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在台身心障礙學生申請高等教育之入學過程
Transition to Higher Education
for Students with Disabilities in Taiwan

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Abstract

Access to education for people with disabilities is primary when social welfare and equity are discussed. The major causes for the non-inclusion of people with special needs within the higher education system are the inability to provide a fair entrance channel, the misunderstanding of the special needs of this population, and the social pressure (low parental expectations, bullying...) on people with disabilities. Taiwan has shown its willingness to provide an inclusive higher education system to everyone as it reserves a special exam and an independent interview channel for students with disabilities but those examinations more often than not do not allow them to access elite institutions. In this study, I interview 12 Taiwanese students with disabilities, 6 from private universities, 6 from elite public schools, and ask them about their experience with the college admission entrance process. The findings reveal that the enrollment opportunities are very different depending on the degree and type of disability; favorable for mild physical or sensory disabilities but disadvantageous for mental, psychic, or learning disabilities as well as any disability when the impairment is more severe. The reasons for that are mainly prejudices against people with disabilities, seldomness of exam accommodations, and unequal repartition of special quotas.

Keywords

disability, education, fairness, transition process, college, discrimination

摘要

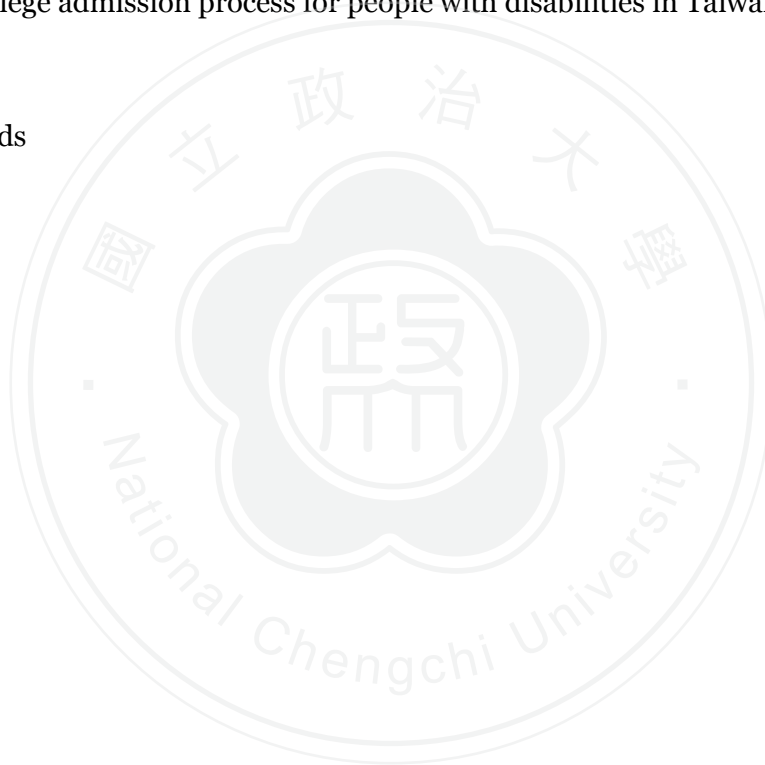
在討論社會福利和社會正義時，身心障礙者的教育是一個重要的議題。在高等教育系統中，身心障礙者總是被排除在外的主要原因有以下幾點：缺乏公平的入學管道、社會對身心障礙者的誤解、身心障礙者所面對的社會壓力（低父母期望值、霸凌.....等）。台灣政府已表示願意為所有人提供一個具高度包容性的高等教育體系，並且為身心障礙學生提供保障名額並進行獨立招生考試，但同時這些考試卻又遺憾的對他們有重重限制，造成他們難以進入頂尖大學。在這項研究中，我採訪了12名台灣身心障礙學生，其中6名來自私立大學，另外6名來自頂尖國立大學，並詢問了他們考取大學的考試過程與經驗。根據研究結果顯示，入學機會會依據身心障礙的程度和類型有很大的差距，輕度肢體障礙或感覺障礙，相對於精神障礙或學習障礙，有更容易被頂尖大學錄取的趨勢，而造成此結果的主因為對身心障礙者的偏見、特殊考場的稀缺，以及身心障礙學生保障名額中的分配不均等問題。

關鍵詞

身心障礙, 教育, 公平, 入學過程, 大學, 歧視

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Introduction

With a broad and extensive health universal coverage, a developed health care system, as well as an increasing number of inclusive education programs from kindergarten to senior high school (Wu, 2007), Taiwan sets the example for many nations -including Western countries- in terms of health and social services provided to people with disabilities. The national health insurance (NHI) covers 98% of Taiwan's population and 99% of the people with disabilities. Besides that, the government implemented the Early Intervention Program in 1994 to systematically diagnose Intellectual and Developmental Disabilities for children under 6 years and provide adapted medical and social services early on. People with disabilities are registered and get a disability card which makes them eligible for medical and social services as well as financial help such as NHI copayment reduction or a cash allowance (Wang, 2016).

It is also important to look at the education system of a country alongside its healthcare system to assess its development since both of them are primary indicators of social welfare (www.undp.org). From 1950 to 1990, Taiwan went through a dramatically rapid higher education expansion process. The number of higher education institutions increased 15-times (from 7 in 1950 to 105 in 1986), and student enrollment increased 52-times (from 6,665 in 1950 to 345,736 in 1986) (Chou, 2015). From 1995 to 2005, the educational system was also thoroughly reformed, including the switch from the joint entrance exam to the multiple examination program (Chen, 2012). Several scholars researched the repartition of Taiwanese students in higher education institutions (HEIs) in terms of socioeconomic background, gender, ethnicity, as well as the impact of the current two-track admission process on educational inequalities (Chou and Wang, 2012; Chen, 2012; Li, Lee, and Lian, 2016). However, the transition to higher education for people with disabilities in Taiwan remains understudied and not well understood.

Since 1990, the United Nations publishes a Human Development Report (HDR) every year based on the Human Development Index (HDI) (Stanton, 2007). This index includes a country's GDP per capita, life expectancy, and mean years of schooling. In other words, a "developed" country must provide its citizens a high-quality education, a long and healthy life, and a decent standard of living (UNDP). Therefore, the well-being of people with disabilities cannot be assessed only in terms of income and health without including education. Moreover, educational attainment leads to higher income (OECD indicators, 2019) and functions as a key mechanism of reproduction of both socio-economic class and labor division (Bowles, Gintis, Meyer, 1999). The fact that Taiwan's education system already expanded does not mean everybody benefited from it the same way.

This master's thesis examines whether the current college admission process in Taiwan ensures students with disabilities a fair chance to enroll in higher education, and especially in public universities. To answer this question, I present the college enrollment rates for people with disabilities, available online as official statistics from the ministries of education and social welfare. Additionally, I conducted interviews with 12 students with disabilities at National Taiwan University, National Chengchi University, Soochow University, and Chinese Culture University and asked them about their experience to precisely understand the advantages and shortcomings of the current process for people with disabilities.

In this essay, I start by introducing theories that connect social stratification, disability, social oppression, and fairness to justify why this topic is worthy of investigation. I then explain the college admission entrance process in Taiwan, in terms of structure, stakes, and inequalities, for regular students as well as for students with disabilities. Finally, I present my findings about the accessibility of the regular track for people with disabilities, the fairness of the special exam, and the assistance provided for the application (to universities) procedure. Since Taiwan has many types of higher education institutions that do not lead to the same employment positions (Chou and Wang, 2012), I will discuss the

limitations and implications of the proposed study on general universities, and not technical and vocational institutions.



Why disability matters

What is disability?

Disability is hard to characterize. A common conception represents it as “the loss or reduction of function or ability as a consequence of impairment”, while the impairment itself refers to “the absence or defect of a limb, organ or bodily mechanism” (Jenkins, 1991: 561). This vague definition connects the body to disability but says little about the nature of disability itself. This leaves lingering questions on whether disability is biological, social, or legal. According to Shakespeare (2006), this question has divided the field of disability studies. The wide panel of diverging opinions can be situated on a scale delimited by two extremities: the medical model and the social model. The medical model implies that disability, although moderately influenced by the social context is foremostly the result of an impairment. In other words, most of the restrictions faced by people with disabilities are a direct result of their physiology and psyche. Many critics have been addressed to that model, for putting too much importance on the body, having a fatalistic approach, and taking the responsibility off society’s shoulders (Thomas, 2004). On the other hand, the social model defines disability as a form of oppression of society on some individuals. According to this perspective, disability is exclusively caused by human actors, directly or indirectly, by some actions or behaviors or by the absence of them (Allan, 2010). The social model emphasizes the role of societies, political institutions, and to a larger extent each of us, as responsible actors. In addition, it conveys that society can adjust to people with disabilities and make their lives easier. Yet, it denies the role of the body in disability, which is problematic and dangerous, as it suggests the medical system is no more useful for people with disabilities than for people without disabilities.

Thomas (2004) details the advantages and shortcomings of both models, and stances for an in-between position, which acknowledges the reality of impairments and the necessity of an accessible medical system to alleviate the symptoms related to those but stresses the

social nature of the disability and the fact that it is imposed by societies in the forms of discrimination and exclusion. Hence, her definition will be used as a reference point in this essay: “Disability is a form of social oppression involving the social imposition of restrictions of activity on people with impairments and the socially engendered undermining of their psycho-emotional wellbeing” (p. 60). The debate on this single word is relevant because the conception of disability leads to ideas of behaviors, measures, policies, and laws. Therefore, seeing that disability as a purely medical entity and conceiving it as a social phenomenon appeals to very different responses. Acknowledging the role of the body and biology in disability but emphasizing the social and societal nature of it is thus, a preferable starting point towards considering people with disabilities as people, with the right and legitimacy to be empowered rather than mere medical patients.

Additionally, Deutsch (2006) wrote a detailed essay on social oppression where he divides it into five main forms: distributive injustice, procedural injustice, retributive injustice, moral exclusion, and cultural imperialism, and specifies the features of each of them. The concept of distributive injustice theorizes the accumulation of different types of capital by one group and the deprivation of it in other groups. People with disabilities among other oppressed minorities are deprived of social capital, their ties and relationships within the society are considerably poorer than the dominant group and thus do not guarantee them labor, social or financial protection. In the same way, as access to schools, and notably higher education is hindered for them, they are also deprived of educational capital and consequently have less educational and employment opportunities. The second form of oppression peculiarly relevant for this topic is procedural injustice, which designs the fact that oppressed groups do not get a fair procedure in various aspects of their life. This can apply to education, employment, justice, administration, assessment... Regardless of the outcome per se, when people with disabilities do not have access to a fair testing/examination procedure to enroll in higher education, this is a form of procedural injustice and thus of social oppression.

Disability as a social stratification factor

The consequences of disability on one's life have been well documented in the literature. In several aspects, there is a significant difference between people with and without disabilities. To begin with, people with disabilities' average educational attainment is lower than their peers. This is especially true for the higher levels of education such as high school and college or university (Shandra, Hogan, 2012; Amrous, 2012; Chatzitheochari, Platt 2019). A study estimated the percentage of the population attending college or above as 68% for women and 62% for men without disabilities in the US versus 48% and 48% respectively for the individuals indicating having at least a disability (Wells, 2003). An important point to keep in mind is that most of these researches are based on surveys using questionnaires that were filled by the respondents. Therefore, people in the incapacity to do so are not represented and the gap might be even larger.

In terms of employment, people with disabilities are also disadvantaged in the labor market, both on a quantitative and qualitative aspect. Higher unemployment rates among people with disabilities seem ubiquitous and have been reported in many countries such as the UK, Canada, Hong Kong, France (Neufeldt, 1995; Amrous, 2012). Moreover, even with the same level of educational attainment, people with disabilities are still more unemployed (Neufeldt, 1995). Furthermore, people with disabilities also suffer from a lower quality of social life on an average basis, and this further impacts many other aspects of their life. They are more often bullied at school (Chatzitheorachi, Platt, 2019) or discriminated against in labor (Bouvier, 2010). They are also less likely to get married and have children (Wells, 2003; Janus, 2009). Last but not least, disability also affects one's well-being. A meta-analysis reviewed three national surveys, gathering altogether more than 100 000 participants consistently found a lower level of self-assessed happiness, worth, and life satisfaction for people with disabilities compared to people without disabilities. Besides that,

higher levels of anxiety for people with disabilities were also displayed in the three studies (Emerson, 2019).

Hence, disability is a topic that needs to be better understood and addressed. People with disabilities face unjustified discrimination everywhere and as we explained in the previous parts, societies and political actors have responsibilities in that but also power and opportunities to adjust better to this population's needs. Disability requires more economic as well as human resources and increases the risk of downward mobility, not only for a single person, but for their relatives as well. Simply put, disability is a social stratification factor. As such, disability interacts with class, gender, and ethnicity and can cumulate with those (Emerson, 2020; Riddell, 2005; Jenkins; 1991). For instance, students from ethnic minorities tend to be more often diagnosed as education subnormal and go to segregated schools (Coard, 1971). If we take a look at gender, mothers more often endorse the role of the caretaker in families with a disabled child (Chang, 2009). Therefore they become dependent on their husband's income (Wang, 2016). Importantly, the proportion of children with disabilities is higher among the working class. This is especially true for the so-called "mental handicap". It remains important to keep in mind that the label "disability" is a product, directly or indirectly, from a diagnosis that involves some subjectivity. The correlation between socio-economic class and disability raises the question of social stigmas.

Class deserves particular attention because it reinforces the argument that disability is highly dependent on the social environment rather than a mere consequence of an impairment. People with disabilities from higher socio-economic backgrounds tend to be better off in their whole life. Parents manage to get their children (with a disability) enrolled in regular education rather than special schools. As it can be expected, people coming from regular schools do better in terms of jobs, income, and social life than those who had their schooling in special institutions (Jenkins, 1991). But this is also true for post-secondary education. For instance, early 2000 witnessed a series of reforms that increased the enrollment of students with disabilities in Higher Education Institutions (HEI) in the United

Kingdom. Yet, this expansion resulted in a social imbalance; males coming from upper and middle classes benefited the most from these policies and grabbed the majority of the newly open spots (Riddell, Tinklin, Wilson, 2005). This example pictures that even with governments' goodwill, a truly inclusive education system is hard to achieve.

The purpose of inclusive education is to have common schools adapted to everyone's needs (Gabel and Miskovic, 2014). Inclusive education can be defined as an "educational approach proposing schools in which all the students can participate and all are treated like valuable school members. It is an educational philosophy and practice that aims to improve the learning and active participation of all the students in a common educational context" (Morina, 2017: 3). Special education structures and segregated tracks maintain the gap between people with disabilities and the rest of society. In a research on 18 European countries, Powell (2006) brought evidence that although there is a lot of heterogeneity from one system to another, segregated schools cannot provide the same level of educational attainment and opportunities as regular schools. On the contrary, adequate support and inclusive educational measures have been proven effective in regular schools. Madriaga et al. (2011) surveyed more than 400 higher education students in England. Among them, one-third declared one or more disabilities. This research reveals that students with disabilities who did not receive any support had significantly lower grades than their peers with no disabilities, but foremostly, those students with disabilities performed as well as their fellows when they benefited from support and arrangements.

Since establishing common schooling for everyone is challenging, it is crucial to identify where the dysfunctions are and what should be the first steps towards a truly successful inclusive education. To begin with, very specific mechanisms that either contain or exclude people with disabilities, even within the education system, have been pointed out. In every level of education but more specifically higher education, students with disabilities face various forms of exclusion by the faculty. Many teachers are not informed of the special needs of students. In the same way, the administration might not implement enough

measures for students with disabilities. The concrete example of Gabel's and Miskovic's article (2014) in an American university depicts what kind of mechanisms are involved in the exclusion or containment of students with disabilities. They first noticed that only 1% of the students were registered as having a disability whereas a previous survey estimated this rate between 8 and 10% at this age countrywide. The process of recognition as such was full of obstacles. Students were not always aware of these possibilities and for those who were, they had to bring an official document within two weeks after the classes started. Besides that, many teachers interviewed did not know they had students with disabilities in their class or when they were, could not provide the special arrangements for lack of understanding or time. Another study reports consistent findings in Canada (Titchkosky, 2011).

Chatzitheochari and Platt (2011) investigated whether lower educational expectations and bullying at school were correlated with lower educational attainment for people with disabilities in England. Whereas bullying only displayed a modest effect (1%), lower educational expectations were found to be responsible for 28% of the total difference of transition rates between students with and without disabilities. This paper connects their results with pre-existing studies establishing additional information: the main driver of lower educational expectations for students with disabilities is vehiculated through the parents. Based on these findings, the authors argue that social stigma has a strong influence on final educational attainment, socioeconomic status, and class reproduction.

In a nutshell, the hurdles encountered by people with disabilities to achieve the same educational attainment as the other can be considered as disability itself. Those limitations are unjustified and can be alleviated with adequate responses. Although the phenomena of containment and exclusion within higher education institutions or the factors leading to lower college enrollment rates for people with disabilities have been well established (Madriaga et al.; Gabel and, Miskovic, 2014) the very stage of transition remains under-documented. This includes preparation and assistance before the exam(s), the exam(s) (or other) itself, and the application to universities. This grey area is an important

missing piece to truly understand the burden of disability, not only for education but as a whole. Therefore, my research will investigate the whole process of transition to higher education for people with disabilities in Taiwan.



Fairness in the examination system

How to understand fairness?

Access to higher education often implies high-stakes standardized exams. People with disabilities need to be guaranteed fair competition with the other students so that they get opportunities to enroll in universities without being given preferential treatment or getting disadvantaged. Fairness is a vague term that can be better understood when divided into three kinds: Equality, equity, and need (Welch, 2005). Equality means that everybody gets the same resources, regardless of input of work, personal need, and so on... Equity is defined as the allocated resources being proportionate to the input. The concept of ranking people after an exam is based on the equity definition of fairness. The more somebody prepares for an exam the better results and following opportunities they should get. Last but not least, fairness by need considers that in every situation people have different resources and some are naturally disadvantaged, people with the least should be given the resources they are lacking in the first place. The fact that people have different needs is often forgotten or criticized as being against fairness while it is actually the root of fairness. The next paragraphs will explain why fairness by need is fundamental and should be the dominant perspective of testing culture.

If equality prevailed in the case of an exam or an admission process, everybody would take the same exams under the same conditions and no accommodation would be granted. Thus, it cannot be taken as a model in a testing situation since it denies both the inequalities of resources and the different input provided by the participants. The concept of meritocracy is built on equity: one's result is the consequence of their own hard work. In a testing situation, this definition poses problems; merit is not the pure and unspoiled result of the energy and time invested into the preparation for an exam, people with disabilities will not get the same results as their fellows even if they put in the same amount of work. Equity is not unsuitable to a competition process but it needs to be associated with measures ensuring

fairness by need. It is essential to acknowledge that people don't get the same resources in life and that the natural imbalances need to be compensated by giving more to those who start with less. In the case of an exam, fairness by need justifies specific accommodations for people with disabilities; people lacking a specific resource should be provided with more so that everybody competes on an equal foot (Welch, 2005).

Among those three types, there is not one right and the others wrong. The question is rather to ask oneself what kind of fairness is adapted to what situation. When it comes to higher education, high-school students compete for the same institutions or departments, therefore the prevailing concept that the better the grades, the better the opportunities, is based on equity. Yet, fairness cannot be achieved if students do not get the same resources, either to access, prepare, or take the exam and even in the aftermath, if there are following steps or in the application procedure (Stewart and Schwartz, 2018). Henceforth, fairness by need also prevails in those circumstances. Accommodations for students with disabilities are a concrete application of that rationale; students with a sensorial, motor, mental, or psychological impairment need to be given extra resources to be able to compete on the same basis as their peers. The main problem is that the ideal accommodation must replace the lacking resource without giving an extra advantage to the student that benefits from it. In other words, students with disabilities must be given accommodations, but only appropriate ones and when needed (Lai and Berkeley, 2012). The purpose of the testing system is to respect fairness by need without compromising fairness by equity. This delicate equilibrium mandates the decision to be taken on a case-by-case basis and students to be evaluated by a competent authority.

Accommodations for students with disabilities

To understand better why accommodations are essential to ensure fair competition and a ranking system, two metaphors can be used. The first one is eyeglasses; they

specifically correct a poor sight but do not impact the content of the exam, nor do they grant the one who wears it an unfair advantage, and so should act a fair accommodation (Elliott and Kettler, 2002). The other metaphor is an access ramp; some impairments prevent students from getting to the point where they can perform and use their abilities. An example of such an arrangement will be the presence of an examiner reading the question to a student with a learning disability. An access ramp bridges the gap that is not there for people without this disability and does not modify the very skills assessed throughout the exam either (Elliott and Kettler, 2002). Thus, accommodations aim to either restore an impaired function or rebuild a path without changing the skill level of the test-taker or the content of the exam.

Even though the purpose and nature of fair accommodations are now defined and illustrated, the question of how to decide what is appropriate for who for which exam is complex and appeals for three things: a research-based assessment of which accommodation is legitimate and fair (on the need-equity duality explained above), an evaluation of students, and a knowledge of teachers and examiners about those accommodations (Lai and Berkeley, 2012). Due to the complexity and the singularity of each situation, each accommodation should be decided case by case (Elliott, Kettler, 2002). Nevertheless, a good baseline to assess which accommodations are appropriate and which one is not is to consider the difference in improvement between students with disabilities requiring it and students with disabilities. The ideal case is met when the accommodation has a beneficial effect on students with disabilities and no effect on students without disabilities (for a specific disability). However, arrangements such as extended time cannot realistically create that effect and therefore, a good baseline is to assess whether an accommodation has a more important boost effect on students with a specific disability rather than students without it.

Oren and Even also provide a useful model to evaluate the appropriateness of special accommodations (2005). For a given cohort of students with different disabilities benefitting from special accommodations, they calculate the correlation of their exam score with the

grades they obtain later in college and compare it to the correlation between exam and college grades for students without disabilities. If the accommodation leads to an overprediction (higher scores on the high-school exam than the college grades), it is likely to be too advantageous and unfair. If the accommodation leads to underprediction, then it is likely to be inefficient. If the prediction is accurate, that means that the accommodation is appropriate.

What those articles reveal is that more research is needed on accommodations for students with disabilities taking exams or other types of assessments. The knowledge generated could tremendously improve the allocation of accommodation for students with special needs, respecting the conflict between need-based fairness and equity-based fairness. But this is not sufficient per se, the evaluation systems have to be improved so that they are accurate and flexible enough to determine who needs what type of accommodation. This further implies that examiners should be at least informed and sensitized on disability and accommodations (Elliott and Kettler, 2002).

Affirmative actions

As explained above, the priority of inclusive education is to teach and assess on a fair basis. However, in terms of testing, this has not been achieved yet. When adequate accommodations cannot be provided, students should be given an alternative assessment (Elliott, Kettler, 2002). This is where affirmative actions are necessary. Given that extensive participation of students with disabilities in the regular channels can definitely be enhanced but yet fails to be fully attained, affirmative actions are still needed, following the same logic of fairness by need as accommodations; since students with disabilities are disadvantaged by regular exams that do not grant them the same opportunities as other students, they need a compensation materialized by one or several affirmative actions. In terms of access to college

and university, affirmative actions can take the form of reserved quotas or another entrance channel.

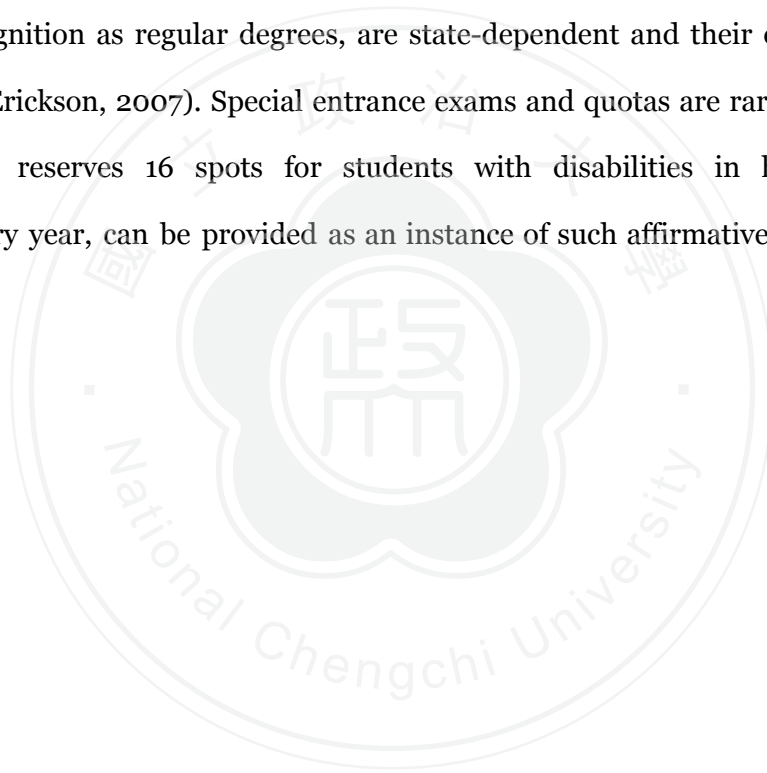
Affirmative actions have a positive effect as they counteract the underrepresentation of minorities in higher education, both quantitatively and qualitatively. Indeed, they increase the graduation rates of minorities as well as the proportion of these populations that attend selective colleges and universities and even positively impact their earnings afterward. Moreover, those effects not only benefit the direct recipients of the actions but radiate on their communities (Long, 2007). Affirmative actions need to be layered on the different schooling and employment periods. Stewart and Schwartz published a study on the higher education accessibility and affirmative actions for students with disabilities and they found out that when those measures are implemented, students with disabilities get the same educational attainment as their peers. Besides, the dropout rate becomes the same for everyone (2018).

Disability and higher education worldwide

Students with disabilities are estimated to be up to 19% of the total number of college students in the United States (National Center for College Students with Disabilities). On the other hand, European countries also struggle to match the participation in higher education of students with disabilities with the other students. The proportion of people completing tertiary education is 15 percent lower for people with disabilities than for the rest of the population in Poland, the United Kingdom, Belgium, Luxembourg, Cyprus, and Ireland (Eurostats Statistics Explained). However, those statistics need to be interpreted cautiously since the definition of disability and its implications are specific to each country. Unfortunately, the paucity of research on those aggregates results in a lack of reliable information for many countries. Yet, with only 5.4% of college students having a disability, Taiwan can increase the tertiary education attendance in this population (Francis, Chiu,

2019).

Regarding the transition process itself, countries have different strategies to foster the inclusion of students with disabilities within the higher education system. France mainly bases its policies on special accommodations for the high school exam and the “grandes écoles” entrance exam (APACHES). Yet, despite the legal framework of disability rights, the process remains obscure and few data are available, especially regarding the interview step of certain schools. The United States, besides special accommodations, implemented distinct exit certificates, delivering an alternate diploma. However, those certificates do not offer an equivalent recognition as regular degrees, are state-dependent and their outcomes remain understudied (Erickson, 2007). Special entrance exams and quotas are rare, but the case of Uganda, which reserves 16 spots for students with disabilities in higher education institutions every year, can be provided as an instance of such affirmative actions (Emong, Eron, 2016).



Context: The college admission process for people with disabilities in Taiwan

Features and stakes of higher education in Taiwan

With 152 higher education institutions, tertiary education has a wide impact on Taiwan's labor market. As of 2019, the college net enrollment rate is 70.55% (<http://stats.moe.gov.tw/>) This percentage underlines that the difference in the labor market is mostly qualitative rather than quantitative. Students going to elite public universities are often selected for prestigious and high-income jobs (Wu, 2009). Private universities are often ranked less high than public ones but they are also twice as expensive on an average basis. Yet, they gather 73% of college and above students (Chen, 2012). Chou and Wang (2012) argue that spots in elite universities are still secured by upper-class students, and that class reproduction is still happening to the same extent. Their research found out a strong correlation between the type of higher education institution Taiwanese students enroll in and their father's educational attainment level. However, the effects of the reform of the joint entrance exam on social inequalities are still debated among Taiwanese sociologists, with both proponents and opponents of this examination system (Li, Lee, Lian, 2016).

As an expanded higher education nation with a centralized high-stakes exam system that rules the transition between high schools and universities (Chou, 2011; Chen, 2012), the Taiwanese model is very suitable for research on transition to post-secondary education. Furthermore, there is an important gap in the literature on this key step for people with disabilities. Henceforth, this complex process needs to be more investigated as the rewards in terms of knowledge on inclusive education and social justice can be huge.

People with disabilities and transition to higher education

The fight for disability rights in Taiwan has come a long way with pioneer organizations such as the Parents' Association for Persons with Intellectual Disabilities or the League of Enabling Associations. The disability rights movements started around 1980 and advocated for social and political recognition of people with disabilities, as well as fundamental rights such as access to education (Chang, 2007). While the repartition of socioeconomic classes is uneven among Taiwanese universities, the author is not aware of research about the proportion of students with disabilities in higher education institutions in English. Yet, few articles estimated the satisfaction levels of people with disabilities regarding education services in Taiwan. Lin (2008) surveyed 692 high school students and concluded that "The needs of youth with Intellectual Disabilities for services related to the transition to a post-secondary school ranked the highest, whereas those related to medical services ranked the lowest" (2008: 46). Furthermore, the study found out that families with lower socioeconomic status would be much more inclined to encourage their child to find a job after school completion rather than attend post-secondary education (Lin, 2008). Chen and Zhang (2003) also drew similar conclusions, highlighting that there was a significant difference between the services needed and the services received, regarding the individual transition programs offered by special educators, for continuation to post-secondary education for senior high-school students with disabilities.

The college admission process

Understanding how important higher education is in Taiwan and how going to a good university is more significant than simply completing college justifies the specific focus of my research on the college admission entrance process for people with disabilities. Since 2005, senior high school students in Taiwan have a few options to get into higher education institutions. The multiple examination program encompasses three tracks, as shown in figure 1: admission by examination, admission by exam (General Scholastic Ability Test) +

interviews, admission by exam (GSAT) + high school recommendations (stars program), or admission by examination only (Advanced Subjects Test). The GSAT is an exam that takes place in January and afterward, depending on their grades, the students can apply to different universities. To apply, students have to send application documents, including resumes and portfolios. If the application is accepted, the final step is face-to-face interviews, which concludes the selection. The government also implemented the “stars program”, an affirmative action reserving quotas to the “best students” of each senior high school in Taiwan to thwart the disparity between big cities (especially Taipei) and the countryside; those students do take the GSAT but skip the interview step. Students can also take the Advanced Subject Test in July, in which the college major choice is only based on their grades.

Those are the options for any student. Students with disabilities are theoretically allowed to use all of these channels, in that case, they will have the same exams and application procedures. While they will be competing with the other students, they can benefit from arrangements. Extended time and special examination venue are the two most common accommodations, on the opposite the other arrangements have to be applied case by case and can be refused. Additionally, students with disabilities can also choose the special exam. Owning a disability card and being a senior high school student are the conditions to attend the special exam, which takes place in March. Finally, some universities, mostly private, open quotas for students with disabilities on their own initiative during the independent interviews in May (only for students with disabilities). Students with disabilities are authorized to use both the special track and the regular track (GSAT and/or AST) during the same year, depending on their own abilities. As figure 2 represents, a disabled student can take the GSAT in January (followed by either interview or stars program), the special exam in March, the independent interviews in May, and the AST in July (altogether 5 possible entrance channels). After each test, they will have to decide whether to apply with the results or not to apply and take the next exam instead. However, students need to sign up for the special exam before taking the GSAT in January.

Figure 1: College admission process in Taiwan (Source: College Entrance Examination Center)

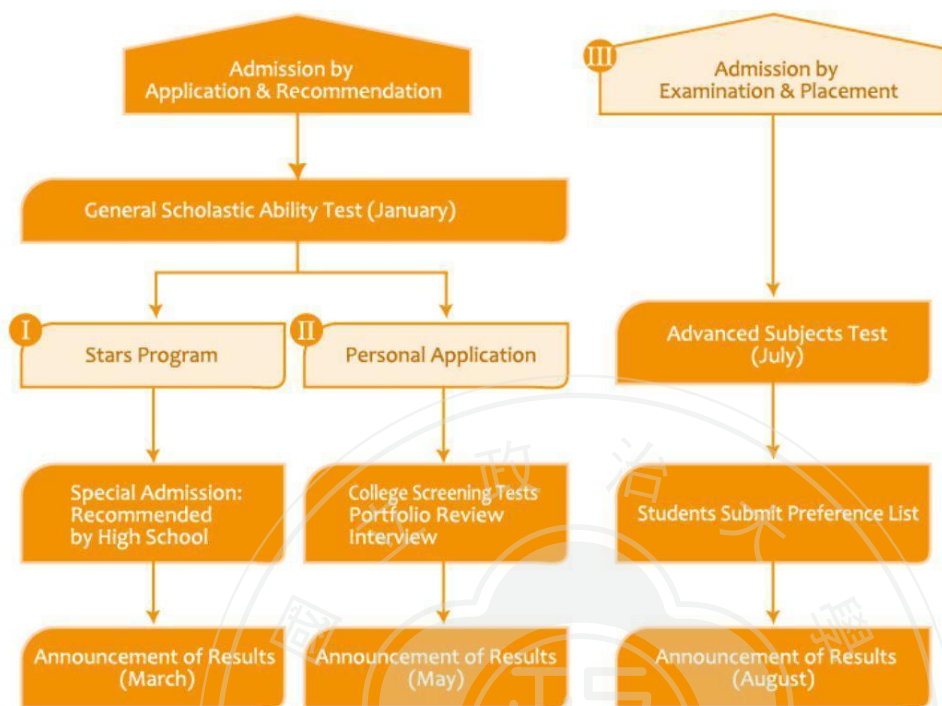
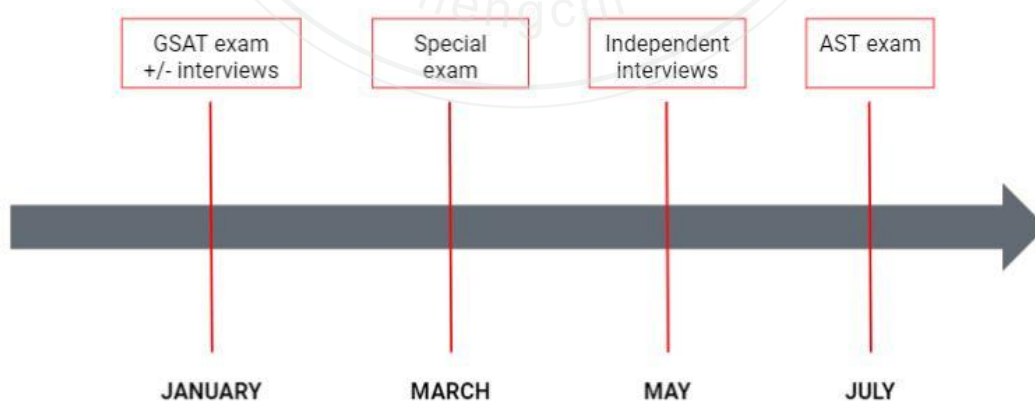


Figure 2: Chronology of the last year of senior high school (12th grade) of students with disabilities



The special exam

For the special exam, the students are divided into groups depending on their disability. Students applying for general and technical universities are also separated. Finally, those groups are further divided depending on the students' senior high school specialty: type I: humanities, type II: engineering sciences, type III: natural sciences. Logically, those types allow students to choose specific college majors: Social sciences, history, geography, law, business... for type I; engineering and hard sciences for type II; biology, and hard sciences for type III. The most important point is that students only compete within the same disability category for the same college spots. The six disability categories are the following: autism spectrum disorder, visual impairment, hearing impairment, cerebral palsy, and other disabilities (<https://cis.ncu.edu.tw/>).

Contrary to the GSAT track, only the special exam grades matter to apply to universities, no portfolio or interviews is part of the selection (as for the AST). On the other side of the process, the universities have the obligation to open special spots for students with disabilities enrolling through that exam. So a certain number of spots will be open for a certain type of disability. Only some departments are open for people taking the special exam (<https://cis.ncu.edu.tw/>). At first sight, the whole admission process seems very advantageous for people with disabilities because they have more opportunities than their peers to access college. However, as figure 3 displays, the discrepancies in the ratio of spots/candidates between different disability types are blatant.

Figure 3: Enrollment rates for the regular track versus the special exam type I (Humanities) in 2020 and number of spots open in Taiwan top 5 public universities: National Taiwan University, National Cheng Kung University, National Taiwan Normal University, National Tsinghua University, National Chengchi University (National Chiao Tung University does not feature in because it offers almost no spots in “social sciences” related departments)

Type / Group	Multiple Admission Program		Special Exam					
	GSAT	AST	Visual Imp.	Hearing Imp.	Cerebral Palsy	Autistic Disorder	Learning Dis.	Other Dis.
Candidates	133 446	43 753	79	91	48	325	143	416
Spots	5 740	4 131	22	31	21	12	7	16
Enrollment Rate	4.3%	9.4%	27.9%	34.1%	43.8%	3.7%	4.9%	3.8%

(Data combined from different statistics on <https://cis.ncu.edu.tw/>)

This document represents the enrollment rates for Taiwanese students taking the GSAT and/or the AST as well as the enrollment rates for the special exam. I chose Taiwan's 5 most prestigious universities because the differences in post-graduation labor outcomes are mostly related to the type of HEI attended rather than the mere fact of going to college. I represented the specialty “Humanities” special exam type I since this is by far the most chosen specialty (70% of the students). The gap between small and large categories is striking. The groups “Autism spectrum disorder”, “Learning disabilities”, and “Other disabilities” account for 80% of the students altogether, yet only 47% of the disability-saved spots in those top universities are available for them. The groups “Visual impairment”, “Hearing impairment” and “Cerebral palsy” enrollment rates are 5 to 10 times higher than the rest.

This suggests that there is no coordination between the different higher education institutions. Even at an individual institution level, the decisions are highly questionable. In 2020, National Taiwan University, the highest-ranked in the country, opened 10 spots for the “cerebral palsy” group (smallest) but only 1 for the “Learning disabilities” group (third largest) and 2 for the “Autism spectrum disorder” group (second largest). The second primary point to get out of that tab is that the groups colored in red acceptance rates are also lower than both the GSAT and AST one (except learning disabilities > AST) and this has to be read as most of the students who do not get admitted through the GSAT then also take the

AST. The total acceptance rate for the regular track is, therefore, higher than 9.4%. To put that back in the context of disability, the students of the groups “autistic disorder”, “learning disabilities” and “other disabilities” who cannot use the regular track and only go through the special exam are highly disadvantaged.



Data and Methods

The purpose of this research is to investigate whether Taiwan's college admission process guarantees a fair contest and a sufficient representation within higher education institutions. To address this question, I collected data throughout interviews. As universities are very numerous in Taiwan, the main discriminating factor is which university students go to rather than the mere fact of getting a post-secondary education. Therefore, I split my sample into two categories: students from elite public schools and students from middle-rank private general universities, the objective being to highlight different perspectives and compare those two groups in every aspect of the entrance process discussed in this study. National Taiwan University and National Chengchi University are two elite higher education institutions. For regular students, the competitiveness of the college entrance admission process makes it very hard to get into those schools for senior high school students. On the other hand, the Chinese Culture University and Soochow University are private institutions with more special quotas reserved for students with disabilities as well as the independent enrollment channel. Students from these schools have very different experiences of this process and are likely to have a different mindset since they are often not their first choice. Hence, interviewing a sample with half of the students being from elite institutions and the other half enrolled in private middle-rank schools was peculiarly relevant to answer my research question. This study does not include any student from technical universities. Indeed, the channels to these institutions are very different, and collecting data on this aspect would have implied a different research question.

I performed in-depth, semi-structured, interviews. This allowed me to use a predetermined set of questions for each of my interviewees but also offered me the flexibility to ask for more explanations, clarifications, or further development if needed. The inclusion criteria were to be a Taiwanese student having the disability card (at least during the last year of senior high school). The eligibility for the special exam was both necessary and sufficient in this study. I interviewed 12 students. The interviews were conducted in Chinese

without external help (the mother tongue of the interviewees) then recorded (with their consent), transcribed, and translated into English (with the exception of Ethan; a bilingual Chinese/English student, whose interview was conducted in English). This ensured the accuracy of the data and the comfort of the subjects. In order to respect their privacy, the interviewees' names are modified in this paper.

Figure 4: Sample features *NTU: National Taiwan University (elite public)

*NCCU: National Chengchi University (elite public) *Soochow: Soochow University (private) *PCCU: Chinese Culture University (private)

Name	Gender	Age	Disability	Monthly Household Income (NTD)	Senior High School	Enrollment Channel	University
Ethan	Male	22	Cerebral Palsy	200 000 NTD	Municipal Kaohsiung Senior High School	Special Exam	NTU
Jack	Male	20	Autism Spectrum Disorder / ADHD	150 000 NTD	National Hsinchu Senior High School	Special Exam	NTU
Linda	Female	22	Bipolar Disorder	60 000 NTD	Saint Francis High School	Star Program	NCCU
Warren	Male	21	Cerebral Palsy	45 000 NTD	Taipei Municipal Chengyuan High School	Special Exam	NCCU
Alice	Female	24	Cerebral Palsy	55 000 NTD	Hou-Zong Senior High School	Special Exam	NCCU
Judy	Female	21	Visual Impairment	100 000 NTD	National Hualien Girls' Senior High School	Special Exam	NCCU
Daniel	Male	20	Cerebral Palsy	60 000 NTD	New Taipei Municipal Linkou High School	Special Exam	Soochow
Harry	Male	22	Asperger Syndrome	N/A	National Chia-Yi Industrial Vocational High School	Tongce / GSAT	PCCU
Mike	Male	20	Visual Impairment	N/A	Taipei School For The Visually Impaired	Special Exam	PCCU
Doug	Male	18	Asperger Syndrome	N/A	National Yuanlin Senior High School	AST	PCCU
Ashton	Male	23	ADHD	60 000 NTD	Taipei Municipal Da-An Vocational High School	Special Exam / Independant Interviews	PCCU
Luke	Male	27	Asperger Syndrome	130 000 NTD	Abroad	GSAT	PCCU

Findings

The GSAT and the regular track

Students with disabilities are theoretically not prohibited from accessing higher education through the regular track, that is to say, the GSAT and the AST. However, they are not always granted the arrangements necessary to overcome their disability. Besides the exam, the interviews (which are the second step of the GSAT) are also problematic as they disadvantage students in the autism spectrum and they give the potential opportunity to the examiner to evict students with disabilities on obscure criteria. Altogether, this their enrollment in universities through this channel.

When students with disabilities take the GSAT or the AST, students with disabilities can apply to arrangements to some extent. In Taiwan, the two most arrangements available for students with disabilities are extended time and a special examination venue. The extended time adds 20 minutes to the exam regular time, whereas the special examination venue allows students with disabilities to take the exam in a less overwhelming context, with a small number of other students with the same disability. For Linda, a NCCU undergraduate student diagnosed with bipolar disorder, taking the exam in a more quiet room was definitely helpful:

“If I weren’t in that special room, I would have felt very nervous and my hands would have been shaking. In my room, there were only 6-7 people but in a regular room there would be 50 students.”

Judy was the only other person in the sample satisfied with the conditions in which she took the GSAT. She said:

“There were some arrangements: 20 minutes extra time, the exam copies (special copies), also I could use assistive devices. Those are things I needed.”

Yet, Judy did not describe what kind of assistive devices she got and further said that her GSAT grades were not good. She actually enrolled in NCCU through the special exam.

Although the GSAT and the AST are open to students with disabilities they do not manage to guarantee equal access to them. The first reason for that is that the arrangements are not granted on a fair basis, taking for reference the definition of fairness based on individual needs, which are higher in this specific situation for students with disabilities. A fair arrangement, a justified arrangement, compensates the disability without giving preferential treatment to students concerned. In other words, an arrangement is considered valid if it benefits a specific student with a disability more than a student without a disability in a given field. If those arrangements offset the disadvantages related to some disabilities, in other cases they do not, as explains Alice, a student with cerebral palsy who has hands mobility problems:

“I applied to use the computer during the exam [...] During the GSAT they granted me 20 minutes of extra time but they didn’t let me use the computer, I had to write with my hands. There were essays in Chinese and English in the exam. The time was not enough (laughs). I wrote very short essays”

In her case, using a computer would not have given her an unfair advantage since it would not have affected skills other than the ability to write at a certain pace. A written test on a certain language (whether Chinese or English in that case) evaluates the examinee’s vocabulary, grammar, syntax both in terms of understanding and proficiency, as well as the ability to express ideas and discuss them. Since none of those skills are affected by the support on which the test is taken, paper or computer, this arrangement should have been granted. Also, Alice did not get any feedback on why she did not get that arrangement.

Some students I interviewed did their exam under a 20 minutes extended time (Alice, Judy...). That was not the case of Ethan, who declares:

“I didn’t apply for it. [It was too] troublesome. Because if you want to apply for that you need to prepare additional documents and undergo supervision. But I think my symptoms are not so serious so maybe I wouldn’t have passed the supervision. If I had time to worry about that, I’d better use my time to study.”

Although this evaluation process was not formulated as a restriction in the case of Ethan. He still perceived it as a time-consuming procedure with an uncertain outcome and therefore decided not to apply for this accommodation.

The GSAT is the main channel to higher education for most students in Taiwan. I just discussed the issue of the arrangements, but it is also fundamental to mention the second, and technically most decisive step of the GSAT: the interviews. Whether or not the GSAT favors upper-class students is currently debated, yet, interviews surely discriminate against some disability types. For instance, several students with Asperger syndrome complained about the disadvantage they were facing in this process, Jack is one of them and states:

“For the GSAT, aside from your original grades you still need to attend interviews. When I attended the interview, I got eliminated. I don’t really like interviews. That type of student; Asperger and autism spectrum disorder students, don’t really fit interacting with other people, they don’t really know how to have a conversation. So for the majority of us, it’s really easy to get eliminated on the interview step.”

Jack explains that most of his special education classes in senior high school were aiming at social interaction. He reports that this aspect has always been challenging for him and hence, having to undergo interviews did not leave him any chance. This evaluation format presents several shortcomings. It could be argued that granting special arrangements to students with disabilities is not justified in the case of an interview as the very purpose is to assess skills such as leadership, and the ability for one to interact or express oneself. First, this argument is questionable since leadership qualities do not reflect the merit of students and how hard they work during their schooling. Second, interviews are problematic

in this case because no alternative is offered to the student. The GSAT interviews lack transparency and do not display a clear evaluation scale which also raises the question of fairness and equity. When asked whether the examiners consider students with and without disabilities differently, Harry points out how this problem prejudices students with disabilities:

“In terms of regulations, there is no difference. But there might be a difference in the examiner’s mind. So in general we will conceal our disability from the examiner. We will hide our status, we will not tell the examiner that we have a disability. Because if we tell him, it might result in us failing the interview. [...] You need to perform so well that the examiner will have no choice but to make you pass because otherwise, he could evict us for personal reasons.”

Having to hide the fact that they have a disability is an extra burden for students with disabilities. Added to the fact that some of them specifically struggle in social interactions, the chances for them to enter a good university on the main channel (the GSAT) shrinks drastically. What Harry and Jack describe is the opposite of a fair process where students with disabilities would be given resources to perform under adequate circumstances whereas they reach the point to strategically conceal their condition in order to avoid being evicted because of this. Harry also underlines the partiality of interviews:

“Those are hidden rules. They’re not written anywhere. I can explain it to you: those rules interpretation are up to the professors [GSAT examiners], with their own understanding”

Harry insists on the fact that the evaluation criteria are subjective and not clearly displayed to the students. To him, this leaves a margin of decision to the examiner that becomes a burden for students with disabilities who are more likely to be discriminated against and evicted during the GSAT interviews.

The regular track encompasses the GSAT and the AST (as well as the star program), I cannot draw conclusions about the AST, insofar as only one of the students in the sample took it. However, I can speculate that most of the findings that apply to the exam part of the GSAT can be generalized to the AST as most of my interviewees pointed out the similarities between the two in terms of regulations and arrangements. Although the GSAT is theoretically open to students with special needs, most of the arrangements are difficult to get. Students I interviewed postulated that they would get the special examination venue easily (Alice, Warren, Harry, Linda, Jack). Some of them would get the extended time (Alice) but others did not (Jack) or did not want to bother applying as it would have made them lose time and energy in the preparation for it (Ethan). Last but not least, the other types of arrangements were almost not mentioned and the story of Alice does not find any legitimate justification. Therefore, it can be argued that the GSAT could be improved in terms of the arrangements application procedure as well as the distribution of those. The interview step has already been criticized as leaving the opportunity for the universities to cherry-pick the students they want in their school based on the features of their disabilities, and it further prejudices some disability types such as autism spectrum disorder students who are disadvantaged by their impairments and are not given alternatives.

The special exam

Students with disabilities have the opportunity to take an extra exam in March, where they are allocated special quotas based on their disability type. If this affirmative action was the channel used by 8 of my 12 interviewees to enroll in university, there are many substantial problems with this channel. To begin with, the classification into several disability categories leads to a very uneven allocation of quotas, with some disability types very advantaged and others very disadvantaged. Then, there is no obligation for universities

or departments to open special quotas and when they decide to do so they have complete discretion of which category (of disability) to open quotas to. Finally, the special exam allows neither students from vocational high schools to apply to general universities, nor students from general high schools to apply to technical universities.

The special exam was considered by the majority of my sample as a better alternative to enrolling in the institution of their choice compared to the GSAT, which displays shortcomings on both the written test and the interview step. Within the sample, the special exam helped 3 students with cerebral palsy to enroll in either NTU or NCCU. Yet this channel is criticized for its limited choice and its uneven opportunities and thus, it cannot be considered fair in any perspective, neither by equality, nor equity, nor need. What almost every interviewee pointed out, along with the numbers, is the discrepancies between disability types. This quotation from Warren actually highlights the heterogeneity in the quotas allocation within disability types.

“The proportion [between disability types] is not the same. If you have ten competitors for one vacancy it doesn’t guarantee that for 300 competitors you will have 30 vacancies. So the acceptance ratio is not the same, also it depends on the university. In our group (cerebral palsy), we have about 50 people, and we have about 23 vacancies altogether. But for the blind group, there are 200 competitors but they only have 40 vacancies. So for our group, it’s especially helpful.”

This is also supported by Harry, a PCCU student with Asperger syndrome, who does not think that the special exam makes a difference for students with autism spectrum disorder:

“Okay, let’s start with the special exam. This exam is not helpful at all for students with disabilities. [...] For the good public universities, there are only 1 or 2 spots and in general, it never exceeds 5 spots per university.”

As explained earlier, this disability category is already disadvantaged by the fact that interviews, which are a mandatory step of the GSAT, do not favor those students. Altogether getting into elite universities is very unlikely for students with autism spectrum disorder. Last but not least, Linda, currently studying at NCCU, took the special exam among the disability category “other disabilities” and expresses:

“I think this special exam is not helpful at all. Too many people and too few spots. The questions are really bad and old. The content doesn’t fit the books we use in class. You have to prepare extra stuff.”

This claim is consistent with the quotas repartition between disability types. Moreover, the “other disabilities” category is also problematic, as it gathers every student with special needs who has not been classified under another label. How can a fair competition be established, within the largest group with one of the least enrollment ratios, and in which students' special ability and disabilities are not comparable? Warren describes that his senior high school asked what kind of majors they wanted to study in what university:

“So we will priorly be asked what majors we are interested in and what schools we want to enroll in. Then they will go to universities and say “we have a few students with disabilities who’d like to choose those majors” and see if the universities can open special spots.”

Yet, the quotas are at the universities’ discretion. Warren later admits that the difference from a year to another is not significant:

“It varies from one year to another, depending on the students’ wishes and the university's decision. Most of the time they open one or two spots, not more. The final decision is up to the universities. At the end of the day, the difference is not that big from one year to another but they still ask us what we want. ”

Warren mentioned that he could report what department and university he would like to enroll in. Very few (actually only Warren and Alice) referred to such an event which suggests that not everybody was asked what kind of quotas could be opened through the special exam. This might be only available to some disability types, or certain senior high schools. The higher education institutions chose independently how many spots they want to open to students with disabilities. Ethan also suffers from cerebral palsy, he confirms that claim and further argues:

“The government policies concern all disability categories. They just ask you to open a quota but the university departments still have the right to choose. It actually gave the power, the discretion to the university departments to choose what kind of characteristics they care about. Like nobody wants blind students, they need a lot of help, they will cause a lot of trouble. I am afraid to say that but that is a true thing, the departments need to spend a lot of extra time and money to help the students with blindness. So blind people will have the least and the worst quota.”

Although this statement is inaccurate since visually impaired people benefit from a better enrollment ratio than students with learning disabilities, autism spectrum disorder, and other disabilities, the point that the universities have the power to cherry-pick the kind of students they are interested in; the ones with a physical disability rather than mental or psychological, still stands. Ethan also states that the big variation between disability groups comes from government policies that foster the power of universities in this selection process:

“We actually have extra ones and the ministry of education made a law, or a regulation, talking about that. It says that if the school’s department is willing to accept one student, a physically disabled person upon this exam... If you open one quota, one more quota besides the regular quota, then you will be able to receive extra money. So it was compensation coming from the ministry of education to encourage the schools’ departments to accept more students with a disability.”

This measure widens the gap between public and private institutions. Elite public schools are supported by government funds and can afford to choose the types of students they want (based on how they conceive different disabilities). On the other hand, private institutions are usually much less selective on the disability types they accept because they need the money from the tuition fees, as Harry brings up:

“Private schools will actively look for students with special needs. Because students with special needs will bring a lot of money and private universities need these funds so they will actively enroll students with disabilities. But public universities don’t have that kind of worry.”

The dichotomy between public and private universities in terms of openness to disability has been mentioned regularly in the interviews. Unfortunately, only Harry shares some insights about the other channel reserved for students with disabilities; the independent interviews. He adds:

“It’s mostly private universities, public universities will very rarely open spots through this channel. [...] Few schools are accessible through this channel: National Changhua University of Education or Taipei University. Those kinds of schools will open interviews. Some bottom rank schools will also open. In general, there are as many available universities as not available universities. [...] You only get 5-6 public universities available every year, no more than that.”

Along with the special exam, independent interviews are an affirmative action with a lot of potential. However, what Harry explains is very accurately confirmed by the official special education website that lists the universities accessible through this channel (<https://www.set.edu.tw/setnet/college/college.asp>); mostly private universities and no elite public universities. The dependence on students' tuition fees fosters a more open enrollment in private institutions but neither incites nor coerces the publicly funded schools.

This further increases the differences between public and private schools as the former gets the privilege to have a certain type of students, both on the socio-economic background and the disability profiles. If classifying the students between different disability types could make sense during the special exam, as different impairments need different arrangements, this same categorization becomes a liability for some students as they end up being in the “wrong category”.

While the special exam was the channel used by most of the students I interviewed to get into universities, it also presents a specific segmentation problem. Taiwan higher education institutions can be divided into two types: general universities and technical universities. In the same way, there are two kinds of senior high schools: general senior high schools and vocational senior high schools. Even if the vocational high school program prepares the students for professional subjects that will fit better to what they will learn in technical universities, those students are allowed to take the GSAT and apply to general universities. Students taking the GSAT can go to technical universities, even if they are in general senior high school. Nevertheless, this is not the case with the special exam, as Daniel, an undergraduate from Soochow university details:

“After the GSAT, I only applied to technical universities offering performance-related courses. But I couldn’t apply to technical colleges after the GSAT. It’s only for the special exam, if it’s the GSAT or the AST you can cross-apply. [...] At the moment, with the special exam, if you’re in vocational high school you can only apply to technical universities, and if you’re in senior high school you can only apply to general universities. [...] The special exam could let students with disabilities cross apply: allow the regular high school students to apply to technical colleges and the vocational high school students to apply to general colleges. It would be better like this.”

Daniel insisted on this point multiple times. In his case, he wanted to study performing arts at Hsingwu technical university but he could not get that opportunity through the special exam. Yet, these limitations also apply to vocational senior high school

students who wish to enroll in general universities. In this matter, the special exam arguably contributes to class reproduction and determinism as this cross-application is impossible. This echoes the fact that the GSAT and the AST are only accessible to some students with disabilities. In other words, students who are suitable to take the GSAT or the AST, virtually have every option available. As for the others, they need to make the right choice after junior high school since that step already determines what kind of institution they will be going to after the special exam.

The special exam is an affirmative action that has helped many students with disabilities to enroll in college and university as it safeguards quotas for them. In my sample 9 students have accessed higher education through this channel. Yet this is to be nuanced by the fact that I interviewed many students with cerebral palsy. Even though it is the smallest, this category has the highest enrollment ratio in elite universities in Taiwan, and also more spots in NTU, the best university in the country. For other categories such as “learning disabilities”, “autism spectrum disorder”, and “other disabilities” this channel is much less advantageous and that is because of the universities’ discretion to choose how many spots they want to open and to what disability types. Centralized policies obligating institutions to open quotas to every category would correct this unfair repartition. Besides that, the special exam forces students to compromise, as most of the departments in a given school are not accessible through this channel.

Assistance or social oppression?

The last year of senior high school is intense and complex for every Taiwanese high schooler but it is even more loaded for students with special needs as they potentially take two extra examinations and have to make more decisions regarding the pre-test applications (registration and application to accommodations) and the post-test decisions (what channel

to use to go to college). The data from this diverse sample of students with disabilities reveals more about the hurdles encountered on this path. Guidance by school professionals is very heterogeneous and turns out to be unsatisfying among the interviewees currently registered in private universities. In addition, familial pressure plays a strong role in their individual decisions. Lastly, the social oppression was felt by many of them and could play a role and the underrepresentation of students with disabilities in top-rank higher education institutions.

When asked about the assistance they got in senior high school, some of the students currently enrolled in elite public universities (NCCU or NTU in my sample) were very satisfied with the help they got at this time. This is the case of Jack, who is doing his bachelor's at NTU. He describes:

“Our special education teachers and our administration staff were very concerned about us. They would help the students with special needs and make some arrangements with other teachers. [...] So this was part of our special education senior high school program and I think it was helpful. I think it was helpful because that was specific to our school, other schools probably didn't benefit from that. Thanks to the assistance of those two teachers, the student's grades improved, at least for a part. Yes, I think so. Although my final English grades were not that good, the teachers still helped me develop some skills related to English such as writing skills or grammar, mainly those two. Something like that.”

Jack was in the National Hsinchu Senior High School, an elite public institution in Hsinchu and he was satisfied with the measures implemented to help students with disabilities. He also mentioned in the interview that some classes were specially aimed to help him overcome his communication difficulties related to his disability. Nonetheless, he keeps pointing out that as far as he is concerned, this is probably something specific to only a few senior high schools. On the other hand, some students do not mention any kind of assistance at that time, such as Mike, who explains:

“During your senior high school, were there teachers or other people helping you to prepare for the exams and look for information on colleges?”

- *No there were not. I needed to prepare on my own.”*

Mike attended Taipei School for the Visually Impaired and did not get such guidance as Jack did, either in quantity or quality, which implies that this important parameter to successfully navigate the transition to higher education process is deeply impacted by the type of senior high schools the students enrolled in. In my sample, interviewees from elite schools were better off than those in private or special education high schools. However, even Ethan, who went to the best senior high school in Kaohsiung (Kaohsiung municipal Kaohsiung senior high school) made a statement that questioned the role of the special education teachers or counselors in their assistance in the college entrance admission process:

“Well, I did everything by myself, especially the applications to study abroad, to the 3 universities in Hong Kong. I did all of it myself. Actually, I didn’t have a special counselor for this kind of process. Mostly I needed to do it myself and sometimes my family, like my mom, helped me. I really appreciate her. I forgot to mention, the teacher in the counseling room helped a lot. Especially for the special entry exam because I don’t have much information but they share it with me, maybe it’s their obligation. I really appreciated them doing so.”

Although he says that the special education counselor from the resources room helped him a lot, he does not refer to any kind of assistance other than transmitting the information. And if that is better than nothing, it does seem to be a basic duty rather than comprehensive assistance. Ethan says that he had to do all the applications by himself and with familial help. This is also to be regarded as the majority of my interviewees did not point out which aspect of special education counselors’ guidance was helpful or not. Mike declares:

“Only the special exam. I didn’t take the GSAT. Because I heard you could take the

special exam without having to take the GSAT so I only registered for the special exam.

- *Why didn't you take the GSAT? [...]*
- *The teacher told us we needed more time to prepare for the special exam, therefore we didn't register for the GSAT."*

Mike is a visually impaired student currently studying at PCCU and even though quotas are advantageous for the special exam, he gave up an opportunity to get the best result and have more choices. In Mike's case, not taking the GSAT was explicitly justified by the belief that preparing for it would have been pointless and time-consuming, he preferred to focus on the special exam. This is a very different mindset compared to every NCCU and NTU student who tried to maximize their enrollment opportunities by taking both the GSAT and the special exam. Doug, another PCCU student with Asperger syndrome decided to skip the special exam, as his answer to my question displays:

"So besides the GSAT, you didn't take any exam? Why?

-I took the GSAT, but I was not satisfied with my results. I didn't take the special exam. There are not many spots available with the special exam."

Doug did not further discuss his motivations to stop after the GSAT although he was "not satisfied with his results", but there is no logic in doing so. Since the special exam takes place after the GSAT, preparing for the former does not hinder one's success chances on the latter. I could not collect much data on what kind of assistance those two students were given in the decision-making process.

Nevertheless, the NCCU and NTU students in this study had a very clear idea of what they should expect on both the GSAT and the special exam, whereas the PCCU and the Soochow University students could not defend their choices and seemed to be carried by the flow of someone else's decision. That is blatant in Daniel's speech, a student currently enrolled in Soochow University:

“During 12th grade, did you get any help from a special education teacher/counselor to prepare for the exams or apply to colleges?”

- *No, the teachers respected my decisions. It was mostly my mom and dad who interfered. [...] Regarding which school to apply to, they made the decision more than I did. They told me straight away there was no way I’d go to a school with a performing arts department.”*

Daniel wanted to go to a technical university but his family did not let him choose the major he initially wanted. Even though from what he says, nothing can lead to thinking that it was or was not related to disability but it seems that an external influence is especially likely to happen for students with disabilities, as Alice points out:

“Besides that, because society regards us as disadvantaged people [people with disabilities], quite often our parents or our teacher don’t want us to take risks or do things that are considered as hard. They tell us “If you study that, your job after is going to be hard”, but they don’t ask us whether we like it or not. Or they choose a major for us and they think it’s the right one. They don’t wanna pressure us, they behave with us as kids: “It’s ok, mom and dad will decide for you.” Although that is also a thing for regular students, I feel like it’s even more common and strong for students with disabilities. I feel like our rights are exploited when it comes to choosing a major: even if the grades are my own work and merit, the department choice might be very different from what I want. [...] So sometimes, since you don’t know what you like, you let your parents choose your major and your occupation will therefore also be chosen for you. It’s pretty bad for people with disabilities.”

Alice is a graduate student at NCCU and she is currently writing her master thesis about disability rights. To her, although this familial pressure and the problem of parents deciding for their children what they should do is present in Taiwan for students without a

disability, it is especially common for students with special needs. Alice insisted multiple times on how important independence was for students with disabilities. She describes that they would either not get the help they want or be infantilized. According to her, it's pretty common for Taiwanese society but even worse for students with disabilities who would more often lose their power of decision on what to study and therefore the very power of shaping their own future.

However, the social bias is not only observed within the family unit but also happens during the assessment process. Harry describes:

“The reason is that the teacher doesn't want the future students to be difficult to handle. Because the prejudices are that students with special needs are students with problems. So if they accept a student with special needs, they might bring trouble afterward. They prefer to accept students who don't have special needs. For them, it's a type of “protection” So it's their way to do it. [...] They foremostly care about whether or not the students are going to bring problems to the school. So they're not really looking for students with special needs.”

This idea that some students with disabilities are convenient and will not make a fuss versus some others who will bring problems can have big consequences; the departments who decide special exam quotas and the GSAT interviews examiners represent two gatekeepers to universities where the examiners have the power to decide who gets to be accepted without needing to justify their decisions. In those two examples, the teachers are endowed with huge power on the two channels available to students with disabilities to enroll in universities. Ethan also explains this discrimination resulting from what was originally thought to be an affirmative action:

“So it was quite unequal, because if you're blind and you want to enter the law department of NTU, then the system will not help you because you need to grab a chance by yourself. If you are deaf and you want to study engineering at NTU, there is no chance for

you to do that because this exam doesn't offer any quota for you. I have to say that it was an affirmative action but it was an incomplete affirmative action because it has a lot of choice limitations for physically disabled students. [...] However, the universities are much more friendly to people with cerebral palsy like me. Because I'm like a normal student, I have fewer differences with normal students. So the departments don't have to bear a bigger burden, just like other students."

Ironically students with disabilities might face the consequences of the lack of guidance and assistance after the transition process, as Jack specifies:

"You need to speak very loudly, you can't be afraid of interacting with others. You can't do it by yourself, you need to interact with other people. Actually, this major is not very suitable for autistic students and "other disabilities" students. It is also not very suitable for visually impaired students. [...] Regarding visually impaired students this is a huge obstacle because they can't see. This one thing. This will be a very big restriction. So it's not that you can't do it [nb: the department courses] but after enrolling in that department you will face a lot of hardships and problems, big ones."

Jack chose to transfer to another department after first choosing a major related to performing arts. He emphasizes that the reasons that pushed him to do so are purely specific to his disability (Asperger syndrome). Furthermore, he claims that he sees such stories happening to several students around him. For him, universities don't consider the question of disability and limitations before opening quotas in certain departments, but that point also implies that the very students choosing those departments do not receive guidance on how to pick a major that will suit them.

In terms of assistance, the gap between university types is very large. In my sample, the students who reported getting adequate support and assistance were those who ended up in elite public universities (Linda, Jack), even though not all of them talked about it. On the other hand, some students from PCCU made poor strategic decisions by skipping some

exams they could have attended, sometimes upon their teacher's advice. Moreover, the pressure of the family and the society felt very present, as Alice explained it was even heavier on students with disabilities. The idea that according to their disability, some students will behave well and some will not is simply discriminatory and results in dramatic and unjustified consequences on some students' lives. The current GSAT interviews system and special exam quotas give the universities the power to choose what disabilities they want and mostly which one they don't want and this needs to be changed. Finally, there seems to be no framework on the guidance of students with disabilities in high school as reported by the interviewees. Few of them currently in elite universities were satisfied with the assistance they received in 12th grade but the majority insisted on their own independence in the preparation and application procedure and two of them were actually led into skipping exams that would have been an extra chance to get more choice on what school and departments to enroll in. And even after the beginning of college, mismatches and transfers to other departments are frequent.

Taiwanese students with disabilities are well aware of the flaws of the system and they want to make it better. They care to be heard, they care to end the discrimination they face on a national scale, and foremostly they care about fairness. The following quotation from Ethan expresses it very vividly:

“How to fix that? I think we need to fix that from the center of the system: Why don't you just provide another option, other than taking exams? Because for universities, taking exams, interviewing, taking a second exam, taking a third exam... this is just picking the students they need, right? But is that the only way to pick the students they need? Through exams? I don't think so. I think the most radical way to change this kind of situation and help disabled people the most is to offer another option, other than exams, for them to apply to universities. However, this will actually cause a lot of debates and it will be very controversial because people will think it is unfair and fairness is the main concern of people. But fairness itself also implies discrimination. Because if you don't compete with us,

on our ground, this is unfair. But if you take it in a larger scope, how dare you to say that it was fair when you don't need to face the difficulties disabled people face every day, but still, compete with you in the fields you're good at. I think this is the most difficult question that we need to solve."

Yet, despite mentioning it many times, what rises from the interviews is that students do not clearly understand what fairness is. As such, the lack of information on what is fair and what is unfair can be regarded as a form of social oppression, depriving students with disabilities to point out the specific injustices of the selection process. This misconception appears in Alice's speech:

"For students with disabilities, it's not friendly at all. They consider the perspective of regular students to design the exam. [...] Even if I study very hard, I have to compete with Taiwan's most brilliant students to get the same spots in University. The difficulty is extremely high. It depends on your own ability."

Alice points out the difficulty of the GSAT but after she rightfully explains the accommodations mismatch, her argument gets blurry. Indeed, when adequate arrangements are granted, every student should be assessed on the same basis and therefore compete with one another under the same grading regulations. This is the condition to ensure that both fairness by equity and fairness by need are respected. This mindset is confirmed by Ashton; when asked about the accessibility of the GSAT and the AST, he replies:

"They're not friendly! The pressure is high. If you're competing with everybody, there's no way you get out of it at the top. Your grades cannot be that good. [...] For hearing impaired students or students with learning disabilities there's no way you get through it, compared to students with [other] disabilities we have no chance. So it's not very friendly."

In his situation as well, denouncing the inaccessibility of the GSAT is justified if the essential accommodations are not allocated to students who need it. Yet, this is not

mentioned in Ashton's answer and therefore it implies the question of where the difference is between students with disabilities and students without disabilities. The selectivity of the process is a feature of the Taiwanese education system and applies to any student. That finding is also indirectly confirmed by Ethan's words:

“Well, I have to talk about the limited time and all the features of this kind of exam, like the limited time and the high-pressure environment. Also, you need to finish your test papers, you need to hand in your results, you need to present what you have learned through test papers... It's really unfriendly to physically disabled people.”

There is a disconnection between the notion of injustice and what Ethan brings up in this quotation. Everything he describes is directly related to the institutional requirements and should not only apply to students without disabilities. The goal of special accommodation is to adjust to unjustified discrimination and the purpose of affirmative actions is to endow a given population an opportunity to compensate for the same discrimination they experience in society. However, in this example, the debate gets carried away on what is inconvenient on school requirements. This topic also deserves attention but is simply not on point as eventually, even in a perfectly fair system, it would still affect every student. Paradoxically, despite criticizing the special exam earlier, Jack states:

“Actually, I personally think that it's a bit unfair to some extent. I can't really speak about other disability types, I'm only knowledgeable on my own disability category. My school grades were definitely not good enough to apply to NTU. With my grades, I could only enroll in middle-range universities and by no means elite universities. But thanks to the special education system, I was able to enroll in NTU. Even though the requirements for theater were quite low, I was accepted in the theater department. And I didn't do that well on the exam. I feel like it's unfair. I would wonder “Did I get accepted in NTU because I worked very hard or is it because I was in the special education system?””

Jack's guilt relates to the feeling of benefitting from an unfair advantage, as the quotas for the "other disabilities" group (the category he was in) in the special exam are extremely low and even lower than the GSAT quotas. He also contradicts himself after specifying: *"My special exam grades were among the top ten in the whole country in my group."* This paradox should not be regarded as a mere lack of judgment but understood under the angle of social oppression. In Taiwanese society, students with disabilities are often accused by their peers to be unfairly advantaged by the exam system, as Ashton illustrates:

"But the pressure from society is high. Society thinks there are a lot of persons being advantaged by this system, but I don't think that's the case at all. Most people, when they know we have a special exam, they will think that we are advantaged compared to the rest of the students."

This strong force put on students with disabilities result in a manichean dichotomy. Some students end up incorrectly believing they are actually benefiting from the system more than they should. On the contrary, another part denounces the oppression and the critics they face about the exam, but blame everything on injustice and get confused about what is fair and what is not. Nonetheless, some students admit that they cannot appreciate the fairness of the system. Judy points out:

"I feel like the process for students with disabilities is already not fair, but neither is it for regular students, so I can't really tell."

Judy was able to indicate the injustice related to the special exam quotas but she acknowledges that besides that, she cannot define what fair means. She plainly states that many problems are common to students with and without disabilities, yet she cannot define what is fairness. Although stressing that the pressure faced by Taiwanese students during the last year of senior high school is egregious, remains a mindful insight, she does not give any element on how this is unfair for anyone.

The findings of this research underline a massive heterogeneity between disability types. The data suggests the provocative idea that Taiwanese higher education institutions prefer some physical and sensorial disabilities over mental and psychological disabilities. This puts in perspective the limits and dangers of a classification based on the nature of the impairments, especially when higher education institutions are given too much freedom in opening special quotas. The risk of exclusion of students with disabilities from a common track and a fair competition to a system where they don't choose the universities where they want to study but the universities choose them, or do not, is real. Such a scenario could happen without a statewide coordinated answer mediated by policies and a deep transformation of mentalities. What is clear, after presenting numerous instances, is that the students do not understand thoroughly what is fairness, but foremostly the stakeholders, either the educational institutions or the government, do not either. Thus, the root of social oppression is directly connected to a general misunderstanding of fairness and leads to the basic conclusion that one cannot ensure fairness within a certain process if one does not understand the very requirements, implications, and purposes of fairness itself.

Discussion

Disability affects 15% of the world's population (WHO). Up to very recently, it was an invisible field in sociology, and even nowadays, it remains highly controversial and understudied (Thomas; 2004, Jenkins, 1991, Shakespeare, 2001). Education is the root of social stratification (Bowles, Gintis, and Meyer, 1999; Sorokin, 1959) and impacts one's life, but also one's relatives and future generations. For these reasons, the educational attainment of people with disabilities needs more investigation than what currently exists. Taiwan has implemented several policies towards inclusive education but the relevance and efficiency of those have not been assessed. In the Taiwanese education system, higher education is a critical step in social stratification. As such, my research tackles and opens new debates that could eventually lead to reforms in the college admission process for students with disabilities.

In this master's thesis, I first reviewed theories about the disadvantages and social oppression related to disability. I explained how disability was mediated by society on individuals with impairments (Thomas, 2004). Choosing the focus of education is primary, since the disadvantages on that field affect one's own life but also their relatives, as well as following generations that can be stricken with many burdens (Jenkins, 1991). I also reflected on what fairness is and how to provide a university admission track that is fair towards people with special needs but does not negatively affect the success chances of the other students (Elliott, McKevitt, Kettler, 2002). Afterward, I presented the current college admission entrance process in Taiwan, for both students with and without disabilities, and brought up the quantitative discrepancies between the special exam quotas.

The data of this paper were collected throughout recorded interviews, transcribed, translated, and analyzed. My first main finding is that the regular track made of the GSAT and the AST does not always give a fair arrangement procedure regarding accommodations. According to Deutsch (2006), this is a form of procedural injustice, and hence, students with

disabilities who are not allocated accommodations that are fair, that is to say, which respect both the equity and need aspects, are oppressed and discriminated against.

Second, the special exam is a solid affirmative action for sensorial and physical disability but disadvantages mental and psychological disability students. In the case of Taiwan, this affirmative action is essential, because it aims to counterbalance the underrepresentation of people with disabilities in elite higher education institutions caused by the shortcomings of the regular track. That inadequacy per se is the very justification of the legitimacy and the fairness of an affirmative action (Long, 2007). However, with the special exam, the choice of departments is restricted for every disability category and the choice of universities is also restricted for most disabilities, especially elite public institutions. The light intervention of the government in that process allows the universities to cherry-pick the disability types they picture as “good”.

Finally, social pressure is always present on students with disabilities and hinders their chances of success. The assistance they receive in senior high school is not framed and thus very variable from one institution to the other, which creates more inequalities between students with and without disabilities, as well as within students with special needs. Interestingly, the quality of assistance seems to concur with the type of senior high school students attended, even though the sample is too small to draw conclusions on the cause of these disparities. The big paradox of this whole picture is that students themselves cannot distinguish what is fair and what is not and neither can the stakeholders. What the students denounce as discrimination, social pressure or injustice, is sometimes confused and irrelevant to the essence of fairness and social oppression (Welch, 2005; Deutsch, 2006). That lack of clear understanding should also be conceived as a form of social oppression per se, by distributive injustice, that deprives people with disabilities of the capacity to criticize the system and request those same stakeholders to implement a fair procedure.

However, this study has limitations. The sample does not include students from technical universities since the access channels are different from general universities. Thus,

the conclusions regarding general higher education institutions can only be speculated to technical schools. In the same way, aside from Mike, all the interviewees did their schooling in regular schools. The findings of this thesis do not represent students with disabilities from special education structures.

Taking a broader look at Taiwan within the big picture, several measures have been implemented in different countries to support the inclusion of people with disabilities in education. The United Kingdom delivers a stipend (average 2000 pounds per year) to students with disabilities in order to alleviate the financial obstacles they might encounter. Moreover, this governmental program can also contribute to paying for their living accommodation as well as the material required by schools (Hubble, Bolton, 2016). In the same way, Finland develops the inclusion of students with disabilities by increasing general awareness. The measures concern diffusion of information about the accessibility of higher education institutions through handbooks, web portals, or online forums. Furthermore, workshops bolstering cooperation between institutions are organized, and accessibility projects in universities are promoted (Kahru, 2014). Israel is also an example of the importance of a holistic approach in assistance to people with disabilities. Even though the government implemented effective policies that equalized the participation to higher education of people with and without disabilities, Sachs and Schreuer (2011) revealed that students with disabilities were not as present in extra-curricular activities and had less access to computers and information technologies. Taiwan education system displays both assistive structures and measures for students with disabilities, yet they could be improved a lot. There are resources rooms in both senior high schools and universities but their actions do not always fit the students' needs. Besides that, special education professionals suffer from budget cuts and limited political support (Francis, Chiu, 2020).

A nation cannot achieve social welfare if it does not consider each and every citizen. People with disabilities have come a long way to make their voices heard around the world. In Taiwan, it has been a powerful movement and it is not over. Although the healthcare

system is very well-developed for people with severe impairments, they still get discriminated against on a daily basis. In the context of a very developed higher education system, denying access to that echelon to people with disabilities is simply perpetuating the cycle of injustice and oppression. The government has shown its willingness to implement affirmative actions to accept more and more students with special needs within universities. Moving forward to a more fair admission process will be challenging, but it is possible and it can tremendously benefit the Taiwanese society as a whole.



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