT support analyst in Porto Alegre, RS; BM5 graduated in Physiotherapy in 1984 and works as a physiotherapist in Porto Alegre, RS; BW1 graduated in Languages (Portuguese/English) in 2009 and works as a teacher in Porto Alegre, RS; BW2 graduated in History in 2005 and works as an administrative assistant in Porto Alegre, RS; and BW3 graduated in Pedagogy in 2011 and works as a teacher in Porto Alegre, RS.

Selection criteria were the following: participants had (1) to be blind, (2) to have finished a college course and (3) to be available to participate in the study. Subjects were found with the help of the researchers' network.

Data were collected by narrative interviews performed on subjects. This methodological instrument was fundamental to this study since it enabled the relations between the social actors and their life situation to be mapped and understood (Bauer & Gaskell, 2002). Besides, interviews have been used by several researchers who carry out studies of blind people, such as Bazon (2009), Oliveira (2007), Raposo (2006), Delpino (2004), Caiado (2003) and Oliveira (2003).

Data underwent the process of discursive textual analysis proposed by Moraes (2003). Findings were classified into two broad categories, which are described below.

Findings and discussion

Findings showed that the subjects of this study also had to face other obstables, besides the ones discussed in the introduction (attitudinal and architectural ones) regarding the inclusion of the blind in higher education. The obstacles, divided into subcategories, and managers' and lectures' strategies to overcome them were simultaneously treated and discussed. A general strategy was suggested to every general obstacle or difficulty. The categories that define difficulties and strategies are: 1) difficulties concerning institutional issues. The

[5] Participants signed the Termo de Consentimento Livre e Esclarecido, to agree with the research.

strategy is investment in blind students' enrollment and permanence; 2) difficulties regarding relations with lectures. The strategy is the adoption of pedagogical beliefs which agree with the inclusion of blind students.

Category 1) difficulties related to institutional issues. Strategy: investment in blind students' enrollment and permanence

Subcategory 1.1 – difficulties in the enrollment process. Strategy: constant evaluation of this action

In the interviews, the subjects of the study mentioned that problems related to the inclusion of the blind in higher education start even before the beginning of classes, i. e., they begin in the selection test (either a specific one or the Exame Nacional do Ensino Médio - Enem). The fact that there is no Braille material and oral tests are taken with the help of a reader[6] stood out as a difficulty students had to face. The latter was illustrated by one of the subjects:

> The selection test was a problem: there was a reader to read the test for me. I don't like to take oral tests. There are many myths about the blind; one of them is the myth that blind people memorize information easily (I disagree completely; I don't have this gift, this aptitude or whatever it is called), […] that blind people have developed hearing skills etc. I don't have any of these and don't want to. I'm not a fantastic being. I have my limitations. (BW1).

The strategy which aims at facing this difficulty proposes that the blind should take the selection test in the same conditions as the other applicants. To make it happen, the selection process must be re-structured. In order to ensure equal conditions, the strategy should involve two actions which would be carried out by the managers of the higher education institution. Firstly, they would talk to the blind student about the execution and application of the test beforehand. This conversation would be about the instruments, the type of test and the time the blind student would have to answer the test (Brasil, 1999)[7]. The second change refers to the need for constant evaluation of selection methods applied to the visually impaired, mainly regarding the application of the test by readers, a model that generated some criticism, such as the one expressed in another excerpt from BW1's interview: "[...] that's why I didn't like the selection test very much: I got nervous because I had to dictate an oral essay to unexperienced readers". It seems that readers have to be better prepared when applicants choose to take the test with their help.

Subcategory 1.2 – blind students' 'invisibility'. Strategy: students' identification in the institution

Blind students' permanence implies the adoption of diferente proposals that can give them the opportunity of attending higher education with good quality. Permanence strategies start by acknowledging the presence of these students in the colleges. Subjects BM4 and BW2, for instance, reported that many difficulties they felt could have been mitigated if the institution had known that they were in the facilities. They mentioned that they often felt 'almost invisible' (BW2), as the result of lack of assistance.

To identify blind students who are enrolled in college is a needed initiative so that an institution can include them. Barbosa and Fumes (2010) highlight that the manager and/or course coordinator play a fundamental role in the structure of higher education institutions and in inclusion projects implemented by the courses they are connected to. The authors point out that, in this identification process, managers are responsible for contacting students and learning about their specific needs, since every student is unique in his/her skills and difficulties.

Lavarda (2014) identified actions that aimed at the permanence of disabled students (including blind ones) at the Universidade Federal de Santa Maria (UFSM), located in Santa Maria, RS, Brazil, when he interviewed the coordinators of undergraduation courses. The author concluded that there are problems concerning how these coordinators are informed, by the institution, about def/NEE students attending their courses. Therefore, he suggests that the institution, with its Accessibility Center, should plan and create a standard instrument to inform course coordinators about students who applied to the Affirmative Action 'B'[8]. Such instrument should offer alternatives to welcoming and hosting students with special needs.

Subcategory 1.3 – lack of specific resources. Strategy: purchase of technological instruments and adapted material

Blind people's permanence has also been linked to the possibility of attending the whole course with the help of technological resources and adapted

[6] A person who, at that time, was assigned by the institution to read every question, the answer alternatives and write down the ones chosen by the blind student.

[7] According to the Decree nº. 3.298 (BRASIL, 1999), which regulates the selective process to access courses offered by higher education institutions. They must offer adaptations and extra time so that students can take the test. Some support must also be available in case students ask for it.

[8] It refers to quotas for def/NEE. At UFSM, all courses must offer 5% of their vacancies to people with def/NEE.

material consistent with their perceptive reality, both in classrooms and in resource rooms, as suggested by BW1, BW2 and BW3 (Oka & Nassif, 2010; Raposo, 2006; Mortimer, 2010; Nuernberg, 2009; Masini et al., 2006). All participants emphasized the lack of different accessibility resources for the blind throughout college education, a fact that meant they had a problem. The report provided by BW3 illustrates it: "My expectation was great because college was a dream for me. But then, obstacles came up: the first subject I attended in 2006 was Communication and Expression. Do you know when the Braille book arrived? In 2008". According to BW3, technological instruments and adapted material do not represent any kind of 'luxury'; "they are basic elements in a university, "[…] physical resources, everything that is related to accessibility, Braille printed material, computers, etc, all is basic" (BW3).

Support technology and adaptation of materials should be planned by college managers before students start classes, since the institution must provide such equipment to them. Administrative norm no. 3.284 (Brasil, 2003), for instance, demands some accessibility requirements to guide the processes of course authorization and accreditation in the institutions. In the case of the visually impaired, this norm establishes that there should be a room with Braille equipment, computers with speech synthesizers, besides "[...] a recorder and a copy machine that enlarges texts, screen amplification software, equipment that enlarges texts for students who have abnormal sight, magnifying glasses, reading rulers and scanners hooked up to computers". The norm also mentions that it is mandatory to implement a "[...] gradual purchase plan for braile (sic) bibliography and audio material to be used as didactic resources". The Instrumento de Avaliação de Cursos de Graduação, an instrument that evaluates undergraduation courses in both classroom-based and online classes (Brasil, 2015), also establishes several accessibility requirements for disabled people.

Raposo (2006) identified that technologies that are offered to blind students in higher education make their learning easier. According to the researcher, the use of technological resources favors students' independence and their fast access to information. Hurst (1998) calls attention to the importance of offering theoretical material in the format required by blind students. According to the author, some students may ask for Braille printed material whereas others may choose either recorded or digital material.

Subcategory 1.4 – lack of support in different environments outside the classroom. Strategy: reorganization of the library and supporting teams

Different difficulties may also be faced by blind students in several spaces in college, outside their classrooms. Libraries and offices stand out regarding this difficulty. BW1 narrated a fact that showed her dificulty in accessing some material in her college library:

> My classmates could get to the library, look and browse over books, look at the images. Perfect: I didn't have this resource, there were no books I could read and I had nothing to do. This is poverty in Education, the access to information. I think it is important, it would help the blind to use all resources (BW1).

The testimony shows the huge barrier that visually impaired students may face when they need to use any material in the college library. Nuernberg (2009), Raposo (2006) and Masini et al. (2006) highlight that supporting teams, such as the ones in libraries and resource rooms, can give importante logistic help to the blind in college. They state that help provided by the teams is fundamental to strengthen actions recommended by programs that promote accessibility and support for the development of lectures' work in class. Masini et al. (2006) also point out that an environment which offers supporting services, such as Braille transcription, is fundamental to the inclusion process in higher education because many lectures know neither the Braille system nor specific technological devices, such as Braille printers.

Subcategory 1.5 – lack of attention to scientific concept learning. Strategy: analysis of the profile of graduates in the pedagogical project of a course

Subjects emphasized that difficulties were faced because some lectures did not believe in blind students' learning capacity. Participants considered this disbelief an element that influenced their development since lectures did not work on adequate teaching strategies to trigger learning because they did not believe the students could learn.

BW3 reported the following: "I went there to learn how to be a teacher but it didn't seem the lecturer wanted me to be one [...]". Her narrative highlights two aspects: her interest in learning the contents that are required to be a teacher, thus, showing her awareness towards scientific knowledge that is needed to carry out quality work in the field she chose. The second aspect refers to her lecturer's disbelief concerning her learning.

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includes the implementation of a pedagogical project (in every course) which aims at all students' scientific knowledge learning. The institution is responsible for following pedagogical situations that establish the base of the courses in an attempt to provide an adequate environment for learning. Therefore, actions that could be implemented to develop a pedagogical project aiming at scientific knowledge learning by the blind should be carried out in two levels: (1) the pedagogical project of the course; and (2) pedagogical situations in class (which are addressed in Category 2).

The core of the pedagogical project of a college course, whose lectures should adopt so as to plan and carry out strategies that make blind students' learning easier, is the 'profile of the graduate' (1). This profile should show consistent education with good articulation between theory and practice throughout the course, so as to prepare the future professional to work. Lectures and managers should follow this project and be aware of blind and sighted graduates' profiles in order to help them start their professional lives. Adaptations of pedagogical materials, technological equipment, physical resources and communication must be carried out by institutional managers and used by lectures to mediate students' scientific knowledge learning.

Chahini and Silva (2009, p. 1) point out that inclusion in higher education does not represent any privilege given to disabled students. It is the promotion of equalization of opportunities so that all people are "[...] included in society as citizens who have the right to develop their potentialities". Guimarães and Aragão (2010, p. 2) highlight that these institutions need to make adaptations in order to account for students' diversity and ensure their access, permanence and, mainly, learning. The authors mention that "[...] the access of disabled people, by itself, neither characterizes their inclusion in the academic and social environment nor ensures that they will finish their studies".

Pedagogical situations in class (2) are addressed below, in Category 2.

Category 2) difficulties involving relationship with lectures. Strategy: pedagogical beliefs which agree with the inclusion of blind students

During the interviews with blind graduates, in general, they were anxious to give their opinions regarding lectures they had had. Different types of obstacles were reported in the relation between students and lectures. BM1, for instance, said: "[...] I had dfficulties in dealing with my lectures. Ah! There you may find several kinds of difficulties".

When a lecturer has a blind student among other sighted ones, s/he must adopt some pedagogical strategies which are appropriate to overcome obstacles. Many of them are different from the ones s/he would use if all students were sighted. The lecturer's didactics must be in harmony with the student's visual impairment and also involve the other students. Based on this analysis, the following pedagogical actions have been proposed as strategies:

First strategy: pedagogical planning to assist students, both blind and sighted ones, needs reflection upon conceptions of blindness (Barton, 1998; Delpino, 2004; Mazzoni and Torres, 2005; Nuernberg, 2009; Caiado, 2003; Masini and Bazon, 2005). According to BM3, conceptions that certain lectures have of a blind person often interfere in the teaching process:

> One of the worst situations which a lecturer can pose to a student who cannot see is, in fact, not triggering any teaching situation, 'disregard' and feel sorry for the student, not demand from him what s/he demands from the others, give a high grade with no merit, out of convenience of pity (BM3, emphasis of the author).

Carrying our studies of the theme may help educators better understand their blind students and abandon possible myths connected to the visually impaired, a fact that may influence their didactic planning.

Second strategy: talk to blind students about possible ways of establishing the relation lecturer-content-student, before teaching contents (Bazon, 2009; Dias et al., 2010; Barton, 1998; Masini and Bazon, 2005; Nuernberg, 2009). This dialogue may be fundamental as a potentiator of scientific concept comprehension in class, since the lecturer shows 'open' behavior towards the students' expectations of content presentation.

Third strategy: setting flexible deadlines. A lecturer's tasks in a group with blind students also involves planning, so that these students have more time to hand in their assignments. It is recommended by decree no. 3.298/1999, art. 27 (Brasil, 1999).

Fourth strategy: mediate the relationship between the blind and the other students by giving them opportunities to work in groups (Vygotski, 1997; Selau, 2013). This type of activity implies different gains to all students since it makes them relate to others, leads to debates, consolidates internalized knowledge and favors good learning (Vigotski, 1998). There is reciprocal effect between working in groups and getting along with peers (Selau, 2013).

Fifth strategy: carrying out evaluation processes

which are suitable to the blind (Oliveira, 2003; Masini and Bazon, 2005; Caiado, 2003) is vital. Besides thinking about the instrument model (if it is Braille, in the computer etc.), more time must be given to blind students because they may take longer to read and write, depending on the instrument they are using (computer, Braille printed material etc.).

Sixth strategy: encourage blind students to finish higher education by telling them how important it is for their professional and personal future. A lecturer's incentive may raise students' awareness since words, in social interaction, can trigger awareness of the need and generate wish to carry it out (Vygotski, 1995; Selau, 2013).

Final remarks

Finally, it should be highlighted that the strategies proposed by this study to overcome barriers and include blind students in Brazilian higher education must be connected to the need for a definition of accessibility and educational inclusion policies aiming at this group of students. These policies must go beyond the Program Incluir proposed by the Ministry of Education (MEC). Every higher education institution must develop policies on inclusive education, with its own goals and characteristics, to articulate all academic community and commit to the inclusive proposal while actually thinking and rethinking its actions.

The previously described obstacles are evidences of the fact that the permanence of the blind in college has been complicated by the influence of lectures and/or managers. However, studies carried out by Vargas (2006) and Masini and Bazon (2005), showed that these actors are not the only ones that resist to the inclusion of the blind, i. e., blind students themselves may trigger situations that create difficulties in their studies. Vargas (2006) reports that blind students who attended a subject he used to teach (and participated in his research) showed their insatisfaction when they were asked to take part in a study group with students from another class. Masini and Bazon (2005) pointed out that certain attitudes and behaviors, such as not enjoying to study, insecurity, affinity with the visually impaired only, problems to accept the disability and trouble regarding social communication, mean more difficulty in taking a college course for these students.

It is likely that, due to these reasons, all participants in this study considered that the inclusion of the blind in higher education institutions also depends on the person him/herself. Thus, they said the blind students must have initiative to attend college. It means that different actions may be useful to perform everyday activities, such as improving communication, asking for adequate structure in the institution and studying extra hours either alone or in groups.

The previously described suggestions are not expected to be a recipe, as if they were the only strategies to implement the proposal which aims at including blind students in higher education. They refer to opinions that emerged from the analyses of the interviews and the theoretical review. Other attitudes taken by lectures to make blind students' inclusion and learning easier in college can be raised. However, exposing them is very relevant to collaborate to implement strategies for the inclusion of the blind in higher education, since they reveal opinions of the visually impaired who went through this educational stage.

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