# The disability from the perspective of university students and its implications

La discapacidad desde la perspectiva del estudiantado universitario y sus implicaciones

#### **Abstract**

The phenomenon of disability is multidetermined, and it can be explained in different ways, implying understanding it for different causes. The objective of this research was to identify and analyze how university students position before utterances which treats about different disability conceptions. A total of 1,472 students from courses in the Biological, Exact and Human areas of a public university in the State of São Paulo, Brazil. The Scale for Conception of Disability (SCD) was virtually applied. The findings indicate that most respondents are in favor of questions that show social and historical-cultural conceptions to understand the disability. This is considered a positive fact, as the way in which the subject conceives certain knowledge indicates the way of dealing with the object, in this case, in relation to a population segment that is still, frequently, in a situation of social exclusion. Valuing human differences in Higher Education, proposing actions to value differences with future professionals, becomes the outcome of this research, in the promotion of a more egalitarian society.

#### **Keywords**

Disabled persons, scale, higher education, Psychology.

## Resumen

El fenómeno de la discapacidad es multideterminado y puede explicarse de diferentes formas, lo que implica entenderlo por distintas causas. El objetivo de esta investigación fue identificar y analizar cómo el estudiantado universitario se posiciona ante los enunciados sobre diferentes concepciones de discapacidad. Un total de 1.472 alumnos y alumnas de carreras de las áreas Biológica, Exacta y Humana de una universidad pública de Brasil. Se aplicó virtualmente la Escala de Concepción de Discapacidad (SCD). Los hallazgos indican que la mayoría de las personas encuestadas está a favor de preguntas que muestren concepciones sociales e histórico-culturales para comprender la discapacidad. Esto se considera un hecho positivo, ya que la forma en que el sujeto concibe un determinado conocimiento indica la forma de tratar con el objeto, en este caso, en relación con un segmento de la población que aún se encuentra, con frecuencia, en situación de exclusión social. Valorar las diferencias humanas en la educación superior, proponiendo acciones para valorar las diferencias con los futuros profesionales, se convierte en el resultado de esta investigación, en la promoción de una sociedad más igualitaria.

#### Palabras clave

Personas con discapacidad, escala, educación superior, Psicología.

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### Para citar:

Pereira Leite, L., Marques de Mattos, B. y Broglia Feitosa de Lacerda, C. (2023). The disability from the perspective of university students and its implications. *Revista Española de Discapacidad, 11*(2), 51-66.

**Doi:** <a href="https://doi.org/10.5569/2340-5104.11.02.03">https://doi.org/10.5569/2340-5104.11.02.03</a>

Fecha de recepción: 19-01-2023 Fecha de aceptación: 24-07-2023



#### 1. Introduction

This paper, which derives from partial, revised and expanded data, from a master's thesis in the field of Psychology, aims to identify the conceptions of disability presented by students from different undergraduate courses at a public university in the State of São Paulo, Brazil, to find out how they position themselves in the face of a set of sentences that describe different models of disability. The interest in the university public is justified by the need for different contexts and professionals to be prepared to act in order to provide equal opportunities for all subjects, respecting diversity in all its scopes.

The text will be developed as follows: (1) presentation of the concept of disability established in the Brazilian legislation and supported by the principles of the International Convention on the Rights of Persons with Disabilities; (2) exposition of the formation of concepts disseminated by the historical-cultural theory, explaining how subjects build their knowledge from the interaction with the social and cultural environment. In this sense, it starts from the understanding that disability is constructed and articulated by the subjects in their social interactions, influenced by several factors, such as living with people with disabilities, inclusive education, media, among others; (3) dissemination of the research methodology and the results obtained; (4) discussion of the findings, based on the historical-cultural theory and critical studies of disability and, finally, (5) the final considerations intend to systematize the implications and responses of the study carried out, proposing future lines of research and possible interventions.

## 2. The formation of concepts to understand the concept of disability

The concept of disability is multidetermined and subject to various interpretations that are widespread in society. The Brazilian Inclusion Law, also named as Statute for Persons with Disabilities – Law no. 13,146, of July 6, 2015, provides, in its article 2, that persons with disabilities are those who have a long-term impediment of a physical, mental, intellectual or sensory nature, which, during interaction with one or more barriers, can obstruct their full and effective participation in society on equal terms with other people (Brasil, 2015, p. 1). This law reiterates the concept defended and disseminated by the International Convention on the Rights of Persons with Disabilities and its Optional Protocol, signed in New York, on March 30, 2007, of which Brazil is a signatory (Brasil, 2009). However, going beyond the norm, how is such a human condition thought of in different social groups? In this direction, we discuss, in a critical perspective, the formation of the concept linked to human subjectivity.

Each subject, based on the interactions they establish, will have access to words and concepts and in the dialogue, they will build meanings and senses for the concepts with which they come into contact. Then, the concepts are not stable, they are influenced by the infinite interactions that the subject experiences and then goes deeper, transforming, being recreated based on these same interactions. When being introduced to a person with disabilities in childhood, for example, a child may feel compassion for that person being in a wheelchair and not being able to run like them; but when approaching the person in a wheelchair and

exchanging experiences, the child can recognize in this person interesting differences that lead them to see the "restriction" of the wheelchair, as the "possibility" of a series of experiences. Throughout life, this child/subject will come across numerous discourses on disability: In the media, in their close relationships (school, work), and in relationships that they only observe in social life, and then their concept of the condition of disability may change, marked precisely by the social interactions experienced and appropriated by this subject (Moreira, 2010).

According to Vygotsky (2010), the conceptual construction process must be based on the relation between spontaneous concepts (those marked by personal experiences and understanding of what each subject perceives in social interactions) and scientific concepts (those formed from information organized and structured by science, in general, disseminated by the school/academic environment hegemonically, and by other means – Internet, media, books, journals, among others – that offer subsidies to understand phenomena beyond everyday perception, adding information to them that would not be perceptible only through experiences). In this process, perception and language are indispensable for the formation of concepts.

The development of the processes that result in the formation of concepts begins in childhood, but the intellectual functions that form the psychological basis of the concept formation process mature and develop only in adolescence; concept formation is the result of a complex activity, in which all basic intellectual functions (deliberate attention, logical memory, abstraction, ability to compare and differentiate) take part; and new and higher concepts transform the meaning of inferior concepts (Vygotsky, 2010). Thus, people organize the information they internalize to favor their survival and permanence in a social group. Thus, for Nébias (1999) sharing the culture of a social group is intertwined with sharing the same categorical basis, which organizes the experience. This means developing a "theory of the world" based on the idea that individual meaning stems from exposures to which the subject is submitted and which, in turn, prevents or facilitates coping with the new.

In order to deal with the concept of disability, it is urgent to relate it to the cultural context and the historical period of its occurrence. In the current scenario in Brazil, there is a spread of actions that are said to be inclusive by the State, aimed at people with disabilities. In contrast, this same context, assumes a socioeconomic model that favors productivity and perfection, and with this the idea of disability moves away from a valued standard, as it presents physical, sensory and/or behavioral differences, within a pattern sharpened by the reference of bodynormativity.

As indicated by Pereira et al. (2017) and Nepomuceno et al. (2020), even with the recent more expressive participation of people with disabilities in the common social spheres, especially in the world of work and education, there is a prejudiced relation between society and these subjects, which is full of labels that indicate the lack of value, and it is usual to adopt the terminologies incapable, invalid, inefficient, abnormal, exceptional, among others. Such nomenclatures are impregnated with the idea of insufficiency or, still, that these people are declared as subjects of second order, indicating the predominance of an organic perspective to characterize them, in which the order of integrality reigns for a body to be considered healthy.

In the bibliographic scan of studies that dealt with disability, Angelucci (2014, p. 118-121) noticed how researchers in the field designate it: When using the terminology disability, what aspects of the subjects' life is one interested in? Further on, the author reports that she found the association of the disability theme to causes, instruments, strategies and relations, configuring the defense of a pathological look on it, or on the

subject who presents it. This implies admitting the designation of these subjects for what they lack, in the auditory field or in the visual, motor and/or cognitive fields. With this, there is a risk of fixing "the identity of a person, failing to consider their gender, sexuality, social class, cultural belonging, and assuming them as disabled".

Palacios & Romañach (2006) also claim that the nomenclature used can negatively influence society's ways of relating to these subjects. They defend the use of the term 'functional diversity' because they consider that it points to a constant characteristic of the lives of all human beings, explaining that we are all potentially diverse in functional terms, creating conditions for greater social integration. In addition, they claim that the social collective is not formed by a homogeneous set of interests, but that society is the result of a conglomerate formed by the sum of each and every one of particular interests.

Still, when scanning publications, more recent studies propose a multidisciplinary view of disability, in an integrated, contextualized and social way. Thus, disability, in addition to being understood as a form of social oppression, which can be, for example, circumvented with elements of accessibility, can also be seen from the perspective of the needs of the care subjects in the places they occupy. In addition to the discussion of normality and diversity, the aspect of the body and pain, seeking to consider at the same time, the specific historical and social conditions, as well as the globalization of ableism, in a conception that the authors call 'post -social' (Bisol et al., 2017).

Waldschmidt et al. (2017) start from the adoption of a cultural model of disability, which does not differ from the social model, but broadens the focus of analysis. He defends culture as a social practice and an analytical category, which is based on the idea that all objects (material and immaterial), institutions, languages and behaviors elaborated and used by a social group, reverberating in the attitudes and construction of the identity of its members.

Based on the readings of historical-cultural psychology, especially the work called Defectology, written by Vygotsky (1997), Leite (2017) infers that disability should be interpreted as a dynamic, relational and procedural phenomenon, despite the relation between the subject and the socio-cultural context, that is, the differentiated individual conditions of human development are valued as a result of expectations and attitudes directed at the subject who presents them, that is, it starts to be configured as a social event. Resuming Vygotsky's ideas (2010), we understand that the way the concept is disseminated and appropriated (theoretical and/or normative) implies the way it will be conceived, and the attitudes related to it.

Therefore, the knowledge about the concept of disability maintained by university students is extremely relevant so that, in a way, we can reflect on the professional practice that these students will perform in their daily lives with people with disabilities. At the same time, the number of people with disabilities who reach higher education in different countries in recent years is increasing (Rocha et al., 2022; Garabal-Barbeira et al., 2018) and there is evidence that the beliefs and attitudes of teachers and students have an impact on educational practices and ways of organizing inclusive actions in the academic space (Garabal-Barbeira et al., 2018). Thus, the relevance of identifying the perceptions of university students is highlighted so that the formative and coexistence processes can be improved.

#### 3. Method

## 3.1. Participants

The subject of this research were 1,472 undergraduate students distributed throughout 61 courses at a public university in the State of São Paulo, Brazil, which is considered a multicampus university, as the 24 university units are located in different cities in the State. We tried to reach a sample of students from different areas of knowledge, encompassing courses from the nine major areas of knowledge: Exact and Earth Sciences, Biological Sciences, Engineering, Health Sciences, Agricultural Sciences, Social Sciences, Humanities, Linguistics, Portuguese Literature and Language and Others. This study consisted of 796 female respondents and 676 male respondents, with ages varying between 17 and 65 years, with the average age of the participants being 23 years.

## 3.2. Instrument

Data collection was carried out through the use of the Scale for Conception of Disability - SCD (Leite & Lacerda, 2018), whose data are in Leite & Cardoso (2019). The scale consists of a set of 20 assertions that portray four different conceptions of disability, with five sentences from each approach being randomly arranged: 1. Organic Conception: Interprets disability as an inherent attribute of the individual, adopting as a reference the deviation from an organic standard of normality, or the presence of a flaw or limit that causes a malfunction of a given organism. The measures to change this deficit weaken in the individual who presents it; 2. Social Conception: Interprets disability as a differentiated organic condition, associated with causal factors of a social, emotional, economic and/or educational nature that influence the human constitution. Here, the disability stems from factors inherent to the individual and the environment, but, to interpret it, it is necessary to centralize the analysis in the subject who presents it; 3. Historical-Cultural Conception: Interprets disability as dynamic, relational and procedural, based on the relationship between individual and the socio-cultural context, which causes a differentiated human development, adjustable according to expectations and attitudes directed at them. Disability results from a biological dysfunction that causes limitation and, as a consequence, a social barrier. It is historically signified in the context of its occurrence; 4. Metaphysical Conception: Interprets disability as something that transcends the human condition, and may be linked to spiritual and/or religious causes, or to supernatural factors. Thus, it is a phenomenon that little depends on the performance of man.

In order to complete it, the respondent is asked to mark, for each statement, an answer option, which will indicate their degree of agreement on a Likert Scale, consisting of five ordered points: 1. Totally agree; 2. Partially agree; 3. Neither agree nor disagree; 4. Partially disagree; 5. Strongly disagree. The third alternative answer (neither agree nor disagree) was included, admitting the possibility that the participants did not understand the content of the statement or did not have an opinion on the subject. Scales have been assessed as relevant for studying social attitudes, seeking to identify how a particular subject is positioned in the face of a specific phenomenon. The use of the Likert scale allows checking the subject's level of agreement with a series of statements that express something favorable or unfavorable in relation to a psychological object (Pasquali, 1996).

#### 3.3. Procedures

Data were collected through the development and application of an electronic form – of voluntary completion, in which it was not necessary to identify the respondent, only the annotation of data corresponding to the year of entry, age, gender, course, college and university unit. This instrument was made available online, via the university's internal network information system, for 24 units. This procedure was structured in a database, through the development and use of a free software program. It is worth mentioning that the investigation was submitted to the appreciation of the Ethics Committee and Certificate of Presentation for Ethical Appreciation, with a favorable opinion, Protocol no. 13476713.5.0000.5398 – *CAAE/Plataforma Brasil*.

After the survey instruments were collected, the data were tabulated and the initial count of all respondents was made. We decided as an inclusion criterion to admit participants who answered at least 80 % of the SCD, corresponding to the minimum of 16 questions, the rest being excluded for data analysis.

Then, the answers were tabulated by university units - colleges and courses; for enrollment periods - incoming and/or graduating; by areas of knowledge - Exact and Earth Sciences, Biological Sciences, Engineering, Health Sciences, Agrarian Sciences, Social Sciences, Humanities, Linguistics, Portuguese Literature and Language and Others; by type of education (baccalaureate or teaching degree), by age group and by gender.

In order to carry out the statistical analysis, the scores were calculated for the four conceptions of disability that make up the scale, according to the option marked as a response, which indicated a degree of agreement with each of the assertions. The scores were given by the sum of the items that make up each conception, and the total score of a participant can vary from 0 to 20. The data were analyzed with the aid of the statistical package IBM SPSS Statistics Base (Version 21.0). General descriptive analyzes of the data were carried out, in which the measure of central tendency is highlighted, represented by the median and the interquartile range. The normality test performed using the Shapiro-Wilk test, with a significance level of 5 %, indicated that the sample distribution is not normal, which led to the use of non-parametric tests.

Given the above, the following were adopted: The Mann-Whitney tests, to compare two means – conceptions of disability (social, biological, metaphysical and cultural-historical) and gender; the Kruskal-Wallis Test, in order to compare three or more groups – conceptions of disability and year of admission; Spearman's correlation test, to assess the correlation between the conceptions of disability and the age of individuals. The significance level  $\alpha = 5\%$  was used.

Data were analyzed according to the variables gender, age and area of knowledge, considering structuring phenomena in society that led the authors to reflections and hypotheses about the impacts of these variables on the way of perceiving and conceiving disability. The justification for choosing to analyze the gender variable is based on the understanding that, over the years, there have been and still are great distinctions between the social and individual background of female and male subjects. Historically, societies have assigned different roles and expectations based on gender, such as the idea that men should be providers and women should be caregivers. These gender norms have influenced areas such as education, work, politics, family and interpersonal relationships.

Regarding the age group variable, it was intended to investigate whether there was a relation between this variable and the way of conceiving disability and, if so, how it occurs. Investigating the data from the knowledge area categorization became interesting to expand the knowledge and understanding of the perception of university students, since the researched literature mostly presents information related to courses in the areas of health and education. Understanding more broadly how the different courses in the nine areas of knowledge surveyed perceive disability can be relevant in proposing public policies for the inclusion of people with disabilities and in actions to raise awareness about the rights of people with disabilities and in promoting practices in the confrontation of ableism.

#### 4. Results

The statistical analysis made it possible to map how an expressive set of respondents positioned themselves in the face of different conceptions of disability. The use of the statistical method was necessary, since it was initially thought to investigate a universe of participants that is representative in numerical terms, namely, that of undergraduate students at a public university.

For the analysis by gender, the Mann-Whitney Test was used in order to compare between people of the feminine and the masculine gender, their positioning in relation to the conceptions of disability present in the scale (social, biological, metaphysical and historical-cultural). As can be seen in table 1, the results point out that there is no statistical significance between the respondents' means when comparing the information regarding the female and male gender.

Table 1. Mean and p value according to the Mann-Whitney U Test of dimensions and gender

| Dimensions          | Gender    | Mean   | U         | p value |
|---------------------|-----------|--------|-----------|---------|
| Social              | Male      | 717,40 | 055776.00 | 0,52    |
|                     | Female    | 731,50 | 255776,00 |         |
| Biological          | Masculino | 723,76 | 060007.00 | 0,65    |
|                     | Female    | 733,49 | 260237,00 |         |
| Metaphysics         | Male      | 721,07 | 050424 00 | 0,45    |
|                     | Female    | 736,71 | 258431,00 |         |
| Historical-cultural | Male      | 743,60 | 050000 50 | 0,15    |
|                     | Female    | 711,97 | 250392,50 |         |

Source: Research data.

Table 2 shows the results of the correlation test between the variables age and scale dimensions. The findings denote a positive correlation between the age variable and the social and historical-cultural conceptions, which means that, the older the age, the greater the tendency to agree with these conceptions, as well as the younger the age, the lower the tendency to agree. However, when assessing the magnitude of these correlations, it appears that these are very weak correlations. There is also statistical significance in the correlation between age and metaphysical conception, however, this is negative, which means that the higher the age, the lesser the tendency to agree with this conception, the opposite being equally true.

Table 2. Correlation analyzes (Spearman test) between dimensions and age

| Dimension           | Positive Correlation p value |      | Dimensions  | Negative Correlation | p value |
|---------------------|------------------------------|------|-------------|----------------------|---------|
| Social              | ,077                         | 0,00 | Biological  | -,005                | 0,84    |
| Historical-Cultural | ,129                         | 0,00 | Metaphysics | -,056                | 0,03    |

Source: Research data.

Table 3 presents the descriptive statistical analysis of the areas of knowledge regarding the positioning in relation to conceptions of disability. It was decided to group undergraduate courses in nine major areas of knowledge according to the criteria established by the National Council for Scientific and Technological Development (CNPq) The median and interquartile range values can be found. When analyzing table 3, it can be seen, from the median values, that representatives from all areas of knowledge were positioned in a way that did not agree with the metaphysical conception, since all medians were equal to 5. This result indicates that the sample surveyed highlighted with greater emphasis the option "I totally disagree".

Table 3. Median values and interquartile range referring to areas of knowledge in relation to conceptions of disability

| Area (CNPq)                                     | N   | Social | Biological | Metaphysics | Historical- Cultural |
|---|-----|--------|------------|-------------|----------------------|
| Exact and Earth Sciences                        |     | 9,00   | 7,00       | 5,00        | 9,00                 |
| Biological Sciences                             |     | 11,00  | 8,50       | 5,00        | 10,00                |
| Health Sciences                                 |     | 12,00  | 9,00       | 5,00        | 10,00                |
| Agrarian Sciences                               |     | 10,00  | 8,50       | 5,00        | 9,50                 |
| Applied Social Sciences                         |     | 11,00  | 8,00       | 5,00        | 11,00                |
| Humanities                                      |     | 11,00  | 8,00       | 5,00        | 11,00                |
| Linguistics, Portuguese Literature and Language | 116 | 10,00  | 7,00       | 5,00        | 10,00                |
| Others  |     | 13,00  | 8,50       | 5,00        | 12,00                |

Source: Research data.

With regard to the biological conception, we found that the median values are higher than the values found for the metaphysical conception, they are lower when compared to the values referring to the social and historical-cultural conception. The median values of the areas of knowledge, when examining the positioning in relation to the biological conception, ranged between 7 (Exact and Earth Sciences, Engineering and Linguistics, Portuguese Literature and Language) and 9 (Health Sciences).

However, it is noteworthy that the area of knowledge with the highest median regarding the biological conception, that is, which showed the greatest inclination to agree with such a conception, was the Health Sciences area, which includes the courses of Physical Education, Nursing, Pharmacy, Physiotherapy, Speech Therapy, Medicine, Nutrition, Dentistry and Occupational Therapy. It is worth noting that the minimum value found for this design was 5, while the maximum was 11.

#### 5. Discussions

We sought to investigate whether the gender variable would be a significant factor in the way of understanding disability. The results of this research signaled to a negative answer, a similar fact was found in the researched literature, in which the studies did not show different positions in the face of disability, with regard to gender (Bartalotti et al., 2008; Magnabosco & Souza, 2019; Monteiro & Manzini, 2008). The university students showed that the metaphysical conception, which seeks to explain disability as something that transcends the human condition, does not represent the way of conceiving the disability of the researched subjects. When comparing the mentioned data with the studied literature, we understand the concept of disability, as it is evolving, has increasingly moved away from the metaphysical dimension. In addition, when contextualizing the space in which this research is inserted, we expected that such results would appear since the public university institution is a place of secular character.

Research findings indicating greater disagreement with the metaphysical understanding of disability can be considered positive, since this perspective can be oppressive and lead to attitudes that violate the rights of people with disabilities. By adopting a different view, subjects are more likely to relate to people with disabilities based on different assumptions, which do not see them as a blessing or a curse. This shift in perspective can help overcome charitable and philanthropic approaches rooted in religious understandings of disability. Instead of being seen as objects of charity, people with disabilities can be recognized as subjects of rights, capable of contributing to society in different ways.

The fact that the Health Sciences area has the highest median in relation to biological conception can be understood, given that in the history of society, many of these courses were directly involved in the diagnosis of disability and also in the interventional processes aimed at rehabilitation and to the adaptation of the subject with disability to the socially established standard of normality. The findings of this research corroborate the studies carried out by Durante et al. (2020).

The biomedical conception of man boosted the understanding that organic differences are inherent to the biological body and, thus, subject to treatment, modification and/or adaptation. Therefore, such perspective locates the defect in the individual and legitimizes the creation of institutions and specialized professionals to meet this demand. In this sense, the subject who has a disability needs to adapt to the standard established by society. When the difference is found in the subject, the deviant label is created, as this individual does not conform to the rules imposed by society that satisfy the standard of *independente e capaz* bodynormativity, therefore being dysfunctional. With this, ableism crystallizes, which in the words of Mello (2020), "a form of discrimination against a specific social group, that of people with disabilities, being linked to the device of 'compulsory capacity' that hierarchizes and induces people with disabilities to aim for standards of appearance and functionality implied in the ideal of a 'healthy', 'beautiful', 'productive', 'functional', 'independent' and 'capable' body". When classified as different, from a negative bias, stigmas and stereotypes emerge, which are produced in networks of socially shared meanings, that is, they are directly related to beliefs and moral values.

Such assertion directly influences the culturally engineered processes of exclusion of this portion of the population, since, when they do not fit the pattern, they are marginalized from educational, work and social living spaces, because they are insufficient or unable to meet the demands of these activities, as stated by Crochick et al. (2020).

This perspective was widely criticized by social groups of people with disabilities, militants and scholars in the area, for understanding that disability goes beyond the biomedical bias. In reference to the research data, Mittler (2003) points out that, although it is rejected in different instances, the biomedical model still remains quite influential with regard to people's practices and attitudes, as it is still part of society's value system. Durante et al. (2020) identified that the medical model of disability is still strongly present in the way Psychology students perceive disability. Bayat (2014), in a study in Cote d'Ivoire, investigated the conceptions of disability in professionals close to the area (such as psychologists, doctors, special education teachers and program administrators) and in a group of mothers of children with developmental disabilities, and the view of professionals is based on the medical conception of disability and of mothers on metaphysics, on religious precepts.

The central aspect in the construction of stigmas, prejudices and stereotypes is the (im)possibility of the subject, in view of the representations of the differences considered negative, to have autonomy of conscience to reflect on these aspects, and the consequences arising from the acceptance of these dictates about oneself and about others in social relations (Crochík, 2011; Magalhães & Cardoso, 2010).

With regard to social conception, through the median values the tendency of the researched students to agree with the social conception can be observed. It is recalled that by adopting the premise that disability is a social construct implies understanding that this phenomenon is constituted beyond a biological difference. Valle and Connor (2014) point out that, in the United States, the movement of people with disabilities, scholars on the subject and advocates of people in this condition have worked to provoke reflection in society about what functional difference and disabilities are. As an example, the case of wheelchair users stands out. In this context, the wheelchair users who visit a building where there is accessibility, such as an elevator or access ramp, presents a functional difference. However, if the wheelchair users want to enter a building that is accessible only to people who walk, they become disabled by the context, which presents a barrier that prevents them from social participation. Thus, the disability can be conceived as a social construction.

Regarding the historical-cultural conception, the median values demonstrate the tendency of the researched subjects to also agree with the historical-cultural conception. Thus, we emphasize that the medians related to the social and historical-cultural conceptions of the nine investigated areas of knowledge showed very close values, which reveals the tendency to agree with the two conceptions. Such an occurrence can be explained because both conceptions consider disability as a social product. The difference, however, is that the historical-cultural conception highlights the historical and cultural character of the disability phenomenon, that is, the individuals present organic differences, but the way in which that difference will be signified, at a given historical moment and based on the culture in which they are inserted, it will lead to understand the difference as a disability (or not).

In general, we point out, by the medians obtained, when analyzed in the maximum and minimum values that could be reached in the score – 5 for less agreement with the assertions and 20 for greater agreement –, that these could be more significant, that is, of the division used for data analysis – nine areas of knowledge – the highest median was of value 13, which points to the tendency to agree with a conception, but not the effective agreement with a conception provided in the instrument used for data collection. As the SCD was applied to undergraduate students at a public university in the State of São Paulo, we expected that such results would be more expressive, since the university as a social institution presupposes the work of interrogation, reflection and criticism on socially relevant issues, such as the disability theme. However, the

findings of this research corroborate the studies conducted by Baleotti & Omote (2014) and Durante et al. (2020), in which the authors point out that the participants did not demonstrate a way of seeing the disability that fits strictly in a disability conception.

In addition, thinking about concepts enables the subject to apprehend social facts in a new way, as it is this form of intellectual organization that allows critical analysis, reflection and understanding of social consciousness, of ideology; therefore, the knowledge of the laws and rules that govern and order the world (Leal & Facci, 2014). In this sense, it is through the formation of thought in concepts that the individuals forge their individual conscience, as they build their values and ethical and moral principles that will guide their thoughts, interests and attitudes. Furthermore, the concept is formed from a social meaning given to something objectified.

Disability, over the years, has been explained, conceived and experienced in different ways, not only varying from person to person, but from time to time, from social group to social group within a given culture as well pointed out by Waldschmidt et al. (2017). Thus, the concept is created and realized in the interaction of the singular parts (that is, in the ways of conceiving disability in a given community that normatively assigns meaning and value to it, and in which different bodies are labeled as dysfunctional), which are articulated through the values and knowledge passed from generation to generation, between themselves and with the whole. In addition, the personal impact generated by disability cannot be lessened, which is strongly due to social factors. A society accessible to all, which respects individual singularities, can alleviate many obstacles experienced in this circumstance (Nepomuceno et al., 2020; Santos & Carvalho-Freitas, 2019).

Each participant of the research exhibits empirical (real) knowledge about the disability. It cannot be said that every subject, in some circumstance of life, constructed thought in the logic proposed by this theory, which is to raise that thought to an abstract level and make it concrete. In this study, we hypothesized that the university institution would cause this movement.

Public university, as a social institution whose function is to instrumentalize the historically constructed knowledge aimed at the needs of society must propagate actions in a reflective and critical way, with a view to understand human diversity. By promoting awareness about the phenomenon, from a point of view in which these subjects are protagonists of their lives, society as a whole advances.

# 6. Final considerations / Conclusions

The research portrayed here sought to ascertain how students from a public university position themselves in relation to a set of statements that seek to portray four conceptions of disability: Organic, metaphysical, social and historical-cultural, which make up the Scale for Conception of Disability (SCD). It was possible to observe in the behavior of the sample, in general, trends of agreement (or weak agreement) with social, biological or historical-cultural models and discordant with the metaphysical, that is, the analysis of the observed scores indicate that there was no strong agreement with any of the researched models. In this context, two inquiries are pertinent: Firstly, at what level the results found can indicate veiled positions regarding the issue of disability,

as considerations regarding the phenomenon elucidate the social rules, that is, what is appropriate or not to say; and also, if this subject has been discussed in the universities and how such reflections have occurred.

Such an object has been of interest to international researchers. Radlinská et al. (2020), who aimed to adapt the Multidimensional Attitudes Scale towards People with Disabilities (MAS), becoming an instrument to study the attitudes of Polish people towards those with disabilities, which can be used to establish or evaluate educational programs, contributing to more inclusive social policies and the study conducted by Rodríguez de Vera et al. (2021), which proposed to carry out a quantitative and qualitative study, in Mozambique, for content validity of a methodological proposal that would generate positive attitudes towards disability, helping to train students in the field of Physical Education to assist people with disabilities.

It is observed, therefore, the importance of reviewing the way people conceptualize and act towards people with disabilities. The concept proves to be complex and plural, its circulation in society comes from an infinity of different forms and experiences of access to information that in turn endorse and imply different attitudes, influencing the way of understanding and acting towards a same phenomenon. It is perceived, then, as a social concept that extrapolates its nature 'in itself', being linked to several determinants, such as: Historical, religious, economic, political, among others. This implies that the process of appropriating a concept carries with it several culturally produced social signs. And yet, as stated by Palacios & Romañach (2006), the change in perspective of citizens also involves the way in which States conduct these issues. If States move forward in their policies towards the social model, this will be presented as the appropriate framework to put an end to how disability is interpreted in a transversal way, since it is understood that it has a social origin.

Returning to Vygotsky's (1997) precepts, in the fifth volume of the collection *Obras Escogidas – Fundamentos da Defectologia*, in which the typology of disability is approached in the light of two perspectives: The primary and the secondary. The primary disability, to the author, is anchored in an organicist conception, and encompasses a series of impairments in the organism resulting from different genetic patterns, neural lesions, hereditary malformations, anomalous formation, in short, a series of occurrences that lead to a differentiated functioning of the physical organism. Secondary disability results from the damage caused due to the difficulty in establishing social interactions and, consequently, the inadequacy of the appropriation of knowledge necessary for full human development. Such conception is subsidized on the premise of the close relation between social and biological, that the latter develops in function of the other, that is, the biological is historically constructed (Vygotsky, 1997). With the adoption of this posture, it is not about denying the existence of organic changes due to disabilities, but of understanding it as a social phenomenon, as they are historically and culturally significant and, for this reason, they are no longer exclusively a natural fact.

As well stated by Piccolo & Mendes (2013), the disability category ends up generating a social model of exclusion, as it finds in the subject that presents deviant conditions to the socially imposed norm, in terms of appearance, behavior and/or attitudes, in addition to professional performance and economic achievements.

The limits of the research are known, and even with a considerable contingent of varied participants, it was delimitated in investigating students of a Brazilian public university. With this, the importance of studying other contexts with other populations is announced, to find out if such findings are common. However, it is reaffirmed that dealing critically with the issue of disability seems to be an essential path for criticizing the current ways of conceiving it, that is, overcoming disability, as a bodily difference, guided by the criteria of health, aesthetic and function, in which points to the debate and transformations in contemporary times are brought, as suggested by Waldschmidt et al. (2017).

Finally, Psychology has been constituted as an important field of knowledge, contributing to the inclusion of people with disabilities to occur in the most varied social instances in a respectful and dignified manner, seeking to offer actions aimed at the elimination of prejudice, the recognition of human diversity, critically discussing the disability demarcated within a historical-cultural context. It is not simply the fact that an organism has anatomical, behavioral and/or functional differences that demarcate its participation or not, but rather how society conceives and structures itself to serve a specific population segment. In this sense, in the enlightened context, the study carried out brings consistent notes to think about propositions that are consistent with inclusive practices, which guarantee a more equal participation of people with disabilities in the university context and, in addition, promote the training of future professionals based on a more critical view of disability, fighting ableism and moving away from models that summarize it in an individual tragedy.

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