Portraits of Disabilities: Incapacities or Age?

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"Portraits describing people with disabilities allow us to picture them so as to correct attitudes and actions."

People with disabilities (PWD) or physical, sensorial, or mental limitations on many occasions are not incapable of certain activities, but nonetheless create individual and collective stigmas. These social disabilities present themselves as disadvantages, once the stereotypes and discriminatory actions impede PWD from carrying a normal life in society. One of the major sources of prejudices is the existent disinformation around the difficulties, potentialities and desires of this population group.

The Fundação Getúlio Vargas and the Fundação Banco do Brasil have established a partnership for elaborating a knowledge map on the sample of PWD, so as to subsidize policies and actions within the public sector and civil society. We identify this sample's socio-economic-demographic profile through the consolidation of secondary information and the processing of assorted microdata belonging to various organizations (IBGE, Seade, MTE, MPAS, MS, MEC, CORDE, OIT among others). We study alternatives to policies of social inclusion, going through different channels of insertion, such as school, health, family, income transfers, and even work inclusion. The result of the research—performed by many—at the FGV's Center for Social Policies is synthesized in a database composed of statistics, maps, laws, and bibliographic references, in the shape of a CD-Rom and a book entitled Retratos da Deficiência no Brasil (Portraits of Disability in Brazil). Portraits are not only ways of describing the people in this segment, as we aim at portraying this very group, in the sense of correcting attitudes, actions and society's treatment of them.

According to the UN, there are around 500 million people with disabilities in the world and 80% of them live in the developing world. The Census 2000's data shows that 24.5 million Brazilians have some disability; 14.5% of the population, a number significantly superior to prior Brazilian surveys: less than 2%. This does not occur through the increase in disability incidence per se, but due to a change in the data collection instruments, in accordance to the WHO's recent recommendations. This expressive populational contingent increases the necessity of a broad diagnostic of this segment so as to contribute to the drafting and implementation of social inclusion actions.

We present a succession of profiles belonging to people with disabilities since the freeing of the slaves in the XIX century until the dawning of the XXI century. We preserve in the text the original terms used in each survey, so that some may seem politically incorrect from a current perspective. From the 1872 and 1900 household surveys to the 1920 Census only the visually and hearing impaired were considered. The 1940 Census still aimed at contemplating the origin of these sensorial disabilities. Of the 64,482 people who declared themselves to be visually impaired, 64.7% stated that the nature of their disability was a consequence of a disease acquired throughout their lifetime, such that approximately 21% reported they had acquired the disability in an accident, and 10.4% by birth. Among the people with sensorial disabilities of a more mature age, most were visually impaired due to diseases, being that 73% of the disabled population was more than eighty years of age. This number decreased slowly as we moved towards the beginning of the life cycle. Among those between the ages of 0 and 19, only 15% stated to be visually impaired due to diseases, revealing how this cause of visual disability accompanies the process of aging.

The 1981 PNAD included a broader spectrum of disabilities, accompanied by the 1991 Census. In the year of 1991, around 1.15% of the Brazilian population were people with disabilities, a value close to the 1.78% obtained in 1981. With the Pesquisa de Condições de Vida by Fundação Seade in 1998, we are able to trace a profile of the people with disabilities in the largest Brazilian city, with 1.03% of the people with disabilities, of which 5.56% had some difficulty with sight, hearing or moving.

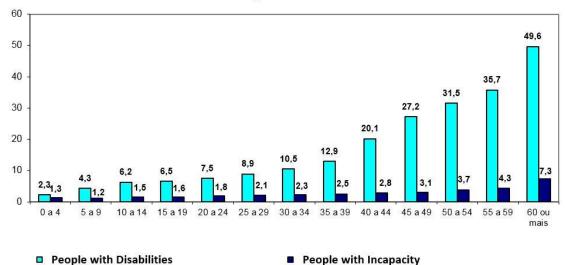
The 2000 Census included not only a broader variety of types of disabilities, but its respective degrees reached the universe of 14.5% of PWD in the population, distributed in the following fashion: mentally challenged (11.5%); tetraplegia, paraplegia or hemiplegia (0.44%); lack of a member or part thereof (5.32%); some difficulty with sight (57.16%); some difficulty with hearing (19%); some difficulty walking (22.7%); great difficulty with sight (10.5%); great difficulty with listening (4.27%); great difficulty with walking (9.54%); hearing impaired (0.68%); unable to walk (2.3%); and visually impaired (0.6%)ⁱⁱ.

As we restrict the analysis to sensorial disabilities in 2000, the rates of visually and hearing impaired reach levels inferior to most surveys prior to 1991 (0.1% visually impaired and 0.095% hearing impaired), 1981 (0.148% visually impaired and 0.232% hearing impaired), 1920 (0.3% visually impaired and 0.26% hearing and speech impaired) 1900 (0.19% visually impaired and 0.07% hearing and speech impaired), and 1872

(0.16% visually impaired and 0.12% hearing and speech impaired). This change can be credited to the changes in the survey instruments of the contemplated population and the mutation of society's perception of the concept of sensorial disabilities.

As a strategy, we analyze complementarily to the sample of the Census' PWD, only those with severe limitations, addressed here as People with Incapacities (PWI) which includes those with at least some inability in walking, hearing or seeing, the mentally challenged, paraplegics, and those lacking of a member or part thereof—not including those with some or great difficulty in walking, hearing or seeing. When we evaluate the sample of PWI, this corresponds to approximately 2.5%, or one percentage point closer to the value attained in previous surveys. The swelling of the disabilities rate is due to the classification used in the 2000 Census (and in 2010) that by incorporating to this sample the people with some or great difficulty in walking, seeing or hearing, ended up classifying a great part of the senior population as such, once these functional difficulties tend to follow the natural aging process. The result is an increase in the heterogeneity of this group and a break with the empirical results found in relation to those in the literature. The proposed solution is beyond the official number of PWD; it is to work with the number of people with incapacities (PWI). In relation to rate of disability, a monotonic growth is observed as individuals age, but there is a smaller impact on incapacities. It is verified that among people older than sixty, the possibility of stating any disability is of 49.64%, compared to the equivalent of among children between zero and four, which is only 2.26%. However, when we evaluate PWI, we observed that the lifetime is less associated to the emergence of incapacities than with the difficulties presented by the PWD. An evidence of this is that when only young PWD are evaluated, the participation of PWI reaches 57%, while among PWD with more than sixty years of age, the percentage of PWI is of 14.7%.

Disability Rates PD x PI



Some characteristics evident in previous empirical studies, such as the relation of disabilities with education by PWD in the 2000 Census—a fact gone unobserved when individuals with some or great difficulty were excluded. For example, among PWD, around 27% do not have any level of education, which is close to that obtained by the population in general (25%). When we evaluate only the group of PWI, this percentage increases to 42.5%. The average schooling of PWD is one year less than the group of without disabilities, and the rates of individual who never attended school are of 16.3%, 21.6% and 33.7% for the whole population, and the subgroups of PWD and PWI, respectively. The difficulty a young person with a disability has of furthering his level of education is also great, as it was verified that PWD and PWI have a smaller capacity of concluding grades in the suggested age, and frequently interrupt the educational process, specially in the alphabetization phase. A reflection of this is that there a greater rate of enrollment in adult education groups, since around 32% and 11% of total enrollment at these education levels is done by PWD and PWI, respectively. When the subject is academic delay, it was verified that among individuals between sixteen and twenty-one who, according to their age, should have finished primary education—the enrollment rate in this education level is the largest one for both groups of PWD (1.5%) and PWI (2.8%0, when compared to the enrollment rate of the population without disabilities of 1.1%).

Another important point is the lack of family support, for there is a greater proportion of PWI residing in collective housing, in particular for the group of people who are mentally challenged. The 2000 Census displayed that among PWI, around 2.08%

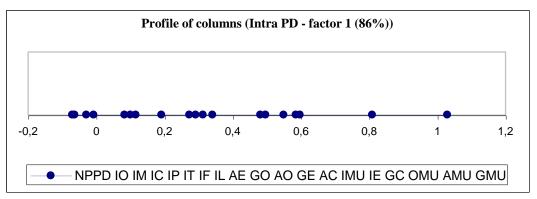
live in collective housing, versus a percentage of 0.62% among the group of PWD and 0.19% for those without disabilities. This problem is the focus of a new program by the federal government entitled "De volta para casa" ("Returning home"), where families receive aid with the cost of housing mentally challenged individuals.

The representativeness of PWI is close to that obtained in previous surveys about disabilities in Brazil. The results found for PWI are in greater accordance with the technical literature and common sense. We verify that the accumulation of living years is more related to the presence of disabilities than with incapacities. The latter have a smaller association to age when compared to disabilities of the type "some or great difficulty in hearing, seeing or walking," whose relationship to the natural aging process tends to be more apparent. This point goes beyond an analytic curiosity: until 2025, if we maintain the disability and inability rates in accordance to age groups, the aggregated rates should reach 18.6% and 3.01%, respectively, growing in relation to 2000 around 30.6% and 19.3%. What lies behind this scenery is the growth of 69% of the portion of the population older than sixty years in this period. It is necessary to prepare adequately the breadth of policies and practices to the effects of a demographic transition and the violence wave, currently in course. With the objective of moving towards equality, it is necessary to treat those who are different respecting the diversity of each individual's special needs.

Panoramic Portraits

The correspondence analysis offers a panoramic portrait through a graph relating the different attributed with the different degrees and types of disabilities. This multivariate technique allows us to examine the "cloud" of points forming the similarities between each individual's profile. Now imagine a series of social attributes such as age, income, education, and etc. plotted at the same time, projected in a graph of the desired dimension. Such occurrence would allow for a broader vision than the analysis of attributed done each at a time. After all, as the saying goes: "a picture is worth more than a thousand words," or in our case, numbers.

The most relevant result occurs when we look at the profile of attributes, the factor with the greatest explanatory power divides these attributed in accordance to age, starting at the youngest placed on the left to the oldest. This effect is strong enough to give, entitled "age factor."



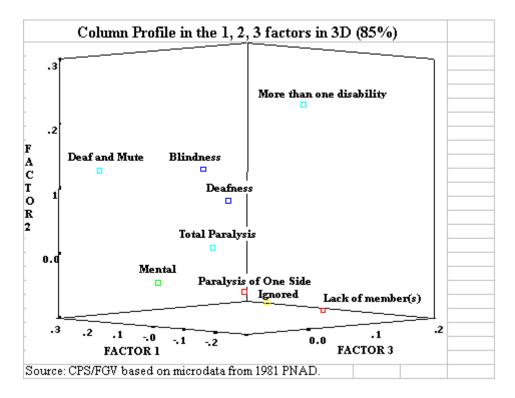
Source: CPS/FGV based on microdata from the 2000 Demographic Census/IBGE.

The points to the left of the graph are those representing the age groups going from 0 to 38 years old, the younger individuals, who tend to be the largest group without disabilities, followed by those who are mentally challenged or hearing impaired. The age profile of the people with some or great difficulty in walking, and hearing includes the age groups starting at 45 to 59, while those with great multiple difficulties have over sixty years of age.

In sum, the results found here support the thesis that age is a preponderant factor for disabilities in general, but not as much for incapacities, for the senior citizen has some difficulty in seeing, hearing and walking or with various disabilities concomitantly, while the young tend not to have them, and if they do, they present themselves to be more

serious, leading to incapacities (hearing and walking), mental challenges, paralysis of the legs or total paralysis, and the lack of a member.

In the case of the 1991 Census and the 1981 PNAD, given the smaller complexity of classifications, it is possible to visualize the proximities between the different points, types of disabilities in a three dimensional graph. We identify four groups of disability types by the combination of social attributes used: **Sensorial:** visual or hearing impairment; **Partial-physical:** paralysis of one side, a leg or lack of a member; **Multiple:** more than one type of disability and total paralysis and **Mental.**



Given the current demographic transition, the aggregated rates of disability and inability will grow by 2015, around 30.6% and 19.3%, respectively.

Notes:

- i The contributing authors are Alexandre Pinto, Hessia Costilla, and Wagner Soares. For further information, please refer to the website www.fgv.br/cps
- ii Another news is that individuals self-evaluate their capacities considered the use of hearing devices, glasses, contact lenses, prosthesis, and canes. This allows for further

pondering to the economic factor, allowing us to indirectly capture those people who deter the resources for the costs of devices correcting disabilities.

www.fgv.br/fgvsocial