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**THE EMPOWERMENT PROCESS IN CHILDREN
FROM 4 TO 6 YEARS HAVING TRISOMY 21 WITH
DIFFICULTIES IN WALKING**

*Thesis written and defense to 24th July 2025 for the Master's degree in
Educational Science*

Option: Mental Handicap, Mental Abilities and Guidance

BY

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To
My Mom FOUELEFACK Marthe
And
HAMIAFO Family

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ABSTRACT

This research titled "The empowerment process in children from 4 to 6 years having trisomy 21 with difficulties in walking" is situated at the intersection of the habilitation empowerment perspective, which stipulates that participation in community activities is the central element in the empowerment process of people with disabilities. This participation facilitates the meeting of internal and external factors. This makes it possible to enable and, by extension, empower or empower these individuals. However, among children with Down syndrome, we have observed that difficulties in walking significantly limit their participation in community activities. The problem thus stated was concretized by the following research question: how does the empowerment process of children with Down syndrome aged 4 to 6 years and having difficulty walking unfold? To answer this, we formulated the hypothesis that: for T21 children aged 4 to 6 years with walking difficulties, the empowerment process is initiated through the interventions of specialized educators. The objective of this study is to understand the empowerment process of children with Down syndrome aged 4 to 6 years who have difficulty walking. To achieve this objective, we used a qualitative research design and data were collected from three participants using the systematic observation technique. These data were subjected to a content analysis. From this analysis, it emerges that the empowerment of children with Down syndrome cannot be approached independently of the social interactions in which they are involved. Indeed, it is in the relationship with the adult (teacher, educator, parent) that the recognition of their ability to make choices, express preferences, and exercise control over their daily lives takes place. The environment then becomes not just a protective framework, but a lever for activating skills, based on a positive vision of development. The results also highlight the need for structured support, promoting the progression of functional autonomy, socialization, and identity construction. Adapted educational tools, ritualized routines, and mediations tailored to the cognitive pace of the child with Down syndrome prove crucial in this perspective.

Keywords: empowerment, Down syndrome, difficulties walking, specialized educator, adapted mediation

RÉSUMÉ

Cette recherche intitulée *the empowerment process in children from 4 to 6 years having trisomy 21 with difficulties in walking* se situe aux confins de la perspective de l'habilitation de l'empowerment, qui stipule que c'est la participation aux activités communautaires qui est l'élément central dans le processus d'empowerment des personnes en situation de handicap. Cette participation facilite la réunion des facteurs internes et externes. Ce qui rend possible l'habilitation et par ricochet, l'empowerment ou autonomisation de ces personnes. Or chez les enfants T21, nous avons constaté que les difficultés à marcher limitent de manières considérables leur participation aux activités communautaires. Le problème ainsi énoncé a été concrétisé par la question de recherche suivante : comment se déroule le processus d'empowerment des enfants T21 âgés de 4 à 6 ans et ayant des difficultés à marcher ? Pour y répondre, nous avons formulé l'hypothèse que : *chez les enfants T21 âgés de 4 à 6 ans et ayant des difficultés à marcher, le processus d'empowerment se met en place à partir des interventions des éducateurs spécialisés*. L'objectif de cette étude est d'appréhender le processus d'empowerment des enfants T21 âgés de 4 à 6 ans et ayant des difficultés à marcher. Pour atteindre cet objectif, nous avons fait usage d'un devis de recherche qualitatif et les données ont été collectées auprès de trois participants à partir de la technique d'observation systématisée. Ces données ont fait l'objet d'une analyse de contenu. De cette analyse, il ressort que l'empowerment des enfants T21 ne peut être abordé indépendamment des interactions sociales dans lesquelles ils évoluent. En effet, c'est dans la relation à l'adulte (enseignant, éducateur, parent) que se joue la reconnaissance de leur capacité à faire des choix, à exprimer des préférences et à exercer un contrôle sur leur quotidien. L'environnement devient alors non pas seulement un cadre protecteur, mais un levier d'activation des compétences, fondé sur une vision positive du développement. Les résultats soulignent également la nécessité d'un accompagnement structuré, favorisant la progression de l'autonomie fonctionnelle, la socialisation, et la construction identitaire. Des outils pédagogiques adaptés, des routines ritualisées et des médiations adaptées au rythme cognitif de l'enfant T21 se révèlent cruciaux dans cette perspective.

Mots clés : empowerment, trisomie 21, difficultés à marcher.

LIST OF ABBREVIATION

ABA: Applied Behavior Analysis

CCNE: National Consultative Ethics Committee

CNRPH: National Center for the Rehabilitation of Persons with disabilities

DNA: Deoxyribonucleic Acid

DPA: Development of the power to act of individuals and Communities

DS: Down Syndrome

DSM: Diagnostic and Statistical Manual of Mental Disorders

HAS: French National Authority for Health

IDB: The Inter-American Development Bank

IQ: Intelligent Quotient

PECS: Picture Exchange Communication System

PPT 21: People With Trisomy 21

T 21: Trisomy 21 (Down syndrome)

WHO: World Health Organisation

INTRODUCTION

In a global context where the principles of inclusion and active participation of people with disabilities are at the heart of educational and social policies, the issue of empowerment for children with Down syndrome (DS) becomes a major challenge. While research on self-determination and inclusion of children with disabilities is progressing, the very concept of "empowerment" applied to childhood and even more so to children with intellectual disabilities remains underexplored. Yet, these children, like any others, are endowed with developmental potential, relational abilities, and decision-making skills, within an appropriate and supportive framework.

Empowerment can be understood as a dynamic process through which the child gradually gains self-confidence, develops skills, participates in decisions that concern them, and actively engages with their environment (Zimmerman, 1995). In children with Down syndrome, this process is articulated between specific developmental challenges (hypotonia, cognitive slowness, special educational needs) and the educational, familial, and institutional environment. It thus mobilizes the notion of "agency" in a space where support, social perception, recognition of skills, and the valorization of achievements play a fundamental role (Charlot, 2013).

The study of empowerment in children with Down syndrome is situated in a context where educational and social approaches are evolving towards inclusive practices, focused on individuals' potential rather than their deficiencies. This orientation addresses a dual necessity: theoretical and social.

From a scientific perspective, the notion of empowerment often explored in adults or vulnerable populations remains under-documented in its child-specific application, particularly in children with Down syndrome. Conducting such a study would therefore shed light on the mechanisms through which these children develop a sense of competence, self-determination, and agency despite their cognitive and adaptive limitations. This research would thus contribute to enriching the theoretical corpus in developmental psychology, special education, and disability studies.

On a social level, Down syndrome is still, in many contexts, associated with reductive, even stigmatizing representations, which hinder children's access to full social participation.

Exploring empowerment would highlight the levers of inclusion, the family, institutional, and educational resources that support their overall development. This approach therefore aims to change perceptions, promote valuing practices, and strengthen public policies in favor of children with disabilities.

This research topic therefore aims to analyze the empowerment process of children with Down syndrome (T21) through the interactions between individual factors, educational contexts, and professional stances. The aim is to understand how these children can develop an identity as actors in their own lives, despite the constraints related to their condition. The challenge is both theoretical (considering empowerment from childhood, in an inclusive perspective) and practical (promoting the emergence of supportive educational practices that respect the autonomy of children with Down syndrome).

The issue of social and educational inclusion for children with Down syndrome is now part of an international movement aimed at recognizing and valuing the rights, competencies, and full participation of people with disabilities. In this context, the concept of empowerment or “the power to act” emerges as a central lever to transform educational and social practices, for the benefit of the autonomy, self-esteem, and integration of children with Down syndrome in their environment (Nussbaum, 2011; Wehmeyer & al., 2000).

Down syndrome, a chromosomal anomaly affecting cognitive abilities, motor development, and social interactions, has long been associated with medicalized representations focused on deficits. However, for several decades, socio-educational and humanistic approaches have challenged this view, emphasizing that the environment, rather than the disability itself, constitutes the main barrier to the flourishing of these children (Schalock & al., 2007; Booth & Ainscow, 2011).

In this perspective, empowerment is understood as a dynamic process through which the child with Down syndrome gradually acquires the resources, skills, and legitimacy necessary to make their voice heard, make choices, exercise a certain control over their daily life, and actively participate in the life of their group (Wehmeyer, 2013). This process requires respectful, structuring, and stimulating support that takes into account both the specific needs of the child and their potential for development.

The present research is part of a comprehensive and clinical approach aimed at analyzing the modalities, barriers, and facilitators of empowerment in children with Down

syndrome, in both school and family contexts. More broadly, this thesis aims to contribute to a reflection on the conditions for true inclusion, breaking away from the logics of assistance and dependence, in favor of an education centered on children's rights, social participation, and capacity development (UNESCO, 2020; Nader-Grosbois, 2011).

To achieve this, this thesis is organized into two parts and includes 6 chapters. The first part includes Chapter 1, which addresses the problem, Chapter 2, which covers the literature review, and Chapter 3, which presents the theoretical framework.

The second part also includes three chapters. Chapter four, which deals with the methodology, chapter five, which presents the results obtained, and chapter six, which is dedicated to the interpretation and discussion of the results.

CHAPTER 1: PROBLEM STATEMENT

1.1. Context of the Study

Trisomy 21 is the most common chromosomal abnormality. Its prevalence and incidence vary considerably depending on the country, the method of data collection, the distribution of maternal age in the population considered, the use of prenatal diagnosis, and the implementation of systematic screening policies (Loane & al., 2013).

Trisomy 21, commonly known as Down syndrome, is the most frequent viable chromosomal abnormality. This syndrome was first described in 1866 by Down, who provided a detailed description of individuals with trisomy. Then, Lejeune et al. (1959) discovered the presence of a third chromosome on the 21st chromosomal pair in these patients, which is the cause of the syndrome.

However, trisomy 21 is the anomaly for which a genotype-phenotype relationship has been demonstrated. It not only alters the genotype and phenotype of affected individuals but also significantly influences their quality of life (Bouquett & al., 2013; Irving & al., 2008; Lyle & al., 2009; Mou & al., 2012). Besides modifying the phenotype and genotype, it also results in multiple anatomical malformations, distinctive morphological features, and varying degrees of intellectual disability (Bouizegarène & al., 2008). It affects approximately one in 700 live births (Doubaj & al., 2010), and currently, there are about 8 million cases worldwide (Roizen & Patterson, 2003). According to Korff-Sausse (1996), adolescents and adults with trisomy often have difficulty expressing their sexual impulses toward a romantic partner due to their phenotypic condition, consequently hindering their ability to form couples and families.

According to Boulvain & al. (2008), Chokoïri & al. (1998), and Loane & al. (2013), the frequency and incidence of trisomy 21 vary significantly depending on the country, the method of data collection, and maternal age distribution in the population. Although the signs of trisomy 21 are visible at birth, they are not sufficient for a definitive diagnosis, necessitating confirmation through karyotyping.

The development of a strategy for screening and prenatal diagnosis is therefore essential. Once screening and diagnosis are established, the socialization of the child begins. It should be noted, however, that managing children with trisomy 21 does not aim to treat

them, as no cure exists for this condition. Instead, specialized and regular medical follow-up can improve executive functions in individuals with trisomy 21, facilitating their socialization and, later, interactions with members of the opposite sex, thus helping them build their own life projects.

Currently, trisomy 21 is the most frequent genetic anomaly, affecting 400,000 people in Europe. There are significant disparities in antenatal practices, as shown by data from European registries (Loane & al., 2013). The proportion of diagnosed trisomy 21 cases and terminated pregnancies varies from 10% in Poland to 73.1% in France between 1990 and 2009 (Loane & al., 2013). Consequently, the prevalence of this condition varies significantly between countries. It ranges from 13.3 per 10,000 births in Ukraine to 31.4 per 10,000 in France, where one pregnancy in 650 was affected during the period from 1990 to 2009 (Loane & al., 2013).

Despite an average prenatal screening rate of 46.9%, the recorded prevalence has somewhat increased, reaching 22.02 per 10,000 births between 1990 and 2009. A recent study conducted in California shows a similar trend, with a prevalence of 11.1 per 10,000 live births (Dzourova and Pikhart, 2005). In South America, the prevalence of trisomy 21 was 15 per 10,000 in Chile between 1990 and 2001 (Nasser & al., 2003). Another study indicated that this prevalence significantly increased in the same country, reaching 29.6 per 10,000 live births (Ojeda et al., 2005).

In Europe, particularly in France, trisomy 21 screening began 40 years ago and was generalized in 1997. Studies evaluating the impact of prenatal diagnosis on expected and observed prevalence rates show that the total prevalence of trisomy 21 among newborns increased from 14 per 10,000 in 1978 to 23 per 10,000 live births in 2005 (Rousseau & al., 2010). Research by the Canadian Neuroscience Association in 2021 on procreation among individuals with trisomy 21 revealed that 25% of them succeed in having fulfilling relationships. However, the gradual increase in pregnancy terminations following prenatal diagnosis reached 78% in 2005, reducing the birth prevalence from 14 per 10,000 in 1978 to 5.1 per 10,000 in 2005. Similarly, Roizen & al. (2003) observed that between 1983 and 2000, the proportion of trisomy 21 cases detected before birth among women aged 38 and older increased ninefold in the Paris population. During the same period, the number of live births of children with trisomy 21 decreased by 3% annually, stabilizing around 7.1 per 10,000

births. By the end of 2017, the prevalence ranged between 5.5 and 7.5 per 10,000. This decline in prevalence is accompanied by an increase in the rate of terminated pregnancies.

Down syndrome is expected to occur in all population categories due to its pathogenesis (Alao & al., 2010). It is well-documented and extensively studied in the United States and Europe. However, it is rarely reported in developing countries (Ramirez & al., 2007). This rarity is likely due to limited knowledge and/or expertise in clinical and chromosomal genetics (Alao & al., 2010).

The prevalence of Down syndrome remains relatively stable in developed countries due to screening, diagnostic tools, and the option of medical pregnancy termination (Egan & al., 2004; Collins & al., 2008). In the absence of similar measures in developing countries, the prevalence and incidence rates are expected to be higher (Weijerman and Peter de Winter, 2010).

In some countries, such as Benin, Nigeria, South Africa, Egypt, Tunisia, Algeria, and Morocco, significant research has been conducted, and national epidemiological data are beginning to emerge. In Benin, Alao & al. (2010) estimate that for a population of 8 million, the number of children with trisomy 21 should be around 500. As early as 1982, Addeyokunnu estimated that in Nigeria, the incidence of trisomy 21 was 1.16 per 1,000 based on a sample of 25,025 individuals

In South Africa, this rate varies according to different authors: Kromberg & al. (1992) report an incidence of 1.16 per 1,000, Delport & al. (1995) note 1.33 per 1,000, while Venter & al. (1995) report an incidence of 1.09 per 1,000. Epidemiological data in North African countries are scarce and quite disparate when available. They emphasize the initial underestimation of the incidence of Down syndrome. For example, in Tunisia, the estimated total prevalence of Down syndrome is 0.98 per 1,000 pregnancies (Chelli & al., 2008).

In Algeria and Morocco, no epidemiological data exist for this condition outside of hospital records or data reported by certain associations; who's human and material resources remain limited (Lamzouri & al., 2012). However, according to a census conducted by the National Association of Children with Down syndrome in Algeria, the number of children with Down syndrome is 80,000. The same source indicates that out of the children born each day, at least three cases present symptoms of Down syndrome (ANET, 2012).

In Africa, Down syndrome (T21) is far from rare, yet it remains neglected in developing countries. In the absence of similar measures in developing countries, the prevalence and especially the incidence of T21 will be high (Aloa & al., 2010; Weijerman & Peter, 2010). In West Africa, the 2022 ECOWAS policy report on disabilities and vulnerabilities highlights that 24% of people with Down syndrome aged between 27 and 45 are able to marry, thanks to advances in neuroscience on memory and language functions.

In certain countries, such as Benin, Nigeria, South Africa, Egypt, Tunisia, Algeria, and Morocco, significant research has been carried out, and national epidemiological data are starting to become available. In Benin, for a population of 8 million inhabitants, the number of children with Down syndrome is around 500 (Aloa & al., 2010). In Nigeria, the incidence of Down syndrome is 11.6 per 10,000 for a sample of 25,025 people (Adeyokunnu, 1982). In South Africa, this rate varies according to authors: Kromberg et al. (1992) noted an incidence of 16.7 per 10,000, Delport et al. (1995) report 13.3 per 10,000, while Venter et al. (1995) reported an incidence of 10.9 per 10,000.

Epidemiological data in North African countries are scarce and quite disparate when available. In Tunisia, the estimated total prevalence of T21 is 9.8 per 10,000 pregnancies (Chelli & al., 2008).

In Cameroon, data on Down syndrome are very scarce. For research purposes, we relied on the *Santé Tropicale* 2017 health data. According to *Santé Tropicale* 2017, Down syndrome affects 1 in 750 children, regardless of race, ethnic group, or social class. Therefore, with a population of 22 million inhabitants, there would be around 29,300 people with Down syndrome.

According to a study conducted by Nguengue & al. (2019), the prevalence of Down syndrome is estimated at approximately 1 in 1,000 live births in Cameroon. However, precise data are lacking due to a lack of resources for diagnosis and follow-up. Mboh (2020) explains this by highlighting the persistence of stigma toward individuals with Down syndrome in communities, often due to a lack of education and awareness of the syndrome.

In Cameroon, developing a strategy for prenatal screening and diagnosis remains essential because epidemiological data on this condition are still limited to hospital records or reports from some associations and specialized institutions. Given this high prevalence, in April 2019, the Essos Hospital Center deemed it necessary to provide better psychological

support to parents of children with T21, enabling them to better support their children. To help develop a life plan for individuals with T21, specialized centers are preparing educational programs tailored to the needs of adolescents, focusing on socialization and autonomy.

Out of nearly 90 children with intellectual disabilities enrolled at the CNRPH between 2015 and 2022, 45 had Down syndrome, representing 55.44%. At PROMHANDICAM, of the 233 children with intellectual disabilities enrolled between 2009 and 2013, 62 had Down syndrome (26.61%). From 2014 to 2018, this number rose to 82 (35.19%), totaling 144 individuals, or 61.80%. In this population, only 12 individuals have children.

Based on these findings, there is a clear increase in the prevalence of T21: from 26.61% between 2009 and 2013 to 35.19% between 2014 and 2018, representing an increase of 8.58% at PROMHANDICAM and 44.44% at the CNRPH. Currently, prenatal screening methods do not yet allow invasive prenatal diagnosis. Amniocentesis is available but costly (250,000 to 300,000 CFA francs), making it inaccessible to many (Obam, 2009). Furthermore, only the Pasteur Center is authorized to conduct samples, which are then sent to France for analysis.

Following screening, and recognizing the importance of supporting children with Down syndrome and their families, informed parents enroll their children in specialized institutions. Within these institutions, the support provided depends on the child's age and, sometimes, their intellectual quotient related to higher brain functions. Authors such as Morvan and Dazord (2005) emphasize the importance of support for disabled individuals. According to them, “personalized and multi-faceted support from a young age can help overcome barriers to autonomy and build a quality life.” Access to relationships and marriage is possible for some people with Down syndrome, but it is challenging for most and facilitated only by specialized care.

This underscores the need to consider the challenges people with Down syndrome face in accessing relationships and marriage by providing multiple, specialized support options and giving them choices and decision-making opportunities.

Today, it is estimated that more than 650 million people worldwide live with a disability. Among this population, the prevalence of Down syndrome is between 1 in 1,000 and 1 in 1,100 live births globally. Each year, around 3,000 to 5,000 children are born with this anomaly, affecting approximately 250,000 families in the United States. In France, Down

syndrome occurs in an average of 27 out of 1,000 pregnancies, and its frequency increases with maternal age. Every year, 450 children are born with this chromosomal anomaly, and 40,000 people live with this condition, representing 0.08% of the French population.

In Africa, and specifically in Cameroon, statistics on individuals with Down syndrome are scarce and often inaccessible. Based on empirical data, it is estimated that among 35 children with special needs in specialized centers in Cameroon, 5 have Down syndrome, suggesting a rate of 10% to 15%.

Thanks to medical advances related to higher brain functions and resulting care, the life expectancy of individuals with Down syndrome has significantly increased. Today, many adults with this anomaly are seeking relationships and family life.

1.2. Problem Formulation

In children with T21, psychomotor issues vary in intensity but are always present. Hypotonia linked to ligamentous hyperlaxity, difficulties in acquiring overall and postural balance, and motor coordination issues affect these children's development and require intervention. Furthermore, difficulties with grasping and motor coordination both gross and fine lead to challenges in exploration, movement, and, for older children, writing skills.

The consequences of delayed psychomotor development can also hinder the parent-child bond. For example, prolonged lying or sitting delays the child's interactions with adults. By 5 to 6 months, typically developing children squirm, reach out to adults, while children with Down syndrome take longer to react and adjust their tone (Denni-Krichel, 2000).

The term “**autonomy**” derives from the Greek words *autos* (self) and *nomos* (law or rule). According to Adant, autonomy is the ability to govern oneself. As Schwarz (1991) puts it: “Autonomy manifests in the ability to judge one's competence, assess one's actions, and develop according to personal values... Increasing autonomy means identifying barriers to development and overcoming them.”

In their *Dictionary of Disability* (2002), Zribi and Poupée-Fontaine define autonomy as: “The capacity to self-govern and make life choices.” For individuals with physical disabilities, autonomy refers to mental capacity despite physical dependency. For those with

intellectual or psychological disabilities, autonomy involves practical skills, social competence, and social integration.

From this assertion, we understand that autonomy or empowerment depends on the type of disability. For people with physical disabilities, it relates to the ability to move easily. For people with mental/psychological disabilities, this autonomy relates to their mental and cognitive abilities. What about children with Down syndrome (T21) who, in addition to having mental and cognitive restrictions, also experience psychomotor difficulties, resulting in trouble walking? In the case of these children, what are the characteristics of the empowerment process?

Indeed, unlike people with either physical disabilities or mental/psychological disabilities who retain all their physical capacities, these children face both physical and cognitive limitations. This complexity makes their empowerment more challenging.

The empowerment process allows this population to understand how to behave, how to integrate into society, and how to navigate society without external help. The foundation of autonomy is being able to do things oneself, rather than waiting for or accepting external intervention. It is important to note that asking for help does not permanently undermine a person's autonomy but is rather a means to regain it later.

Autonomy is often associated with independence and freedom. However, Hamonet (2007) defines the concept of "autonomy without independence." He illustrates this with the example of a person in a wheelchair. According to his theory, this person is in a disabling situation when not in their wheelchair. However, by using the wheelchair, they become autonomous in their mobility. This autonomy is achieved through the use of this assistive device: they are dependent on the wheelchair but autonomous in their movement (no longer needing assistance to perform this action).

Thus, autonomy is not necessarily synonymous with independence. However, autonomy is closely tied to the notion of freedom. Communication is a determining factor in achieving autonomy, as it is through open and honest discussion that people can reach a consensus on establishing common rules. Autonomy emerges through relationships with others. For Castoriadis, the autonomy of an individual and that of society go hand in hand. It is the capacity to open up to others that enables adaptation and autonomy. He believes that

autonomy cannot be defined solely in relation to the individual. For him, autonomy is not just following one's own rules, but rather developing rules with those around us.

An autonomous person must possess both skills and social behaviors to integrate into society. Autonomy is not built individually. Since humans live in society, they cannot develop alone. Weber (2008) offers a definition of autonomy that aligns with the goals of modern societies: autonomy in real life is not the freedom of self-governance, but creating a social environment that allows us to evolve collectively and as stably as possible. He suggests that autonomy is the foundation of human dignity. Paradoxically, it is built through relationships with others. Alterity thus becomes a boundary of the self, which in turn drives autonomy. Autonomy resides in reciprocal exchanges with the environment, making it a collective and social process rather than an individual one.

The perspective of empowerment has found resonance in health promotion (Lord and McKillop-Farlow, 1990), social work, and educational sciences. It addresses individuals facing poverty and disability (Wilson, 1996), social isolation, and prolonged dependency on social and health services (Godbout and Tribble, 2008). These individuals often experience social interactions that stigmatize their identity, blocking their capacity for change.

These situations are fertile ground for triggering the empowerment process through motivational factors "such as a crisis, frustration, or an offense" (Lord and McKillop-Farlow, 1990, p. 5). According to this specific view of empowerment, the process revolves around addressing the feeling of being unable to manage one's life independently. The goal is to create conditions that help individuals rehabilitate their self-image. The empowerment process targets cognitive power, specifically the sense of personal competence (Ozer and Bandura, 1990, p. 472).

Empowerment thus involves recognizing and enhancing the competencies of individuals, counteracting feelings of powerlessness by enabling them to "define their own needs and act accordingly" (Lord and McKillop-Farlow, 1990, p. 3). Inducing cognitive dissonance (Bouchard and Gagnon, 2000) in an individual leads to a new perception of themselves and their abilities, achieving the ultimate goal of the empowerment intervention: personal control over one's own life. The role of the facilitator or support group is to create conditions that enable empowerment by fostering internal and external factors. The intervention focuses on imparting skills and showing confidence in the individuals. Having a

significant person who listens actively and highlights strengths rather than weaknesses, in line with the strengths perspective (Anuradha, 2004), is necessary for empowerment. However, community participation is the sufficient condition.

Participation itself has an empowering and self-reinforcing effect. As people gain confidence, they seek more opportunities to participate; in turn, their participation in community activities increases their confidence and sense of control (Lord and McKillop-Farlow, 1990, p. 6). Community participation thus serves as a platform for skill development and social validation of individual abilities.

From the empowerment perspective, participation in community activities is central to the empowerment process for people with disabilities. This participation facilitates the integration of internal and external factors that make empowerment possible. However, for children with Down syndrome aged 4 to 6 who struggle with walking, their difficulty significantly limits participation in community or group activities.

In summary, we observed that children with Down syndrome aged 4 to 6 who struggle with walking face considerable challenges in participating in community or group activities. Yet, the empowerment perspective emphasizes that participation in such activities is essential to the empowerment process for people with disabilities.

1.3. Research Question

How does the empowerment process occur for children with Down syndrome aged 4 to 6 who have difficulties walking?

1.4. Research Hypothesis

In this study, we hypothesize that for children with Down syndrome aged 4 to 6 who have difficulties walking; the empowerment process is facilitated by interventions from specialized educators.

1.5. Research Objective

The objective of this study is to understand the empowerment process for children with Down syndrome aged 4 to 6 who have difficulties walking.

1.6. Significance of the Study

1.6.1. Scientific Significance

On a scientific level, this work will contribute to increasing knowledge about individuals with Down syndrome in general, particularly those exhibiting defiance or noncompliant behaviors. It aims to enhance understanding within the fields of educational sciences and specialized education. Through this study, the scientific community will better recognize the place of individuals with Down syndrome in academic research.

1.6.2. Social Significance

The study aims to enable children with disabilities to fully showcase their potential in society, proving that everyone has a role to play regardless of the type or degree of disability. Parents of these children often feel burdened by having a child who does not fit societal norms, sometimes keeping them at home out of frustration or disappointment.

Many families of children with autism believe these children are incapable of learning, viewing them as cursed or burdened. Socially, this study can help change these perceptions, showing that autistic children can develop autonomy and succeed once their specific needs are identified and addressed. It also aims to help families understand that autism is not a fatality and that they can provide emotional and even professional support for their child's development toward autonomy.

1.6.3. Personal Significance

On a personal level, this research will help me understand the complexity of attention and its fundamental role in school adaptation and cognitive functions. Additionally, I will gain insight into the challenges autistic school-aged children face, particularly with attention and learning difficulties. Finally, the study will allow me to discover positive reinforcement strategies that may help reduce attention deficits in autistic children within the context of school adaptation.

CHAPTER 2: LITERATURE REVIEW

2.1. DOWN SYNDROME (TRISOMY 21)

Down syndrome, or trisomy 21, is not a disease but a congenital malformation. According to Taupiac (2008), it is described as: “a condition, a set of alterations caused in the physical and mental development of the subject by an extra chromosome.” It is caused by the presence of an extra chromosome on the 21st chromosome pair, meaning that instead of having a total of 46 chromosomes, an individual with Down syndrome has 47. The chromosomal modification present in people with Down syndrome impacts their physical traits and their physical, socio-affective, and particularly intellectual development. Development is slowed, especially intellectual development. While individuals with Down syndrome share common traits, they also have significant differences. Each person with Down syndrome has characteristics related to their syndrome but also inherited traits from their parents and acquired characteristics through education.

According to the WHO, one in 800 children is affected by this malformation, which is the leading cause of intellectual disability. There is still no treatment for this chromosomal aberration.

2.1.1. Trisomy 21 and its Etiology

According to Brin-Henry et al. (2004), trisomy 21 is a genetic disease caused by the presence of an extra chromosome on the 21st pair in cells. This extra chromosome explains the full range of symptoms. Trisomy 21 is therefore a genetic disorder. It was first described in 1866 by British physician John Langdon Down. His name was later given to the condition. Until recently, the term “mongolism” was used in reference to the facial characteristics of people with Down syndrome, but this has now been replaced by trisomy 21 or Down syndrome. It was only nearly a century later, in 1959, that French researchers Gauthier, Lejeune, and Turpin discovered that cells in individuals with Down syndrome contain 47 chromosomes instead of the usual 46. This is a chromosomal aberration, a “nature’s accident.” There is no cause or blame to be found.

There are three forms of trisomy 21 (Rondal, 1986):

- ✓ The most common (90%) is the "free homogenous" trisomy. The chromosome distribution error occurs during mitosis, at the time of gamete (sperm and egg) production, or during the first cell division (meiosis).
- ✓ In 5% of cases, an error occurs during the second or, more rarely, the third meiosis. The developing embryo will have both normal cells (46 chromosomes) and trisomy 21 cells (47 chromosomes). These are called "mosaic trisomies."
- ✓ The remaining 5% is "translocation trisomy 21": part or all of the extra chromosome 21 attaches to another chromosome, typically chromosome 14 or 22. A person can be a healthy carrier of a chromosome 21 translocation ("balanced translocation") and pass the anomaly on to their children, who may develop trisomy 21 ("unbalanced translocation").

2.1.2. History and Evolution of the Concept

Trisomy 21, or Down syndrome, is the first chromosomal aberration described in humans.

1838: Jean-Étienne-Dominique Esquirol first described patients whose traits strongly resembled those of trisomy 21, noting "soft muscles, a large belly, a large head, widely spaced eyes, a flat nose, thick lips, a hanging tongue, mouth half-open, short and thick neck, and a swollen face, making it appear square." However, at the time, he did not regard this as a specific clinical entity, as noted by Michèle Carlier in her book *Déficiences intellectuelles et intégration sociale* (p. 354).

1866: Édouard Séguin expanded on this description based on the observations of Paul and Cécile, documented in his work *Traitement moral, hygiène et éducation des idiots* (1848). At that time, he concluded, "There is no mistake; the physiological disorders were of secondary importance, the intellectual and moral state was the only serious issue, without being alarming; no abnormal instincts revealed the characteristic nervous disorders of idiocy, I was dealing with a simply backward child." Later, in his second book *Idiocy and its treatment by the Physiological Method* (1866), he referred to "furfuric idiocy" or "furfurous cretinism," comparing the milky complexion of these individuals to that of wheat bran.

1866: Simultaneously, John Langdon Down published a paper titled *Observations on an Ethnic Classification of Idiots*, in which he described the symptoms of this syndrome in detail and concluded, "I have had the opportunity to observe a considerable number of idiots and

imbeciles and found that many could be exactly classified among the major human races other than those from which they originate." Thus, J. Langdon Down classified these individuals as belonging to the "Mongolic or Mongolian variety." This classification led to the term "infantile mongolism" in reference to the facial features of Mongolian peoples, which persisted for nearly a century.

1958: Jérôme Lejeune, Raymond Turpin, and Marthe Gauthier identified a genetic anomaly 47 chromosomes instead of 46 among these individuals, confirming that the extra chromosome was the 21st, hence the name "trisomy 21."

1960: In the classification adopted by the Denver International Committee, "mongolism" was officially renamed "trisomy 21."

1961: While "mongolism" was still widely used, a group of scientists advocated for the term "Down syndrome" to replace it, notably in the British medical journal *The Lancet*.

1965: The World Health Organization (WHO) officially replaced the term "mongolism" with "trisomy 21" or "Down syndrome."

2000: A new milestone was reached with the sequencing of chromosome 21. In the same year, the English magazine *Nature* published the complete sequence of chromosome 21, established by 62 international researchers (Hattori et al., 2000).

2012: The United Nations declared March 21st as World Down Syndrome Day, symbolically linking the 21st chromosome to the 21st day of March.

2.1.3. Prenatal Screening

Only a karyotype study can definitively diagnose trisomy 21. Before June 2009, prenatal screening for trisomy 21 typically involved two stages: an ultrasound in the first trimester of pregnancy, followed by a blood test, which has been routinely offered to women since 1997, establishing a global risk of trisomy 21 based on the mother's age. This can be done at any medical laboratory. If the test result suggests a higher risk, the expectant mother may proceed to amniocentesis (amniotic fluid sampling), which carries a risk of miscarriage between 0.5% and 1%. In the case of a confirmed trisomy 21 diagnosis, the mother can decide whether or not to continue the pregnancy. Since June 2009, the French National Authority for Health (HAS) has mandated combined first-trimester screening and specified the procedures to

improve the quality of prenatal screening, minimizing error rates that could lead to unnecessary amniocentesis. This combined screening considers factors like maternal age, fetal heart rate, ultrasound measurement of the nuchal translucency, and a biochemical analysis of maternal serum conducted by a certified laboratory. The National Consultative Ethics Committee (CCNE) recommends the use of a new genetic test, which analyzes fetal DNA extracted directly from the mother's blood starting from the 11th week of amenorrhea. This test greatly reduces the need for amniocentesis without fundamentally altering the current procedure, which is designed to give parents the option of a free and informed choice about continuing the pregnancy.

2.1.4. Anatomical and Clinical Signs

Particular Morphotype Like everyone, individuals with trisomy 21 inherit physical traits from their parents. However, they share a set of common dysmorphic traits:

- At birth, the closure of the fontanelles is often delayed.
- The head circumference and frontal lobe size are reduced (brachycephaly).
- The neck is flat.
- The face is generally round with a flat profile.
- An epicanthus is common, along with Brushfield spots around the iris (small, irregular, white spots forming a ring).
- Strabismus and blepharitis are common, and congenital cataracts may sometimes be present.
- The nose is short, small, and triangular with narrow nostrils; the nasal cavity and nasal fossae are dysplastic.
- The skin is more sensitive to cold and fragile.
- The ears and external auditory canal are smaller.
- The hands and feet are also smaller than average.
- There may be cracks in the lips, which are often thick.

- The oral cavity is reduced: the mouth is small (microstomia) with a hypotonic, protruding tongue, meaning it tends to stick out of the mouth as the child cannot control it well. This is not macroglossia, but a pronounced spread of the tongue due to hypotonia, which is rarely observed in infants.
- The palate is often vaulted.
- The upper and lower jaws may have dental anomalies in number, structure, and shape.
- Adenoids and tonsils are often enlarged.
- The neck is usually short.
- If the person has a congenital heart defect, there may be an anterior chest deformity.
- Abdominal muscle hypotonia typically results in a large abdomen.
- As adults, individuals with Down syndrome may develop poor muscle tone and reduced mobility

2.1.5. Impact of Trisomy 21

2.1.5.1. The Intellectual Aspect

Intelligence is the result of interactions between the child and their environment. All the biological complexity of the human being is intertwined with the environment in which the person evolves, ultimately resulting in the development of a fully formed individual. In order to function at its potential, the brain needs various biochemical substances such as neurons (with 11 million neurons forming a wiring system to carry all information), as well as chemical elements that fuel this system.

These include amino acids like serine and cysteine, and neurotransmitters like serotonin, which are produced by the thalamus and pituitary gland. If these substances are affected by a biochemical imbalance, it could result in poor brain function. Thus, it is a very complex network involved in a person's cognitive abilities, not only on a biochemical level but also on an environmental one.

Based on these analyses, Piaget demonstrated that "intelligence is a balance, and this balance is the result of an interaction between the subject and their environment, an

interaction that is influenced by both the subject's characteristics and those of the environment."

For individuals with intellectual disabilities, their development follows the same path as demonstrated by Piaget, but at a slower pace (for example, an adolescent with an intellectual disability could take more than two years to complete the sensorimotor stage). Importantly, their development stops earlier.

For instance, people with mild intellectual disabilities typically experience developmental stagnation early in the concrete operational stage, and may have difficulty organizing the information they receive from the outside world to understand, store, and later use it for problem-solving. "When faced with a slightly complex problem, they return to a preparatory thought process."

Therefore, their ability to make logical connections between things is limited, especially when the problem becomes more complex. For individuals with moderate intellectual disabilities, their intellectual development seems to halt at the preparatory stage, while those with severe or profound intellectual disabilities often stop at the sensorimotor stage. Much of their learning occurs through imitation and repetition (Jean François Martin, 2007, p. 58). According to Cuilleret (2003), individuals with Down syndrome tend to function with mild or moderate intellectual delays. This contradicts earlier descriptions, which suggested that their delay was very severe. They learn slowly and need to be taught many things that typically developing children learn on their own (Dionne, Langevin & al., 1999). Indeed, their intellectual development usually stops early in the abstract operational period (Dumas, 2005). As a result, they struggle with abstract concepts. Consequently, the slowing of development and the incompleteness of cognitive structures are critical elements to consider in supporting these children.

People with Down syndrome have a strong relational capacity. Not long ago, they failed to demonstrate this, as many were institutionalized or limited to a very small family circle. It was also assumed that they had very limited abilities and were overprotected. However, they have always been recognized for their amiable and affectionate nature. Today, they have the opportunity to evolve in various contexts and with a variety of people (Touraine, Fréménille, and Sanlaville, 2011).

According to the online Larousse Encyclopedia, there are certain intellectual traits common to children with Down syndrome. A child with Down syndrome learns more slowly than others, their curiosity to explore their environment is limited, and their interest in various activities may be absent or poorly maintained over time. However, when educational strategies are properly adapted, they may be able to learn a lot and do so effectively. This, however, is conditioned by their health status, requiring medical intervention. Vision and hearing problems are very common among individuals with Down syndrome, and their correction is possible. It is clear that any dysfunction in these areas will have disastrous consequences for the information intake process and its cerebral interpretation.

A child with Down syndrome struggles to work independently without direct and individualized help. They also have auditory perception problems—they do not capture all sounds clearly, and their brain's interpretation of auditory information is less effective, so they respond less well to commands. They find it difficult to follow instructions given to a group and have trouble retaining and processing multiple sequential instructions. Therefore, instructions should be given one at a time, and it is important to ensure they are understood.

Additionally, they may have difficulties with expressive language. In terms of motor skills, a child with Down syndrome faces difficulties with both gross motor skills (balance, tone, anti-gravity muscle movement) and fine motor skills (such as using a pen or scissors). They also struggle to accept rapid or abrupt changes in the tasks they are asked to do. They do not understand that they need to leave an activity unfinished or abandon something they enjoy. They may only be able to concentrate for short periods, and often the issue is more about fatigue than loss of concentration. In their interactions with peers, they are often isolated—whether by choice, because they cannot keep up with the fast-paced stimuli, or because others tire of accommodating their slower pace (Dumas, 2005).

2.1.5.2. The Social Aspect

Living without interaction with peers is unthinkable for most of us. Humans need to interact with others, and lack of interaction over a long period can lead to cognitive, emotional, and even medical issues. Research shows that 30% of individuals with intellectual disabilities never speak on the phone, and 18% never socialize with their family, friends, or other people in their community.

One of the challenges is to encourage as much interaction as possible. Parents are often responsible for developing this network by creating activities. Usually, when it comes to a child, the problem is not always apparent, but the deeper the gap between an individual with intellectual disabilities and those around them, the more likely their social network will begin to fray (Jean François Martin, 2007, p. 71).

2.1.5.3. Social Skills

Social skills are not limited to observable behaviors, such as how well one behaves at a restaurant; they also refer to an understanding of oneself and the environment in which one lives. An individual with an intellectual disability has their own perception of the social world they inhabit and reacts accordingly. This process of creating their social world begins with the first attachment and unfolds over several years, with some researchers suggesting that it may continue into the primary school years. It is during this process that an adolescent learns to trust their environment and the people around them, demonstrating social skills. For a child with an intellectual disability, the process is not different. However, there needs to be more rigorous support to ensure that their representation of the social world is well-balanced. Moreover, it is necessary to provide more opportunities for them to practice their social skills (Jean François Martin, 2007, p. 71).

2.1.5.4. The Emotional Aspect

We all have a concept of the self that refers to how we perceive ourselves. According to Adler Towne (1998), the concept of the self is tridimensional, meaning it has three dimensions: the personal self (who we truly are), the ideal self (who we want to be), and the external self (the image we wish to project to others).

Sometimes, the external self aligns with the personal self, but when it doesn't, we end up wearing "masks" to preserve the image we believe others have of us. For individuals with intellectual disabilities, the external self is almost always in agreement with the personal self, so there is no need for masks.

The concept of self also influences how a person reacts to others and the situation. It is impossible to discuss emotions without mentioning self-esteem. Self-esteem is, in a way, a judgment we make about ourselves. When this judgment is positive, life seems wonderful because we believe in our abilities and appreciate who we are.

At other times, this judgment can be negative, leading to daily suffering. André and Lebord (1999) mentioned that there are three essential levels of self-esteem: the first concerns self-love, which refers to unconditional love "despite one's flaws, limits, failures, and dreams." The second level concerns self-perception, representing an evolution focused on oneself, not based on reality, but rather on the interpretation we give it. Finally, the third level refers to self-confidence, meaning feeling "capable of acting appropriately in important situations."

These three levels can also be found in individuals with intellectual disabilities, but they are fragile due to a lower self-esteem compared to the general population. Therefore, it is necessary to help them modify their self-image by allowing them to experience successes. They often experience more failures than others, which weakens their self-esteem. It is important not to assume they are unaware of this. A large majority of children with intellectual disabilities understand their limitations and can identify their differences from others.

2.1.6. Disorders Inherent to Down Syndrome (T21)

2.1.6.1. Neurocentral Disorders

✓ Muscle Hypotonia

Muscle hypotonia is not global but affects certain muscle groups, particularly those of the shoulder girdle, which impacts respiration, and the buccofacial area. This physiological hypotonia disrupts posture and facial expressions in babies with Down syndrome. These children express their emotions and needs less clearly through these primitive forms of communication and receive fewer appropriate responses to their demands. Interactions with those around them are therefore impoverished both qualitatively and quantitatively.

According to Ammann (2012), this tone-motor deficit results in slow responses to stimuli, which can lead parents to think their child does not react to their stimulations. Many parents find their baby "very calm and quiet," which may lead them to encourage less participation in daily family life. However, the child does respond, but with a delayed reaction and less liveliness. It is important to consider this and encourage the child's responses to foster interaction. On the contrary, some parents may overstimulate their child by presenting

multiple toys, constantly engaging them, or consulting every possible specialist. In such cases, our role is to temper this approach and listen to what the child may initiate.

Furthermore, if buccofacial muscle hypotonia is not rehabilitated, it can lead to swallowing and phonation issues, with cheek sagging and tongue protrusion. Hypotonia of the eye muscles results in delays in oculomotor coordination, causing slow exploration that hinders the construction of the surrounding world. There are also difficulties with motor skills and the speed of right/left scanning. These issues affect the maturation of thought, particularly deficits in global thinking and synthesis (Morel & al., 2004). The child with Down syndrome tends to focus their gaze on details and does not take in the whole scene.

Finally, muscle hypotonia impacts the development of both motor skills and psychomotor abilities, which will be discussed further.

✓ **Perception of Time**

Concepts of rhythm and time are often very disturbed in children with Down syndrome. Rhythm disorders impact many areas, especially what are called "archaic" rhythms. These children often exhibit:

- Delayed and poorly timed motor responses, whose consequences will be discussed in the next chapter.
- Disruptions in biorhythms, which affect the construction of time.
- Speech rhythm disorders.

Speech rhythm problems lead to difficulties in speaking, and sometimes explosive and poorly timed speech. It is common to observe incorrect syllable repetition, which may suggest true stuttering, with associated synkinesis (involuntary muscle contractions during voluntary movements of other muscles), or palilalia, which is the spontaneous, involuntary repetition of syllables. The child cannot stop repeating a syllable before moving to the next. This lack of rhythm control also causes omissions of syllables and/or phonemes, as well as substitutions and assimilations of phonemes, adding to articulation difficulties (Ammann, 2012).

Additionally, rhythm disorders affect pneumophonic coordination, which requires timing. It is noted that in children with Down syndrome, the inspiratory phase is short or even

nonexistent, and the expiratory phase is short and poorly controlled in its flow, which prevents the voice from having sufficient tonality.

According to Ammann (2012), mastering the sequence of events in time is crucial for language development at several levels. Symbolically, the understanding of chronology is essential for constructing a story. This unique relationship with time also impacts the mastery of verbs and their conjugation. For example, individuals with Down syndrome often use the present tense when the future or conditional tense would be more appropriate, which can lead to misunderstandings.

These issues are also significant for acquiring syntax, which is based on the order and succession of words. The concept of succession is crucial both in terms of content (organizing thoughts) and form (organizing words).

2.1.6.2. *Other Disorders*

According to Cuilleret (2007), children with Down syndrome may present other specific neuromotor disorders, such as growth problems, delayed laterality, cerebellar disorders, sleep disturbances, and slow, prolonged cortical maturation. Cerebellar disorders are responsible for difficulties in movement coordination and balance, affecting spinal stability and walking. Furthermore, children with Down syndrome typically have significant latency time. This latency may lead to the impression that the child is abandoning the conversation or is uninterested, when in fact; they simply need more time to respond to a stimulus. This increased latency disrupts the establishment of turn-taking in conversation, a prerequisite for oral language development (Bigot, 2000).

In typically developing children, cortical maturation is usually complete around the age of 16, but this is not the case for children with Down syndrome, as it seems to continue until around 22 to 24 years old. These new insights could lead to changes in the duration and setup of educational and/or rehabilitative plans.

2.1.6.3. *Motor and Psychomotor Disorders*

The expression of psychomotor disorders varies in intensity, but they are always present. Hypotonia associated with ligament hyperlaxity, difficulties in acquiring global and postural balance, and motor coordination problems all hinder the development of these children, requiring intervention. Furthermore, issues with grasp and motor coordination,

global and manual, lead to difficulties in exploration, movement disorders, and, for older children, writing difficulties. Delayed psychomotor development can also affect the parent-child bond. For instance, prolonged lying or sitting does not encourage the child to make requests of the adult. Also, while a typically developing child will begin to stir, twist, and reach out towards an adult by 5 to 6 months, a child with Down syndrome will take longer to react and adjust their tone (DenniKrichel, 2000). Children with Down syndrome also experience motor disorders, including:

- **Respiratory issues:** Hypotonia of the respiratory muscles affects the development of the rib cage and respiratory capacity, leading to increased vulnerability to pulmonary and ENT infections.

- **Delayed acquisition of walking:** Between 14 and 28 months, due to hypotonia of the foot muscles. Additionally, movement is essential for perceiving environmental stimuli. To sense a change in position or imbalance, movement must occur. For effective visual exploration, precise eye movements are crucial.

2.1.6.4. Intellectual Disorders

People with Down syndrome usually have an intellectual disability ranging from mild ($IQ < 70$) to moderate ($IQ < 55$), but it can sometimes be severe. Children with Down syndrome often experience attention and memory problems. Attention issues arise from disturbances in sensory discrimination and the speed of stimulus perception. The ability to visually and auditorily discriminate is less efficient in children with Down syndrome than in other children with intellectual disabilities. Furthermore, perceptual speed is also impaired, resulting in significant latency times for these children (Marcelin, 2002). The distractibility and impulsivity of children with Down syndrome, combined with a slow adaptation to novelty (preference for novelty between 8–16 weeks in typical children versus 17–29 weeks in children with Down syndrome), contribute to these attention difficulties (Carette, 2002). Regarding memory issues, there are disruptions in the memorization process, which requires the organization of information.

These disruptions are linked to deficits in conceptual categorization and symbolic coding of perceived information. As a result, memory retention is less significant due to intellectual disability (Marcelin, 2002). Furthermore, children with Down syndrome typically have better visual memory and invest less in auditory memory.

According to Seynhaeva and Nader-Grosbois (2005), children with Down syndrome follow similar developmental sequences to typical children but progress more slowly and exhibit greater heterochrony (differences in developmental rhythms across domains), especially in the early sensorimotor stages. However, according to Ammann (2012), these claims are only true for specific developmental milestones (such as walking or first words). Overall, it appears that these delays do not occur in the same manner as in typically developing children. The difference lies in the worldview and thought process of individuals with Down syndrome. Their reasoning is more analytical, which may explain difficulties in acquiring vocabulary and reading. Additionally, accessing abstraction is challenging: extracting key elements and relating them is often impossible. There is a significant connection between early reasoning and the emergence of symbolic language (language as a tool for thinking). This emergence occurs when the child is capable of both diverting an object from its usual function and coordinating their actions to achieve a delayed goal (Morel et al., 2004).

2.1.6.5. Communication and Language Disorders

The development of communication and language in children with Down syndrome is significantly delayed. A child with Down syndrome is often described as very calm, even apathetic, and less reactive, entering into a genuine communication loop with their parents later than typical children.

• Eye contact and joint attention

According to Vinter (1999), sustained eye contact between the mother and her child with Down syndrome typically occurs around 7 or 8 weeks, whereas, with a typical child, it usually happens around 1 month. This delay could be due to slower maturation of the macular area.

Moreover, these early eye contacts are of short duration. According to Morel et al. (2004), a typical infant spends 80% of feeding time looking at the mother's lower face, who frequently speaks to them, whereas a child with Down syndrome may have a "vacant" gaze. This difficulty in focusing is due to neuromotor reasons (relative hypotonia of the eye muscles), neurophysiological causes, and psycho-affective factors; the mother of a child with Down syndrome generally struggles to engage in conversation during feeding times. Joint attention, which emerges after establishing eye contact, is also delayed in children with

Down syndrome. Vinter (1999) provides three explanations for the difficulty in establishing the triadic relationship (mother-object-child):

1. The child's eye contact with the mother is intense and persists for longer periods (up to 12 months, whereas in typical children, it diminishes after 4 months to explore the external environment).
2. There is little back-and-forth gaze between the mother and the object. The child with Down syndrome tends to fixate on an object and shows little interest in other environmental objects. This delay in the evolution of eye contact is linked to the slow construction of knowledge about the surrounding world and vocabulary (Rondal, 1986).

• Turn-taking

Turn-taking can be gestural (e.g., the child shakes a rattle, the adult imitates, stops, the child repeats, etc.) or vocal (the child produces a sound that is imitated by the mother and then repeated by the child) before becoming verbal. The establishment of turn-taking is fundamental for learning dialogue. This pre-conversational reciprocal exchange is typically established by the end of the first year in typical children but is not seen until 2.5 years in children with Down syndrome (Rondal, 1986).

It is difficult for children with Down syndrome to establish this turn-taking because they tend to vocalize while their mother speaks, unlike typical children who vocalize during silent moments. This leads to numerous "vocal collisions," where both parties speak at the same time. Vinter (1999) offers two hypotheses to explain these "vocal collisions": it may be due to the child's difficulty inhibiting their vocalizations and/or the insufficient time given for the child to respond, as the adult often speaks for them. As a result of these difficulties, the establishment of pseudo-dialogues is hindered.

The early establishment of the communication loop with the adult and this pre-conversational dialogue are priorities in early intervention, as they form the foundation for language development (Rondal, 1986).

• Social Smile

The social smile is the semi-voluntary smile observed in typical children around 2 or 3 months in response to social situations. The onset of this social smile is also delayed in

children with Down syndrome, who generally smile later and less often than typical children. This delay and the low frequency of social smiles may hinder the development of the parent-child bond (Rondal, 1986).

• **Pointing**

At age 3, children with Down syndrome begin pointing with vocalizations, but they do not look at their partner. This makes it difficult for the adult to interpret these vocalizations, which seem not to be directed at them. Often, the child will hand an object to the adult without making eye contact, and conversely, the adult may give an object to the child without waiting for eye contact.

• **Imitation**

Imitation by parents is crucial in language development, as it encourages children to imitate their parents. Imitation skills, both gestural and vocal, are impaired in children with Down syndrome. Imitation forms the basis of knowledge and language construction. Given the child's limited reactivity, it is crucial to capture even the faintest reactions and behaviors (gestures, vocalizations, etc.) to make sense of them.

• **Babbling**

According to Rondal (1986, 2009), the development of babbling in children with Down syndrome follows the same progression as in typical children but with a temporal delay. Babbling typically begins around 9–10 months in children with Down syndrome, which is 2–3 months later than in typical children. Vinter (1999) notes that babbling in children with Down syndrome is unstable, and their consonantal repertoire is particularly stereotyped, which partly explains the delay in acquiring first words and the persistence of significant phonological issues.

• **The Lexicon**

In children with Down syndrome, the development of the lexicon is generally very slow. Children with Down syndrome typically experience about a one-year delay compared to "typical" children in the emergence of their first words (around 10 to 18 months in typical children). At 22-24 months, the proportion of words with conventional meaning is only a few percent in children with Down syndrome, compared to 40-50% in typical children (Rondal,

1986). Additionally, the lexical explosion that normally occurs after two years of age in typical children is not observed in children with Down syndrome: their lexical stock increases slowly but continuously. Research by Polisenska and Kapalkova (2014) supports the idea that the constitution of the lexicon in children with Down syndrome is delayed (rather than atypical) compared to children with typical development.

• **Articulation and Speech**

According to Rondal (1986), children with Down syndrome also face difficulties articulating the sounds that make up words in their language. Their speech often remains less intelligible than that of younger typical children. The articulation difficulties mainly concern the final consonants that appear last in typical development, i.e., the constrictives (f, v, j, ch, s, and z) and the liquid "l". These difficulties are likely due to the combination of several factors: oro-motor difficulties (imprecise articulatory movements) linked to hypotonia of the bucco-facial muscles (which has been repeatedly mentioned), delayed neuromotor maturation, and sometimes hearing deficits ranging from mild to moderate. Rhythm and temporal processing disorders have been highlighted to explain speech difficulties in children with Down syndrome. These are compounded by perceptual difficulties that prevent the child from grasping the similarities and contrasts between the phonemes of the language (Bigot, 2000).

• **Syntax**

By the age of 4, when the child with Down syndrome has a sufficient lexical register, combining two or three words to form basic sentences is possible. Up to 5-6 years of age, children with Down syndrome will produce language that can be described as "telegraphic," as it contains very few morphosyntactic markers: the child often omits articles, prepositions, adverbs, conjunctions, etc., and does not conjugate verbs. The child with Down syndrome thus only retains the most prominent aspects of objects or events and expresses them without any grammatical structure except for word order (e.g., "Cat sleeps"). Bigot (2000) also indicates that language disorders in children with Down syndrome are due to a failure to grasp the relationships between subjects, actions, and objects. Indeed, children with Down syndrome have difficulty perceiving and encoding the rules governing relationships between the various stimuli they perceive.

• Understanding

The understanding of children with Down syndrome is often situational, meaning they can understand a statement if they are in the presence of external cues that help them infer the meaning of the words and sentences presented to them. Indeed, when these children are placed in more demanding comprehension tasks where they do not have access to extralinguistic context, their understanding of language structures is often imperfect, especially if the statement is complex (e.g., passive sentences or those containing subordinate clauses).

• Non-verbal Communication

The majority of communication (about 70%) is conveyed through non-verbal means. The role of facial expressions is therefore crucial during interactions, as they support and accompany the verbal message. However, in individuals with Down syndrome, facial expressions are often inappropriate in relation to their speech: they are either absent or excessive. This mismatch can therefore surprise a listener who is not familiar with these particularities.

In summary, the development of prerequisites for oral language is delayed in children with Down syndrome, making their entry into a communication dynamic more difficult. Furthermore, while the child with Down syndrome can access a combinatorial language that can be relatively rich in terms of vocabulary, it remains underdeveloped in terms of syntax. Regarding understanding, individuals with Down syndrome rely heavily on extralinguistic context to comprehend statements, and any elongation of speech or grammatical complexity makes understanding problematic.

• Immunological Disorders

From conception, due to genetic modifications, the role of the placenta's immune barrier is diminished. The placenta is therefore partially permeable to external aggressions, which explains the risk of additional malformations. Furthermore, immune deficiencies make individuals with Down syndrome more vulnerable than others to allergies, eczema, and ENT infections (e.g., rhinitis, otitis, laryngitis). These infections affect speech perception and contribute to the delayed development of language in children with Down syndrome.

• Sensory Issues and the Development of Communication and Language

Sensory disorders affect almost all children with Down syndrome. All the sensory organs are affected, not at the periphery but in the perception of messages received at the central level. Since all five senses are generally affected, this leads to dysfunctions in the development of the cognitive system in babies with Down syndrome. This aspect alone makes early intervention essential from the first months of the child's life (Cuilleret, 2007).

• Sensitivity

Sensory disorders cause difficulties in perception and sensation. In terms of exteroceptive sensitivity (which corresponds to the sense of touch), children with Down syndrome have difficulty perceiving information such as "It's cold / soft / sharp / cutting," which could potentially put them in danger. Furthermore, children with Down syndrome touch objects less than typical children, their tactile exploration is less coordinated, and they have difficulty recognizing an object they have previously touched. These children also present proprioceptive sensitivity issues, which explain the difficulty children with Down syndrome have in mastering body movements. Regarding interoceptive sensitivity, pain is perceived later and differently, seeming "diminished." As a result, the child with Down syndrome rarely complains or does so too late. For example, they may not react to a painful ear infection or a more serious pain, preventing parents from responding quickly.

• Balance

Balance disorders are constant and long-lasting. The use of quadrupedal movement when transitioning from sitting to standing persists. Furthermore, walking and moving across narrow surfaces are usually disturbed (Carette, 2002).

• Hearing

Children with Down syndrome are prone to rhino-pharyngeal episodes and otitis, often leading to conductive hearing loss. If undetected and untreated, this can negatively impact language development. It is worth noting that sensory hearing loss is rarer and varies in severity depending on the case.

However, these hearing disorders have a medical response and are not the most problematic. Indeed, children with Down syndrome also suffer from "listening disorders," meaning their perceptions are misinterpreted at the central level. Without specific education, these children experience a narrowing of their auditory field, especially for high-pitched sounds, above 4,000 Hz. The sound is quickly transformed into a painful sensation, which explains the behavior of some children confronted with loud noises like a telephone ring or fireworks. Another aspect of listening disorders is linked to difficulties in perceiving rhythms: it is not easy for a child with Down syndrome to understand and interpret the "duration" parameter. These disturbances in listening must be related to the delayed emergence of foundational skills such as turn-taking, vocal imitation, and babbling. These disorders also lead to difficulties in establishing the phonatory system and transcribing perceptual messages. Indeed, the child with Down syndrome often makes occlusive/constrictive, voiceless/voiced, and oral/nasal vowel confusions.

• Taste and Smell

It seems that in children with Down syndrome, the taste buds are distributed differently on the tongue compared to typical children. They are located at the periphery and in the central part of the tongue. For children with Down syndrome, the appreciation of tastes is complicated. However, oro-motor therapy may help alleviate some of these issues. This diminished sense of smell can and should be trained for two reasons: first, to recognize danger signs such as the smell of smoke, a pungent or sharp odor, and second, to adapt to social behaviors, distinguishing between pleasant and unpleasant smells.

• Vision

Children with Down syndrome are often subject to eye and/or orthoptic issues (myopia, strabismus, cataracts, etc.). In addition to these visual disorders, which are also found in typical children, individuals with Down syndrome specifically present "gaze disorders."

Rondal (1986) described a slower maturation of the macular region in children with Down syndrome, which may be caused by hypotonia in the ocular muscles and issues in brain maturation. Oculomotor disorders were mentioned earlier. They are responsible for difficulties in establishing effective fixation points for gaze. In children with Down syndrome, these fixation points are unstable, which explains why, without early education, the child perceives absurd and distorted images that hinder the establishment of environmental

exploration, the acquisition of temporal-spatial concepts, and deictic interactions, which are the foundation of communication.

Furthermore, the child with Down syndrome has difficulty fixing their gaze: they often have temporary nystagmus, triggered by the instability of the eye muscles, making early educational intervention important. These gaze disorders are linked to difficulties in establishing prerequisites for communication, including eye contact, joint attention, pointing, and gestural imitation.

All senses are necessary to create a complete representation of the environment. One of the speech therapist's goals is to connect the different perceptions of the child in order to give meaning to the objects around them. Furthermore, some studies have revealed that children with Down syndrome struggle to focus on the relevant aspect of a stimulus. If not addressed, this difficulty may lead to failure in communication situations and could be the cause of the lexical deficits mentioned earlier. A child with Down syndrome thus needs more stimulation than a "typically developing" child, but above all, the presentation of these stimuli must be adapted to their perceptive abilities (Bigot, 2000).

2.1.7. The Care for Down syndrome

Caring for a child with Down syndrome requires several interventions:

2.1.7.1. Medical Care

Every child with Down syndrome must receive medical monitoring for their age group, with particular attention in certain areas. The frequency of consultations should be high in early childhood, but after three years of age, they become annual. Systematic follow-up is essential due to the specific expression of pain in individuals with Down syndrome, which persists at any age: slow response, hypotonia, difficulty indicating if they are in pain, describing their sensations, and language disorders. As a result, while an ordinary person may express discomfort or unease, a child with Down syndrome might only express it through a change or disturbance in behavior, withdrawal, regression of learned skills, or signs of refusal (Bénédicte, de Fréminville, & al., 2007, p. 273).

2.1.7.2. *Physiotherapy*

The physiotherapist prevents the appearance of postural disorders. The project is built and regularly reevaluated individually for each child according to medical prescriptions and physiotherapeutic assessments. The goal is to support the child's neuromotor development and prevent deficiencies and static anomalies that emerge in the absence of intervention due to hypotonia and hyperlaxity. Early physiotherapy (around 6 months) is essential and should be adapted to the characteristics of this condition. This follow-up will help prevent, detect, and treat orthopedic disorders that are common in children with Down syndrome. Physiotherapy objectives include:

- Slowing down and reducing muscular hypotonia.
- Helping the child with Down syndrome become aware of their body and its limits through massages and pressure.
- Supporting the child in their motor progress.
- Quickly and regularly establishing good gestural habits.
- Monitoring physical development and motor abilities (Rethoré & al., 2005).

2.1.7.3. *Psychomotor Therapy*

The psychomotor therapist treats movement and gesture disorders in their neuro-motor, emotional-tonic, and cognitive dimensions. They aim for efficient psychomotor organization, focusing on body schema and body image work. The psychomotor therapist's goals are to:

- Improve the child's awareness of their body.
- Develop self-confidence.
- Help the child express their emotions and refine emotional control.
- Enhance non-verbal communication and relationships.
- Optimize adaptation and learning abilities.
- Reduce developmental delays compared to peers (Renaud, Touraine, & al., 2011, p. 18).

2.1.7.4. Occupational Therapy

Occupational therapy helps individuals with Down syndrome achieve autonomy in daily life activities. The occupational therapist provides compensatory methods, technical aids, and environmental adaptations based on the child's needs. They also promote the development and functionality of fine motor skills (stability, bimanual coordination, sensitivity, and dexterity), aiming to improve writing skills and the ability to trace letters.

2.1.7.5. Psychological Support

Psychological support for individuals with Down syndrome focuses on two complementary axes:

- **Family:**

As with any child, the family constitutes the essential framework for the development of a child with Down syndrome. From the moment of diagnosis (whether prenatal or postnatal), the family must begin a difficult and often lengthy process of reorganization to give their child with Down syndrome the place they deserve in the family structure. Certain support systems implemented by associations can provide additional assistance, as can parent and sibling support groups.

- **Individual Development:**

Throughout childhood, adolescence, and into adulthood, objective and repeated assessments of the individual's competencies, difficulties, and social abilities can help the person with Down syndrome, their family, and educators better understand their strengths and weaknesses, aiding in the construction of their life project. In regular settings, this involves adapting by identifying the people and structures on which they can rely (Renaud, Touraine & al., 2011, p. 20).

Psychological support plays a crucial role in helping individuals in this process, as well as supporting families in managing the risks involved. Down syndrome does not shield individuals from life's challenges. Just like anyone else, there are moments when an individual struggles to cope, and professional support becomes especially necessary.

However, the implementation of these various follow-ups depends on the child's needs and, above all, on what the child and their family are able to cope with. The child with Down syndrome is, of course, living with the condition, but first and foremost, they remain a child.

2.1.7.6. Speech Therapy

There is a specific language issue in Down syndrome, with articulation difficulties contributing to lower intelligibility of speech, which is not correlated with comprehension level. The primary goal of early intervention is to help a very young child establish communication, without aiming for normative outcomes, and to help them express, at their own pace, all of their potential. The speech therapist also supports parents in interacting more effectively with their child, whose hypotonia reduces communication signs, using stimulation while still allowing the child to take their place as an interlocutor.

2.1.7.7. Educational Care

The educator is the first to intervene with families. They stimulate the child more globally to engage with their environment. The educator's primary goals are autonomy and socialization, which involve developing both verbal and non-verbal communication (such as expressing feelings and emotions). The educator also coordinates with external partners and supports families in enrolling their child in daycare, school, and medical visits. The child is at the center of the intervention (Bénédicte, de Fréminville, & al., 2007, p. 278).

2.2. EMPOWERMENT

It is important to note that finding a definition that encompasses all aspects of the empowerment process is difficult. Each definition emphasizes certain key elements. According to Samman and Santos (2009), Alsop and Heinsohn (2005), and Rowlands (1997), empowerment is considered the process of acquiring "power" at both the individual and collective levels. It refers to an individual or community's ability to act autonomously, as well as the necessary means and process to reach this capacity to act and make decisions in their life and society. Empowerment includes two dimensions: power, which forms the root of the word, and the learning process to access it.

On the individual level, it is the power an individual has over their own life and their ability to make decisions. Eisen (1994) defines empowerment as the way an individual

increases their abilities, enhancing self-esteem, confidence, initiative, and control. For Gibson (1991, p. 359), it is a social process of recognition, promotion, and empowerment, enabling people to meet their needs, solve problems, and mobilize resources to feel in control of their own life.

On the collective level, empowerment refers to the power of individuals within a group, aiming for social change, more justice between men and women (e.g., political participation).

In other words, "Empowerment is a process or approach that aims to enable individuals, communities, and organizations to have more power to act and make decisions, greater influence over their environment and life. This approach is applied in many areas: social, health, economy, politics, development, employment, housing... and often targets victims of social, economic, gender, or racial inequalities..." (Gender and Indicators, Commission on Women and Development, written by Sophie Charlier and Lisette Caubergs).

The Inter-American Development Bank (IDB) defines women's empowerment as "the expansion of rights, resources, and women's ability to make decisions and act independently in social, political, and economic spheres." This definition will be adopted in the context of our study. We can see that the emergence of the concept of empowerment fits within this turn, questioning the issue of power, both individual, collective, and social.

For clarity, we prefer the English term "empowerment" over its French translations like "attribution of power" (Bisilliat, 1992, pp. 11-23), "obtaining power" (Jacquet, 1995), or even "strengthening power" or "enhancing the ability to act" in certain French versions of World Bank publications.

2.2.1. Origin and Evolution of the Empowerment Concept

The history of empowerment begins under the Roman Empire, where its Latin root comes from the verb *posse* meaning power. "*Posse*" becomes "*possum*" when conjugated in the first person, which is the reduced form of "*potissum*," literally meaning "I am the master of" or "I am the head of..." with a radical sense of "having power, influence, effectiveness, strength" (Orlandini, 2003). By extension, the phrase refers to mastery, ability, or capacity over someone, an action, or something, for a particular purpose or motivation.

This root is present in the English etymology of "empowerment," where a prefix and suffix were added to inject dynamic meaning and form a noun from a verb. In "em-power,"

"em" is used in the sense of "to provide," in this case, power, or as defined above, the ability or capacity, either through authorization, delegation, or transmission.

The verb "to empower" first appeared in the 17th century to mean delegating power. The word "empowerment" appeared in the 19th century to define both a state and an action: giving power (Bacqué and Biewener, 2013, p. 7). Here, we see the ambiguity in the definition: it refers both to the act of someone giving power to someone else and to the acquisition or appropriation of that power by another person. In the 1970s, the word was adopted in the U.S. by the battered women's movement, characterizing an egalitarian, participatory, and local process through which women develop "social awareness" or "critical consciousness," enabling them to develop "inner power" and gain the ability to act, both personally and collectively, within a perspective of social change. Empowerment here is understood as a process initiated by individuals and/or groups, focused on self-help and self-determination in Anglo-Saxon vocabulary.

As noted by Marie-Hélène Bacqué and Carole Biewener, the meaning of "empowerment" has further evolved as the term came to be used in organizational management practices during the 1990s. Their thesis is that the integration of the concept of empowerment into the expert vocabulary comes at the cost of its radical potential. It is a well-established fact that the term "empowerment" can be understood in quite different ways.

To clarify, we will distinguish three approaches in which the concept of empowerment is used differently. These three approaches are not mutually exclusive but complementary, allowing for nuanced uses depending on how they combine with one another. The first approach concerns the field of values upheld by political and social orientations. The second focuses on the distinction between individual empowerment and collective empowerment. The third approach differentiates the process: is empowerment a professional procedure in pedagogy, social work, or therapy, or an emancipatory initiative from "the bottom" up?

For the first approach, we will rely on the works of Bacqué and Biewener mentioned earlier. For the second, we will refer to the analysis by Elisheva Sadan in *Empowerment and Community Planning*. To present the third, we will contrast the views of Tim Greacen (Greacen and Jouet, 2012) and Jean-Nicolas Ouellet (2010).

In this context, "empower" means to "give power" by granting or allocating permission or a license. The suffix "-ment" in English is typically attached to verbs to form nouns. This

noun takes the meaning of the result" a power granted" or "a power acquired" or refers to actions like "the transmission of power" or "the acquisition of power." Lincoln & al. (2002) identified the first use of the word in the 17th century, in a work on the reign of King Charles of Hamon L'Estrange in 1655. In the excerpts from the Pope's letters, "empower" means authorization or license (bestow), referring to the power to delegate authority, in this case, "authorizing the construction of a college, recognizing or granting the right to..." In 1667, the term was also used to mean "to make capable," "to bring power over."

Originally, "empowerment" referred to the transfer of power from someone who possesses it most to someone who possesses it least by granting them new capabilities. Over the centuries, a reversal occurred, as evidenced by the specialized Oxford encyclopedias (2007 and 2015). In law, empowerment defines "the process that enables individuals or groups to take a more active role in society and the state as entities with rights (...). Struggles for emancipation can be built around greater access to economic resources, political participation, or the right to define cultural identity" (Cane, P. & al., 2008). In geography, empowerment is presented as "the permanent increase in the capabilities of relatively poor or marginalized individuals, enabling them to shape their own lives and bring about social change," or as "increased autonomy for individuals to make choices" (Castree & al., 2013).

Finally, the Oxford Concise Medical Dictionary provides a specific definition in the health context. "Illness is generally associated with the loss of the ability to act according to one's desires, and full recovery can only be achieved when the individual feels capable of making their own decisions (...) for example, when professionals make decisions for patients with AIDS or mental illness, or when society stigmatizes certain groups or behaviors. Empowerment involves corrective measures to address the lack or loss of decision-making power (...)."

It is interesting to note that, starting with an authorization granted by a superior to a subordinate, empowerment ultimately describes, 350 years later, a movement in the opposite direction, originating from the bottom and rising up. In this case, empowerment expresses a dynamic of autonomy, where subjugated individuals free themselves from the limitations or frameworks imposed on them. Most often, this occurs through group formation, acquiring skills, building a unique identity, demanding recognition of their differences, negotiating rights to overcome their handicaps, and flourishing equally with others. Their efforts culminate in mastering their destiny by engaging in collective struggles or projects. However,

while collective mobilization is crucial for improving living conditions, one should not underestimate the converging force from above, inspired by those more sensitive to the needs of the individuals under their authority.

In relation to compliance, these figures prefer to offer support, more conducive to the flourishing of the claimed autonomy. Their status as experts evolves into that of consultants, coaches, and educators, aiming to establish more balanced relationships.

"Empowerment" refers to "both the process and the result of this process" (Bacqué & al., 2013). The result may be both "the power granted" and "the power obtained." As for the process, it characterizes two opposing movements: the top-down transfer of power and the emancipation from the bottom up.

Bacqué and Biewener (2013) point out that terms used in France, such as autonomy, emancipation, or empowerment, do not mention power, while their Quebec equivalents "power to act" or "power to do" do not capture the processual concept. The use of the English term has become widespread due to translation issues and the expression of the concept's complexity, which intertwines the notion of power with the process needed to achieve it (Bacqué and Biewener, 2013; Calvès, 2009; Cantelli, 2013). This concept has evolved over time.

It was not until the 1970s that it was used widely by civil society in various contexts: particularly by feminist activists involved in local associations in South Asia and the United States, by the popular education movement, and by civil rights activists demanding political representation for their communities. In the United States, the battered women's movement, which emerged in the early 1970s, was among the first to use the term to describe the process of acquiring "social awareness" or "critical consciousness," enabling women to develop "inner power," acquire both personal and collective capacities for action, and engage in a perspective of social change. This definition of empowerment is very different from that of the 19th century, where it referred to power granted, authorized, or legitimized by a higher authority such as the state, religious hierarchy, or experts and professionals. It was with this new understanding that the term began to be used in the 1970s as an expression of social and feminist critique. In the 1980s, it was adopted by professionals and academics to characterize new approaches aimed at breaking with paternalistic, hierarchical, and unequal intervention methods, as seen in fields like social work, community psychology, and international

development. It was also in this perspective that, still in the 1980s, women engaged in community development in India used the term, opposing the institutional and top-down definition given by the Indian government.

Throughout the 1990s, the concept of empowerment was integrated into the international vocabulary of expertise and public policies, particularly by major multilateral institutions like the United Nations (UN) and donors like the World Bank. This increased its use but also posed new definitional challenges (Bacqué and Biewener, 2013; Calvès, 2009). The concept of empowerment is used in numerous sectors, including social work, management, healthcare, and international development.

2.2.2. Empowerment: An Individual and/or Collective Process

Rappaport explicitly states, "I was also surprised that some see empowerment as an individual construct rather than fundamentally collective, organizational, and contextual."

The debate, in fact, revolves around whether empowerment is an internal or external change process. The problem is that it is both, but the emphasis on the internal process rather than the external one follows ideological considerations. Its goal is to dilute the radical, social, and political impact of an emancipation movement. The internal process involves personal feelings or beliefs in one's capacity to make decisions and solve problems. External change is expressed in the ability to act and implement new knowledge, information, skills, capabilities, and other resources acquired during the process.

Some authors call the internal change "psychological empowerment" and the external change "political empowerment." Translators use two different words for "empowerment": "autonomisation" in the first case and "emancipation" in the second.

According to this distinction, psychological empowerment occurs at the level of an individual's consciousness and feelings, while political empowerment is a real change that enables a person to take part in decision-making affecting their life. To achieve psychological empowerment, a person only needs internal strength, while to realize political empowerment, they need environmental conditions, mainly from the organization, which will allow them to exercise new capacities.

However, the two meanings converge when one considers empowerment as an interactive process between the individual and their environment, in which the sense of self as

powerless transforms into acceptance of oneself as a citizen with sociopolitical capacity. The outcome of this process is competencies based on concepts and abilities that are essential features of critical political consciousness, the ability to participate with others, the ability to face frustrations, and the drive to influence the environment. Therefore, it would seem absurd to oppose the two dimensions.

This is evidenced by the fact that the foundational writings on empowerment in mental health, coming from individuals who have experienced mental health issues, such as Clifton Beers' (1951) book or Judi Chamberlin's (1977) work, begin with the narrative of their own lives and how they reclaimed their abilities before addressing their political engagement and struggle to change the treatment conditions for people with mental suffering. This requires understanding both the individual process, as in Freud, and the social process, as in Hegel. For now, this debate allows us to situate the difference between two often confused concepts: empowerment and recovery, and the stakes related to this distinction.

2.2.3. Empowerment and Recovery

Recovery is a very different concept from healing. Healing depends on the expertise of the doctor, unless it occurs spontaneously. In any case, it is an objective fact, symmetrical to the illness, and entirely independent of subjectivity. Recovery, on the other hand, is something that involves the person. Recovery is about reappropriating power, having control over one's life and future. This is why some authors equate empowerment with recovery, but this is far from satisfying. Recovery is necessary in light of psychological suffering, but it is not empowerment. It is necessary but not sufficient. The process of recovery is driven by a desire for normalcy, for a return to a certain efficiency, a certain validity. The concepts of resilience and recovery are very closely related. Perhaps resilience refers to overcoming trauma, whereas recovery refers to the reappropriation of oneself following an organic affliction.

In this case, recovery would indeed be, as Ouellet says, a medical concept. "Recovery is a term from the medical vocabulary." It moves healthcare professionals out of a custodial role and encourages an attitude of hope. It's important to believe that the person you're helping will overcome their challenges. However, caution is needed when interpreting the concept of recovery. What does this concept encompass, depending on the position one occupies? With only medical expectations, using diagnostic tools like the DSM (Diagnostic and Statistical Manual of Mental Disorders), one can easily remain focused purely on controlling symptoms.

A person who no longer experiences any symptoms might be perfectly numbed by medication. They no longer see spiders on the wall, but they no longer see the wall either. At the extreme, not feeling symptoms is also a characteristic of a deceased person. We must be careful not to define fixed paths or goals that might lead to normalization, a predetermined journey that disregards the person's dreams and aspirations. We should not confuse rehabilitation with recovery. Normalcy can quickly become a stereotypical vision of the ideal way to live. What we see in recovery, which doesn't apply in an empowerment approach, is the emergence of models that are reproducible for everyone. One size fits all. In an empowerment process, the journey is often more important than the result. "We are never sure of the outcome of our efforts, but we come out strengthened by what we have learned, particularly learning how the system works and learning to make ourselves respected." (Ouellet, 2010, p. 9).

While one might object to Ouellet that recovery is not solely about rehabilitation, we cannot exclude the understanding of this concept from the intention of its promoters to limit empowerment to an exclusively "psychological" dimension, without social impact. The central issue becomes the definition of power. Is it about personal appropriation of the ability to "do things," ideally "normal" things, meaning "socially adapted" actions? Or is it a claim for identity, both individual and collective? In fact, what this confusion between recovery and empowerment covers is the issue of the system. Is empowerment a tool for educational, social, or therapeutic purposes, or is it a movement, a movement of emancipation, of speaking out, not only *by* the concerned individuals but also *for* them?

The history of the concept explains, perhaps more than its political reclamation, where the ambiguity comes from. It is essential to understand that empowerment articulates two dimensions: the dimension of power (contained in the word itself) and the process of learning to access it. Empowerment can refer to both a state (being empowered) and a process. Originally, empowerment was the delegation of power from a higher authority to a lower personality. With the rise of "new social movements" in the 1960s and 1970s, there was not just a shift in the focus of collective action from production to issues such as women's liberation, racial justice, LGBTQ+ rights, regional identities, and ecology a "politicization of the social." There was also a new definition of power and the relationship between power and knowledge (think of Foucault, Basaglia, and their take on the Chinese Cultural Revolution), which enriched discussions within social movements. The Black Power movement, for

example, advocates for the recognition of the Black minority through political representation and, for some, its economic empowerment.

2.2.4. Reclaiming Power Over One's Life

For Ouellet, empowerment is a radical concept, meaning uncompromising. Just as there is no compromise when it comes to respecting a right it is either respected or not it is the individual who can tell us if they feel they are reclaiming power over their life. The person must be at the center of decisions that concern them. It is the opposite of the paternalistic medical model. We are no longer in a position of care, but are breaking down the last walls of the asylum in society.

In this sense, it would be inconceivable to move someone from one residence to another without them having a say in the matter. They must be involved in the assessment leading to the decision to move and actively participate in the decision-making process. It involves self-determination, making one's own life choices.

To choose, the person must understand. And to understand, they must participate in discussions and explore alternatives. Choosing, participating, and understanding are the three pillars of reclaiming power. Three verbs that we use in all tenses, but always in the first person, singular or plural. The person is the expert on their own case. They feel the symptoms. If we listen to them for the diagnosis, we must also listen to them after the diagnosis.

This is a perverse effect of psychiatry, which lacks physical markers of illness. Without our words, there is no diagnosis. But after the diagnosis, our words are considered madness. Reclaiming power and mutual aid: mutual aid is a form and means of reclaiming power. Anyone who has gone through a seemingly negative experience can help others. Mutual aid restores confidence because it provides competence based on what one has learned to overcome difficulties or setbacks. We didn't go through the desert for nothing; we became guides. It's a transformation of experience that removes us from the victim role. Mutual aid ensures that each human being can one day feel life succeeding within them. It places the person in a different posture: they become competent. Reclaiming power and rights: this is another major difference with recovery, which does not speak of respecting rights. This positive identity is what we feel when we are respected and considered as a person in full.

If empowerment is an act that changes one's being, in that it is an "appropriation" of power the capacity to act, to be an agent the autonomous voice of users cannot be the result of a pedagogical or therapeutic procedure, even if this notion, when linked to respecting the dignity of the user, has profoundly transformed practices in social work, medico-social work, and healthcare. Today, users, in their autonomous speech, no longer wish to be children of Uncle Tom's Cabin but claim the example of Toussaint Louverture. Power is not given; it is taken. In the context of user speech, empowerment is a collective act of emancipation and can only be understood as such.

2.3. AUTONOMIZATION

According to Weber, "the social system must be understood through its operational closure, because when we speak of the closure of the system, we speak of its autonomy" (P. Weber: *The Intervention of the Social Worker, Energizing Practices*, and p.103). A quote from Goffman can support Weber's position: "A social organization is a place surrounded by barriers opposing permanent perception, in which a type of activity takes place determined by the organization... Inside a social organization, one finds a team of actors who cooperate to present a given definition of the situation to an audience." (E. Goffman: *The Presentation of Self in Everyday Life*, Vol. 1, Les Éditions de Minuit, Paris 1973, p.225, in P. Weber, *The Intervention of the Social Worker*, p.103). "Talking about barriers, closures, and boundaries is talking about limits, which constitute the frame of the social organization" (Max Weber: *Economy and Society*, Plon, Paris, 1995, p.86, in P. Weber, *The Intervention of the Social Worker*, p.103). Weber then points out that the definition of these limits will depend on the observer's choice of system, as these limits are not physical.

Weber also cites the work of Peter Berger and Thomas Luckmann, *The Social Construction of Reality*, in which they discuss the nature of human interaction with their environment. Unlike other species, humans do not have a specific environment, and their biological limitations are compensated for by the social environment they create. This relationship between humans and their environment is characterized as an opening to the world. Humans, according to Berger and Luckmann, construct their social environment to compensate for their weak biological "constitution."

Weber thus connects the concepts of operational closure from Varela, the barriers from Goffman, and the relative closure to the world from Berger and Luckmann, explaining that, as

seen in Varela's work, an autonomous domain of behavior emerges from this. However, a social system's boundary is not physical, as in Maturana and Varela's eukaryotic cell, and cannot be physically identified. To perceive it, Weber suggests we must understand that it belongs neither to the system nor the environment. It is a space between the two, created by the system itself when it differentiates itself from its environment. Thus, the concept of autonomy in social systems echoes the concept of self-production (autopoiesis) in living systems.

This boundary gives the system its identity and autonomy. Notably, autonomy can only exist in relation to the "Other," as a boundary is, in itself, a separation from the other, the stranger, what is not oneself. Autonomy, therefore, involves differentiating oneself from others and being able to close off from the external. However, Weber cautions that this closure does not mean complete isolation; there is still exchange with the environment. This distinction is important for political, philosophical, and ethical considerations, as advocating for a social system's complete closure could lead to sectarian or even totalitarian excesses.

To conclude with Weber's work: "Autonomy is the foundation of human dignity. Paradoxically, it is constructed in relation to the other. Otherness becomes a limit to the non-self, which then drives autonomy. Varela's operational closure thesis helps us understand the autonomous processes of living and social systems, which have their own behavior. This means their goal is not externally programmed, but produced by the organism itself, which creates meaning in relation to its environment."

Corinne Bartier-Borawski devotes half of her work to autonomy in social services. She defines an autonomous person from the social worker's perspective as one who "manages," faces their family or social responsibilities, raises children, manages a budget, and copes with household tasks. This person knows how to "take charge of their life." However, autonomy in social work is no longer associated with freedom or independence but with responsibility and the ability to fulfill one's social role. Bartier-Borawski questions how social workers' actions might limit or support the autonomy of clients, emphasizing that social work aims to assist clients in achieving as much autonomy as possible. In this context, autonomy is not about freedom but about fulfilling social roles effectively.

CHAPTER 3: THEORETICAL INSERTION

This part of our work will be dedicated to the explanatory theories of our object of study. We will approach it further through the theoretical approaches to empowerment.

3.1. MODELS OF EMPOWERMENT

Empowerment is synonymous with greater participation in decision-making, and it is through it that individuals feel capable of making decisions and consider it legitimate (Kabeer, 2001). The notion of empowerment thus fits within a vision of acquiring power, control over one's life, and developing the ability to make choices. This idea of the "ability to make choices" has been widely debated by Sen (2000) and further expanded by Kabeer (2001), who linked it to the notion of people's ability to possess things and make choices.

3.1.1. The Radical Model

It is nourished by social transformation theories, such as those of Freire, the most radical branch of feminist movements, and some community movements. In this view, the issues of empowerment include the recognition of groups to end their stigmatization, self-determination, the redistribution of resources, and political rights. The goal of individual and collective emancipation leads to a social transformation project which, in the most radical approaches, questions the capitalist system. In a schematic way, this conception of empowerment makes sense in a chain of equivalences linking justice, redistribution, social change, awareness, and power, with power being exercised by those "from below."

3.1.2. The Liberal Model

In the Anglo-Saxon sense, sometimes referred to as social-liberal, it is associated with influential figures like Woodrow Wilson and John Maynard Keynes, who, after World War II, when international regulatory institutions like the UN were being set up, defended a form of social liberalism. This differs from economic liberalism, which is based on laissez-faire and market laws, by legitimizing the role of the state and public policies to promote civil rights and reduce social and economic inequalities. It combines the defense of individual freedoms with attention to social cohesion and community life. This social-liberal model can take into account the socio-economic and political conditions of power exercise without structurally questioning social inequalities. It incorporates part of feminist critique when, for example, it

supports the integration of women into the labor market as a contribution to economic development. In this model, empowerment takes place in a chain of equivalences alongside concepts such as equality, opportunity, poverty reduction, good governance, empowerment, and the ability to make choices.

3.1.3. The Neoliberal Model

According to the works of American political scientist Brown and French theorists Dardot and Laval, it corresponds to a political rationality that "puts the market first," but "is not only and not primarily focused on the economy; it consists more in the extension and dissemination of market values to social policy and all institutions" (Brown, p. 51). This conception does not imply the disappearance of the state; on the contrary, neoliberal policies, even if they rely on anti-Keynesian rhetoric, tend to place the state at the service of the market and manage it according to the values it upholds. At most, access to opportunities is discussed, without questioning social inequalities (Bacqué & Biewener).

3.2. THEORETICAL PERSPECTIVES ON EMPOWERMENT

It is important to note that, based on a review of literature on empowerment in social work, we have found that there is not a single theory specifically associated with empowerment, but rather theoretical perspectives. These are "angles" or "theoretical horizons" from which a conception of empowerment is proposed, nourished by more than one theory drawn from the human and social sciences.

3.2.1. The Perspective of Awareness (Conscientization)

The perspective of conscientization, inspired by the "literacy-conscientization" approach associated with the Brazilian intellectual Paulo Freire (1974), emerged in the 1960s (Doré, 1985). It is based on a historical materialist conception that denounces the structural causes of various forms of oppression experienced by disadvantaged social groups. Used mainly in community organization (Deslauriers and Bourget, 1997; Mondros and Wilson, 1994) and by proponents of the structural approach (Moreau, 1987; Lévesque and Panet-Raymond, 1994), this approach places the concept of praxis, understood as the dialectical relationship between action and reflection, at the center of the process of liberation and power acquisition.

Conscientization is not only a pedagogical process, a method of learning where the subject, based on their experience of oppression, domination, or exploitation, is the master of their process, but also a project of political transformation of society. Conscientization is therefore more than just becoming aware; it is also a commitment, an action plan, both individually and collectively, to act to transform the world and to free oneself from all forms of oppression (Ampleman & al., 2012, p. 14).

The process of power acquisition remains conditional on a cognitive-psychological modification in individuals who are in a situation of power deficit, combining structural theorization and a dialogical approach to oppression linking personal determinants with social, political, and economic ones along with awareness of the right to publicity. However, the limitation of conscientization to the psychocognitive (in the manner of Brodala, 2010) is considered by this perspective as an individualizing reduction of the process as long as no active investment is made. This means that the active involvement of individuals and collectives in political decision-making centers is imperative, so that, according to the transformative finality of social relations toward equality and social justice in the face of systems of oppression, resources are redistributed equitably among social groups (Mendell, 2006).

Margot Breton (2002) emphasizes, however, that democracy is a necessary but insufficient condition for power appropriation. The actualization of the conditions required for appropriation takes shape in a form of partnership intervention with recipients. The constructivist assumption that the social world is constructed by actors means that the intervention will be guided by the creative capacities of the recipients, enabling the overcoming of forms of oppression (class, gender, race, etc.).

Before mastering techniques and tools, what matters in a conscientization and mobilization effort is the will to develop genuine solidarity with the people we want to reach. The work of conscientization is a commitment, a stance based on revolt against situations of oppression, the hope of transforming these situations, and trust in the creative capacities of the people we aim to mobilize (Ampleman et al., 2012, p. 4).

Thus, the perspective of conscientization draws our attention to the effects of unconscious internalization of social, cultural, and economic structures of domination, which make individuals "accept" or endure injustices resulting from asymmetric power relations.

Therefore, it is necessary to act on the knowledge of the individual and collective issues of structural domination so that people affected by these situations are not only informed but also able to understand how these social relations affect their daily lives and those of others living in similar conditions (Dallaire, 2012). In this perspective of empowerment, a popular education effort to raise awareness of the issues is a prerequisite for collective and confrontational action to address and correct the effects of injustice and oppression, not only for those affected but also for those who produce them.

3.2.2. The Perspective of Empowerment (Habilitation)

Originating from the management sciences of the 1980s (Thomas & Velthouse, 1990; Argyris, 1998), the perspective of empowerment found resonance in health promotion (Lord & McKillop-Farlow, 1990), social work, and educational sciences, among others. It addresses individuals facing poverty and disability (Wilson, 1996), social isolation, prolonged dependence on social and health services (Godbout & Tribble, 2008); individuals whose social interactions with professionals and family contribute to the metonymization of their identity, where they are reduced to stigmatizing characteristics, resulting in a blockage of their capacity for change.

These situations constitute fertile ground for triggering the process of power appropriation through motivational factors such as a crisis, frustration, or offense (Lord & McKillop-Farlow, 1990, p. 5), resembling the perspective of conscientization. According to this specific interpretation of empowerment, it revolves around the feeling of inability to lead one's life independently, and an empowerment practice focused on habilitation will be designed. The aim will be to create conditions that help the individual rehabilitate their self-image. The appropriation process itself concerns a type of cognitive power, the sense of personal ability (Ozer & Bandura, 1990, p. 472).

Thus, appropriation involves the production of a positive evaluation of the competence of the recipients, counteracting the sense of powerlessness by allowing them to "define their own needs and act accordingly" (Lord & McKillop-Farlow, 1990, p. 3). Inducing cognitive dissonance (Bouchard & Gagnon, 2000) in the individual leads to a new perception of themselves and their abilities, thus achieving the goal of habilitative intervention: the personal control of the individual over their own life. To do so, the intervenor or support group will be tasked with facilitating the meeting of internal and external factors that make habilitation

possible. The intervention will focus mainly on skills transfer and demonstrating trust in the recipients. Having a significant person who is ready to listen actively and value them by focusing on strengths rather than weaknesses, within the framework of the strengths perspective (Anuradha, 2004), is a necessary condition for habilitation. However, participation in community functioning would be the sufficient condition.

We found that participation, in itself, has an enabling and self-reinforcing effect. As people gain confidence in themselves, they seek more ways to participate; their participation in community activities, in turn, contributes to increasing their confidence and their sense of control. (Lord & McKillop-Farlow, 1990, p. 6). Community participation thus serves as a platform for learning skills and socially confirming individual abilities.

3.2.3. Environmentalist Perspective

The environmentalist perspective was initially developed within American community psychology in the 1980s based on the work of Julian Rappaport (1981, 1987) and his colleagues (Keiffer, 1984; Zimmerman, 1995), whose project was to establish the epistemological legitimacy of the discipline on the concept of empowerment, critically opposing the prevailing epidemiological focus that primarily emphasized prevention. In the 1990s, within the Quebec context, William A. Ninacs (1995) and Yann Le Bossé (1996, 1998a, 1998b, 2003, 2012; Le Bossé & Lavallée, 1993) furthered this perspective by promoting a French version of empowerment, the “development of the power to act of individuals and communities” (DPA).

The environmentalist perspective is supported by an ecological analysis framework (Rappaport, 1987; Trickett, 1994), working from the unit of analysis of the “person-in-community” (Le Bossé, 1996) or the “actor-in-context” (Le Bossé *et al.*, 2002), and involving consideration of “all the physical, psychological, contextual, and structural conditions for action” (Le Bossé, 2008, p. 141). The source of an environmental approach to power appropriation lies in a real or perceived situation of powerlessness (Ninacs, 2008, p. 15); it is then that appropriating power combines individual will and structural factors toward action: “Any empowerment approach for individuals and communities primarily relies on the possibility to influence the availability and accessibility of resources in the environment and on the willingness and ability of people to take their destiny into their hands, regardless of the

perspective (structural or individual) and the unit (community or individual) of analysis” (*Le Bossé, 2003, p. 34*).

The conditions required for the realization of the environmental empowerment approach are illustrated systematically in the works of Le Bossé (2003, p. 1). These include:

- 1) Simultaneously considering the structural and individual conditions of social change;
- 2) Adopting the unit of analysis of the actor in context;
- 3) Taking into account the contexts of application;
- 4) Defining the targeted change and its modalities with the people involved;
- 5) Developing an action-oriented conscientizing approach.

However, it should be noted that starting with his 2012 theoretical work, the Bossé seems to have downplayed the component of “simultaneously considering the structural and individual conditions of social change” in his framework for analyzing practices. The author clarifies in this work that the goal for recipients is to “change the world in everyday life” in a reformist idea, without it becoming a direct or indirect prescription, or expecting the arrival of the “Great Evening” (*Le Bossé, 2012, p. 320*).

Given the criticism of the role of the call to empowerment in socio-economic activation policies for marginalized individuals (the perspective of accountability), the Bossé has rightly emphasized the democratic purpose of the DPA. For the author, the ultimate goal of the DPA is to be found in the concept of the “good life,” as presented by philosopher Ricoeur. Not the goal that intervenors would want for their recipients, but the life considered “good” from the recipients’ point of view (*Le Bossé, 2012, p. 128*). This evokes the idea of co-construction of the power appropriation process, primarily based on a cognitive and contextualized reading of the social issues faced by intervention recipients, in a negotiated perspective of the common good. One of the theoretical principles advanced by the DPA would be the recipient’s “desire” to change their situation without this desire representing a response to direct or indirect prescriptions.

According to these theoretical assumptions, presented as pragmatic principles of action, the role of the intervenor is “neither police officer nor savior” (*Le Bossé, 2002*), but rather a

guide for the recipients, ensuring a mediation function with the relevant resources and actors. The goal is to stimulate the desire in recipients to engage in a project, risking something (Ninacs, 2008), within an intervention relationship that aims to be egalitarian (Lemay, 2007), i.e., based on shared power by integrating the recipients into the intervention process, co-determining the change target, the methods used, and the evaluation of results.

3.2.4. Capabilities Perspective

Drawing on the work of Amartya Sen in economic and social ethics during the late 1970s and 1980s, the capabilities perspective entered the discourse of the UN and especially the World Bank (Bénicourt, 2006) during the 1990s, a period marked by the reassessment of structural adjustment policies applied to development initiatives for “poor countries” (Bacqué & Biewener, 2013, p. 81-83). The capabilities conception of power highlights the individual’s freedom of choice as the foundation of empowerment, critiquing traditional theories.

Capabilities refer to the expansion of an individual’s real freedom of choice and action, aiming for the fulfillment of the lifestyle they value. The conditions for appropriating power involve a regulatory function ensuring the provision of sufficient options so that the person can effectively translate their choices according to their aspirations. As Deutsch puts it: “Capabilities, inherent to fundamental rights, are the conditions for achieving them” (Deutsch, 2015). The dynamic of this regulatory function thus involves “agency” in relation to the “structure of opportunities.” For the intervention itself, such a dynamic means adopting a role that opens up to the aspirations and values of disadvantaged populations, thereby altering social policies and intervention practices (Basua & al., 2011). Ultimately, by encouraging economically disadvantaged populations to engage with institutional structures of opportunity, the capabilities perspective seeks to achieve the ideal of well-being through the promotion of the fight against social inequalities and poverty (Randriamanampisoa, 2011).

3.2.5. Accountability Perspective

Finally, the perspective of empowerment is directly linked to the influence of the extension of the neoliberal regulatory model to the world of social intervention at the end of the 1990s. Its social goal is often criticized in the works of the previous perspectives. It is notably used to empower certain targeted populations: unemployment (Reysz, 2006), drug addiction (Quirion and Bellerose, 2007), criminality (Denamiel, 2006; Hache, 2007), homelessness (Dobson and McNeill, 2011), domestic violence (Lorenz and Bigler, 2013),

antisocial behaviors (Flint, 2006), etc. The individual is urged to engage in a process of taking power within a neoliberal regime: taking responsibility means self-regulating as a social problem by conforming to the neoliberal norm, which calls for behaviors adapted to such an environment:

"The transfer of responsibilities would first pass through the creation of an attachment to a new way of thinking and acting. This would happen in two stages: first, making a certain type of behavior undesirable – detaching ourselves from a certain dependence on the state, and then, simultaneously, making another type of behavior, a so-called 'responsible' behavior, desirable" (Hache, 2007, p. 51).

This means that the individual actually assumes a double responsibility: current responsibility and virtual responsibility. Current responsibility means that the individual is accountable for the consequences of their actions and the intentions behind them (Denamiel, 2006). It refers to classic legal responsibility. Virtual responsibility, on the other hand, is based on the potentialities associated with the individual's dispositions (Genard, 2013); it concerns actions the individual could have taken in the past – since they did not make the right choices – and those they might take in the future, based on the principle of prevention (Hache, 2007). Thus, virtual empowerment is about holding the individual accountable for their existence and well-being, with their life understood as the result of a series of chosen and unchosen actions for which only they are responsible – and blameworthy, if necessary. Based on the social models valued and the potential deviations from the norm, a behavioral projection of the future individual will be constructed to make them accountable for the actions they might take according to this probabilistic calculation (Lorenz and Bigler, 2013). The empowering process of appropriation of power requires work on the individual's reflective disposition and self-esteem in order to stimulate self-assessment, self-judgment, and self-discipline:

"The author stops minimizing and denying their behaviors, and refocuses on themselves: they search for meaning in violent acts. Indicators of empowerment concern the qualification of the act, considering the intention, and accepting the consequences of the act, including the obligation to commit to preventing recidivism" (Lorenz and Bigler, 2013, p. 119).

To do this, intervention must both remind the individual of the expected behavioral norms and, paradoxically, urge the individual at risk to show autonomy and responsibility in meeting these behavioral expectations:

"By now considering empowerment as a process rather than an end goal, we formulate a new imperative for the beneficiary, requiring them to take a more active role in the therapeutic process itself. Thus, the burden of responsibility for the success of the intervention is shifted to the beneficiary, making them more responsible for the success of the program and, consequently, for its failure" (Quirion and Bellerose, 2007, p. 41).

The ideal of making individuals facing psychological and/or socio-economic vulnerabilities competitive and high-performing would thus be the goal of the empowering intervention device, as reinforced by a form of neoliberal governmentality (Dardot and Laval, 2009).

3.3. DISABILITY AND EMPOWERMENT

First, let's recall that empowerment perspectives each propose a socialization of mechanisms of autonomy in a world where individualism constitutes the dominant form of socialization into collective life. For example, for Le Bossé and al. (2009, p. 184), "In the approach centered on the DPA, the practitioner's effectiveness criterion is based on the ability to develop with the person being supported a solution that leads toward what is important for them." How do we recognize that something is truly important for someone, and not simply to respond to the individualist injunction of self-realization, for someone else? According to Pierre-Henri Castel (2012), individualism is a social form imposed on everyone; it is not the individual who makes society. It is rather the constitutive illusion of the society of individuals to believe that self-government, self-production of the individual, creates society:

"No one spontaneously conceives that the individual-being is a social form – without being stupid or blind, because this is precisely what it means to belong to the 'society of individuals': to attribute, as value, the status of an agent who creates society... which, in fact, socializes you as an individual-who-believes-to-self-produce" (Karsz, 2011, p. 15).

This new form is autonomy-condition. Autonomy-aspiration gave the primary role to guilt, but now autonomy-condition (Castel, 2012, p. 355-356). According to this author, no one today can want anything other than autonomy. It is autonomy that makes the social and

makes it effective, because we rely on others' autonomy to accomplish ourselves. Castel (2012), echoing Ehrenberg (2010), describes the current regime of autonomy as "autonomy-condition" (an inherent condition of dignity), in contrast to autonomy-aspiration, which encouraged each of us to extend the process of acquiring autonomy over time. Autonomy-condition demands that this self-realization happen here and now. It's a particular relationship with oneself, where the process of autonomization is likely a relationship of voluntary submission, in a relationship of authority (voluntary submission) or domination (involuntary submission) to the injunction to "emancipate." This paradox must be considered when theorizing empowerment both from the perspective of the intervention recipients and the practitioners.

Moreover, we have seen that one of the theoretical references for the environmental perspective of empowerment to judge social goals was "the good life," inspired by the philosophical reflections of Ricoeur. But what is a good life today? Is it the one the individual has chosen to live or the one they submit to? How do we distinguish between these two postures? As Castel (2012) points out, neurosciences are attempting to explain the social bond as something that resides in the brain, and the more autonomous you become, the happier you will be, because that's today's good life. For empowerment, the question of the margin of agency that individuals and communities have concerning their ability to choose what is good for them becomes urgent: between liberating responsibility (Hache, 2007) and affranchisement from conformity, how do empowerment advocates address social autonomization issues?

The recurrent paradox of each individual thinking they are an individual by themselves, while there is nothing more socially imperative than individualizing oneself more and more, reaches its climax here. The individual feels torn between the anguishing sense of abnormality in overly singular situations and the rejection of the impersonal conformism of overly normalized situations (Castel, 2012, p. 363).

This paradox questions the possibility for empowerment practitioners not to directly or indirectly impose certain norms of the good life, as some authors prescribe for practitioners:

"Clearly positioned in the perspective of a reformist goal, this objective we assign to social practices is based on a non-prescriptive logic that places central importance on negotiation and simultaneous consideration of the individual and structural dimensions of

each situation. This, in order to allow people to continue, individually or collectively, their pursuit of the good life" (*Le Bossé, 2012, p. 128*).

This paradox represents one of the blind spots in the theoretical reflection of empowerment. It is, in fact, one of the structural dimensions of collective practices of power appropriation that is not thought through, and it would take the form of authority relations induced by current social norms of individual autonomization. For example, this would explain why in the context of collective practices, the group often feels compelled to serve each individual.

Also according to Castel (2012), we are caught in a paradoxical context where we must question the conditions of the embarrassment of action. Constraints on autonomy create all kinds of situations, including the choice to not choose. In short, the link between intention and action is fragile. There is not necessarily a logical connection between the two, even though neurosciences reduce intention and action to a cognitive logic. To take an action puts us in an embarrassment of acting. How is this embarrassment interpreted and dealt with in the empowerment process? Castel adds that in our societies, the individual is expected to overcome this embarrassment by assuming responsibility for their actions and their consequences, and even the consequences of those consequences. Feeling responsible has become an imperative, and it creates shame when we fail. In these conditions, how do we truly discern what people desire for and from themselves? Constraints are increasingly internalized to ensure self-management as a responsible agent monitoring its own intentions. Thus: "To be autonomous and happy is, in short, to succeed in self-regulating one's own self-regulation for the best, that is, according to the self-regulated expectations of others" (Castel, 2012, p. 458). Would powerlessness become a pathology, a disability? Will we soon see the emergence of therapies for autonomy? This structural hypothesis of contemporary socialization toward autonomy concerns not only the perspective of empowerment we previously exposed, but the entire ambient social normativity, despite repeated efforts by other empowerment perspectives to critique the goal. The injunction to participate is part of a global social phenomenon that rests on an anthropological view that humans must be seen, of course, in the tension between autonomy and vulnerability, but under the normative horizon of activity and performance. The exclusion, inherited from the 19th century, based on a division of beings according to capabilities defined once and for all in objective terms, is thus replaced by a dynamic division where capacities and competencies must constantly be maintained, enriched, and demonstrated. Faced with calls to be high-performing and

participatory, the individual is constantly grappling with multiple demands that require them to keep up but also expose them to failure or the demonstration of their inadequacies (Genard, 2013, p. 60).

For example, autonomy is seen by employers as a source of productivity and often, by employees, as a subjective reward and a means of recognition (Castel, 2012, p. 362). Once again, we could praise this reality where everyone can now access social emancipation, but the problem is that this emancipation is a permanent injunction in changing contexts that demand constant flexibility:

"Because being able to 'change oneself' is also a strength, even a marketable talent. It seems that this power, or rather this obligation to change oneself, but also to be 'the agent of one's own change,' significantly influences the moral and psychological economy of individuals in the age of autonomy-condition. It is one thing to aspire to become oneself; another to have to reinvent oneself endlessly in a 'liquid' environment, according to Zygmunt Bauman" (Castel, 2012, p. 362-363).

These reflections raise the fundamental question of individual freedom, a question at the heart of empowerment goals, but insufficiently theorized. In *The Singularist Society*, Martuccelli (2010) suggests that we consider the paradox linking the individual to the conditions of social life when defining freedom differently from the belief in human potential. "Freedom does not reside in individuals? Of course, individuals have their own inventive power. But one thing is to grasp its role based on the differential possibilities offered by social life, and another is to bury it as a mystery, deep in the human psyche (creation) or as a metaphysical capacity of existence (freedom)."... "It is in social life itself, not in the individual, that this irrepressible possibility of action resides. It is the way in which social life itself conditions our actions (constraining or enabling them) that accounts for it" (Martuccelli, 2010, p. 104-105).

CHAPTER 4: METHODOLOGY OF THE STUDY

This chapter outlines the methodological framework upon which our research is based. It begins by recalling the research question, hypothesis, and objective. It will then discuss the study site and population. Finally, it will present the methodological tools deployed during our investigations, the reasons for their selection, and how they were employed. Lastly, the methods of data collection and analysis used to develop and question the gathered material will be explained.

4.1. STUDY SITE

The Einstein Center is a psychopedagogical center that supports and assists both special needs and typical children (the minority). It implements educational actions to promote learning for children with learning disabilities.

Founded in October 2001, the Einstein Center initially began as a consultation office for children with specific needs. After seven years of operation, the office transformed into a psychopedagogical center in 2007 due to the growing number of students. Today, the center is an establishment under the supervision of the Ministries of Basic Education and Social Affairs.

4.1.1. Geographic Location

The Einstein Psychopedagogical Institute is located in the Central region of Cameroon, specifically in the city of Yaoundé (the political capital), Mfoundi department, in the district of Yaoundé II, Nkolbikok neighborhood. It is situated right behind the Nkolbikok transformer (Parc Montée). The center consists of a two-story building that includes an office, a common room, classrooms, etc., and an external building with another room and a common space.

4.1.2. Center's Mission

The Einstein Psychopedagogical Institute is inspired by the educational journey of one of the greatest scientists in history to form its guiding motto.

Indeed, Einstein's academic path, marked by "failures and difficulties in adapting to the educational system," inspired the center's vision of the child as a learner. Although this journey was marked by setbacks, it did not hinder the development of young Einstein

(dyslexic), who went on to become the greatest physicist in the world. Therefore, the center sees every child with learning difficulties as "an Einstein in the making," which is reflected in their motto: "See in every child struggling with academic adaptation, an Einstein in potential."

The center also applies Maria Montessori's pedagogical approach, which focuses on the sensory development of learners. In Montessori's method, children explore and understand the world around them through touch. This approach promotes learning through experimentation. Children learn by manipulating objects in a structured environment set up by the teacher. The pedagogical approach of the Einstein center, therefore, aims to foster autonomy in its learners.

The center also employs:

- An integrative pedagogical approach
- TEACCH methods (used for children with autism spectrum disorders, offering a structured environment to promote autonomy through visual supports)
- ABA (Applied Behavior Analysis, an early intervention program for children with autism and other neurodevelopmental disorders that modifies behavior using reinforcements)

PECS (Picture Exchange Communication System, a program aimed at developing communication and language in children with neurodevelopmental disorders)

Additionally, the center uses parental guidance, which provides support to parents of children with learning disorders. This method guides parents on how to assist their children's learning process at home, making them active participants in the educational process. The center also organizes interviews with parents.

4.1.3. Organization of the Center

The Einstein Psychopedagogical Center is led by its founder, Mrs. KATIHABWA, née NJONKOU MARIANNE GISELE. The founder is assisted by the center's director, Mrs. Pyou Zenabou Zita, a teacher with vast experience in managing children with neurodevelopmental disorders. The center also has a multidisciplinary team, which includes:

- A psychologist
- A pediatrician
- A speech therapist
- A psychomotor therapist
- Two specialized educators
- Social workers
- Teachers/educators

4.2. STUDY POPULATION

The population refers to a finite or infinite set of pre-defined elements upon which observations are based. A sample, on the other hand, is a subset of individuals selected from the population, designed to be representative of the larger group for the purpose of the study (Gordon, 1993). Sampling is the process of selecting a limited number of individuals, objects, or events for observation, which allows for general conclusions to be drawn about the entire population.

In this study, a purposive sampling method was used, where a specific subset of the population that met predefined inclusion criteria was chosen.

4.2.1. Inclusion and Exclusion Criteria

To obtain the most homogeneous sample possible, we defined characteristics we desired to find in the sample elements through inclusion and exclusion criteria.

4.2.1.1. Inclusion Criteria

- Be diagnosed with Down syndrome (T21)
- Aged between 4 and 6 years old
- No gender distinction
- No ethnic distinction

- Be enrolled in a specialized school

4.2.1.2. Exclusion Criteria

- Not enrolled in a specialized school
- Aged younger than 4 or older than 6 years
- Presenting a disorder other than Down syndrome

4.3. TYPE OF RESEARCH

This is a qualitative study. The goal is to analyze and understand phenomena, group behaviors, facts, or topics. The aim is not to obtain a large quantity of data but to obtain in-depth (qualitative) data (Gaspard, 2019). Qualitative research seeks to explain a phenomenon, give it meaning, and make sense of it. Results are expressed in words (interviews, observations, etc.). This approach places the patient at the center of the process, aiming to understand the meaning of their experiences and co-construct knowledge with them in a participatory process.

Qualitative research focuses on understanding human and social facts by considering them as carriers of meaning conveyed by actors (individuals, groups, institutions) involved in interpersonal relationships (Mucchielli, 1996). Instead of seeking to generalize data, qualitative research aims to understand and delve deeper into specific situations (fewer cases, more detail). The construction of the problem remains broad and open, making qualitative research exploratory. The goal is not to test a pre-established theoretical framework but to generate new knowledge through inductive reasoning, which moves from specific cases to general conclusions. The stages of data collection and analysis (words, narratives, images) do not occur in a linear manner but may overlap as the methodological design is refined (the principle of "data saturation" signals when further data collection is unnecessary) (Bion & al., 2021, pp. 23-27).

4.4. STUDY METHOD

To achieve our objective, we have chosen to use the case study approach, which involves reporting a real situation, taking it in its context, and analyzing it to discover how the phenomena the researcher is interested in manifest and evolve. Thus, viewed from a research

perspective, the case study is a specific technique for collecting, shaping, and processing information, aiming to account for the evolving and complex nature of phenomena within a social system, with its own dynamics (Collerette, 1997).

Case studies are used as a research method and allow for taking into account the holistic and significant characteristics of the studied life events. They are also characterized by being in-depth studies (Hentz, 2006). Collerette (1997) distinguishes case studies from other research strategies, such as experimentation and surveys, defining them as the empirical exploration of a contemporary phenomenon in its natural context using various means.

The case study is an empirical investigation that examines a contemporary phenomenon in its real-life context, where the boundaries between the phenomenon and the context are not clearly evident, and in which multiple sources of information are used (Collerette, 1997). On the one hand, we have chosen this type of study because it provides a situation where we can observe the interplay of a large number of interacting factors, which helps account for the complexity and richness of situations involving interactions as attributed by the concerned actors (Collerette, 1997).

The case study as a research method also has weaknesses that must always be kept in mind when using it. Firstly, it is time-consuming both for the researcher and for the subjects. Secondly, the external validity of its results is problematic, as a case study is difficult to replicate by another researcher. Finally, it has significant limitations regarding the generalization of the results it produces. Indeed, it is unlikely that comparable studies will be conducted to generalize the theory that a case study has induced or to make its results applicable to an entire population (Lecompte & Goetz, 1982; Lucas, 1974; McMillan & Schumacher, 1984; Whyte, 1963; Worthman & Roberts, 1982).

4.4.1. Data Collection Technique and Tools

In this section, we will present the technique and tools we used for data collection from participants.

4.4.1.1. Observation as a Data Collection Technique

The population of this study consists of children with Down syndrome (T21) aged between 4 and 6 years. This population is relatively young, and in addition to the effects of the disability, they do not yet have the necessary skills for us to interview them or give them a

questionnaire. Therefore, observation remains the only data collection technique that can be implemented with them.

The word "observation" comes from the Latin "ob" (in front of, against) and "servare" (to look at, to protect, to keep) and has several meanings: to comply with, respect a law, mild admonition, notice, pay attention, and proceed with logic, through which we observe all the particulars of the phenomenon without disturbing it by experimentation. Observation requires focused attention on an object and the ability to distinguish differences between phenomena, and it rests on a strict opposition between the subject (observer, researcher) and the object perceived.

More precisely, observation is the action of looking at phenomena carefully to describe, study, and explain them. In other words, it is the action of perceiving reality attentively (such as an object, for example, in order to better understand the ability to distinguish differences between phenomena).

Claude Bernard (1870) suggests that observation involves purely and simply noting the phenomenon that is before one's eyes, without any other concern than preventing observational errors that could make the phenomenon incomplete or misdefined. To do so, he uses any tools that might help him make a complete observation (observation grid). One must observe without preconceived ideas, with the observer's mind remaining passive, meaning it must be quiet and simply listen to nature and write it down as dictated.

Some phenomena can only be accessed through observation, such as mimicry, gestures, or severe communication and relational disorders (e.g., autism, multiple disabilities). Observation allows studying phenomena within their context. According to the *Petit Larousse illustré* (2008), observation is defined as the act of looking attentively at beings, things, events, and phenomena to study, monitor, and draw conclusions.

Observation is a process in which the habits, expectations, scientific knowledge, and skills of the observer play a decisive role. The observer extracts a certain amount of information from reality, selecting what seems relevant. It is an inventory of the real, and a major problem arises: how to divide reality into relevant units. For this reason, and because they cannot perceive everything or choose to observe everything, the observer makes a choice; they select the information they extract based on a final goal that must be determined

in advance. This is necessary to avoid facing a mass of raw data during analysis, or risking missing important elements because they were not properly targeted.

In special education, the object of research is human behavior. To collect relevant data, whether for research or evaluation, observation is an entirely appropriate and necessary tool in the reality of special educators. Observation is considered a required skill in special education. It is the foundational element for clinical analysis in the work of the special educator. It is based on observation that the entire educational process rests, as it allows for a portrait of the subject and the issue. Observation can be used by special educators working in an experimental context, and it can also be part of the everyday life shared by the educator and the subject, referred to as shared educational experience.

As a research technique, observation leads to a specific way of capturing the study object. This mode of capture depends on how the researcher represents the object and, therefore, on the theory they refer to. Observation should be repeatable under similar conditions and verifiable by other observers. The choice of an observation situation and subjects depends on the objectives one sets. Regardless of the context, observation will be accompanied by reflection on the contents: defining observation conditions (indoors or outdoors, in a large or relatively confined space spatial framework, with more or less defined material conditions), recording the information (note-taking, audio/video recording, evaluation), selecting behavioral indices to observe (selecting relevant and limited indices via observation grids, for example), and interpreting those indices.

The systematic nature of an observation lies in the regularity with which the observer applies the data collection procedure. Different parameters must be considered when constructing an observation setup. How these parameters are fixed will depend on the research approach, the type of object constructed, and the research goals.

Finally, highly structured observation techniques can be developed for systematic descriptions of behaviors, referencing a theory (observation grids). Developing an observation grid is a delicate operation, as it results in capturing the object in a specific form (reduction, filtering, coding). It involves examining all the methodological and technical issues related to its construction. Observation grids offer opportunities for quantification, comparison, and facilitate the examination of the reliability and validity of the observation.

Systematized observation aimed at objectifying phenomena through a structured data collection device (grids, tests, videos) implies field investigation and real-life situations. We have opted for this technique due to the great objectivity it offers in gathering survey data without influencing the collection process and thus diluting the credibility of the information gathered (Ghiglione & Matalon, 1991). This allowed us to observe locations, attitudes, and behaviors of actors involved in our research.

The use of observation in the study is also explained by the fact that it involves the observer, the observed, the recipient, their roles and movements, as well as the relationships between them, considered in space and time during their encounter. The method of observation in this study is crucial because it involves breaking down and reconstructing perception and ordinary relationships as they are established in observation methods created for scientific purposes. Viewing observation as a process in this study means considering it as a set of phenomena to which we can assign a unit, and which can be considered active and organized over time.

Such a perspective leads us to move away from the usual logic where observation is fragmented, seen either as a method, as a time in a research process, or as a batch of collected data. Instead, it is the consideration of the intertwining of these various aspects that we believe constitutes the specificity of a constructed observation. In a study like ours, observing means seizing certain elements of reality and ignoring others.

4.4.1.2. Data Collection Tool

To proceed with data collection, we used an observation grid. By empowerment, we refer to the acquisition of skills and self-empowerment. This refers to how the child with Down syndrome (T21) increases their abilities that promote self-esteem, self-confidence, initiative, control, and the ability to meet their needs. In addition to these requirements (such as cleanliness, autonomy in eating, understanding rules), the integration of children into the school system is part of the empowerment process. The acquisition of the knowledge necessary for the development of autonomy should allow the child to assimilate the rules in force within the group and thus integrate socially these elements can be grouped under autonomy of doing and autonomy of thinking .

- **Autonomy of Thinking**

Autonomy of thinking refers to the ability to "govern oneself according to one's own laws, make decisions without external intervention." It is the ability to make choices that determine the life one wants to lead. This autonomy of thinking also encompasses other concepts such as school curiosity and the desire to learn, socialization, and adaptation to an unfamiliar (both social and physical) environment. It is the synthesis of the intellectual capacities of the person.

In concrete terms, autonomy of thinking is the ability to evolve independently in society while conforming to its requirements: safety, socialization, vigilance, etc. It is related to intellectual ability (adapting to the external environment and taking its characteristics into account).

• Autonomy of Doing

In contrast to autonomy of thinking, autonomy of doing seems to relate to mastering practical skills and everyday gestures, both in daily and professional life. It appears more related to functional independence than strict autonomy.

Table 1: Observation Grid

Items	Presence	Absence	Comments
Acquisition of cleanliness	X		In the process of acquiring this skill. She now agrees to use the potty, although she still wears a diaper
Autonomy in eating	X		Eats on her own. No longer likes to be helped
Autonomy in mobility	X		Moves independently and avoids obstacles appropriately.
Assimilation of rules	X		Behavior varies depending on the situation
Ability to make	X		Makes appropriate choices. Clearly expresses

choices			“yes” or “no.”
Curiosity (school-related)		X	Not very focused on academic learning at the moment.
Desire to learn	X		Shows interest when learning new play techniques.
Socialization	X		Seeks contact with peers and initiates interaction.
Adaptation to an unfamiliar (social and physical) environment	X		Adapts easily to new environments.
Mastery of everyday knowledge	X		Skill acquired at about 35%.
Mastery of everyday gestures	X		Understands polite behavior, respects elders, and performs basic hygiene routines (e.g., washing hands before meals)

4.4.2. Data Analysis Technique and Tools

Given the nature of the data (qualitative), we opted for a qualitative analysis technique. Content analysis, being the primary technique for analyzing qualitative data and applicable to all forms of discourse, images, and communication, proved to be the most suitable method for analyzing the collected data.

Regarding the analysis of observational data, it was carried out following the methods of Moliner, Rateau, and Cohen-Scali (2002) and Quivyrt Van Campenhoudt (2006), which allowed us to group all our data into sub-themes. More practically, our analysis of the observational data focused on the duration of tasks.

The analysis of observational data depends on the theoretical and epistemological views of the researcher: objectifying analysis for behavior description or subjectivizing analysis for understanding. Jaccoud and Mayer (1997) describe three methods of analysis, more or less formalized. The first is qualitative analysis, based on grounded theory, which proceeds with back-and-forth between hypotheses and observables. The second is quantitative, sequential analysis, which aims to evaluate the frequency and distribution of the phenomenon (based on the observed indices). The third, derived from the anthropological tradition and postmodern epistemology (Denzin & Lincoln, 1994), concerns the narrative analysis of the discourse produced by the researcher on their object.

4.5. DATA COLLECTION PROCESS

This section explains how we conducted our observations. We carried out our observations in the classroom during learning sessions, during playtime, recess, and lunchtime within the school grounds. We observed the children's behaviors throughout the daily routine, from the start to the end of the school day.

CHAPTER 5: PRESENTATION AND ANALYSIS OF DATA

In this chapter of our work, the focus is on the analysis of the data collected in the field. To this end, we will first present our participants (socio-demographic data), and then we will conduct a qualitative analysis of the observations made in the field using the analysis grid. The study is based on participant observation in a school and therapeutic context, combined with semi-structured interviews with educators and parents. The material was subjected to a thematic content analysis, according to Bardin's method (2003), allowing for the extraction of units of meaning around three axes: autonomy, self-esteem, and social participation. The observations reveal that the empowerment of children with Down syndrome relies on supportive interactions, regular appreciation, and environments where the child can initiate actions. These microtransformations are sensitive indicators of a comprehensive development process. Content analysis proves to be relevant for grasping the subjective scope of these advancements.

5.1. INTRODUCTION OF PARTICIPANTS

Table 2: Introduction of Participants

Participant	age	Gender	Start of treatment	
A	5	Female	2022	Nursery 1
B	6	Mael	2022	Class 2
C	5	Mael	2021	Nersery 2

5.2. DATA ANALYSIS OBSERVATIONS

We will proceed with a thematic analysis of the various observations from our participants. Content analysis allows for documenting the subtle yet significant forms of empowerment in children with Down syndrome. The role of a supportive environment, the appreciation of abilities rather than deficits, and a structured yet flexible framework is central.

5.2.1. The role of specialized educators

Specialized education plays a fundamental role in the empowerment process of children living with Down syndrome (DS), by providing them with an environment adapted to their needs, rhythms, and abilities, while allowing them to develop a sense of competence, belonging, and autonomy. Far from being limited to the transmission of knowledge or compensatory care, it is part of an inclusive and participatory dynamic that aims to make the child an actor in their own development.

Empowerment, understood as a process of autonomy and strengthening of the ability to act (Zimmerman, 2000), involves the implementation of educational systems that value choices, encourage initiative-taking, and support the construction of personal and social identity. Specialized education, through its individualized and caring approach, constitutes a major lever to meet these requirements.

Specifically, it promotes the learning of functional and social skills, while utilizing alternative communication tools, differentiated pedagogies, and projects centered on the child's strengths. This allows the child with Down syndrome to develop their ability to express their needs, formulate preferences, and actively participate in collective life. These elements are essential for strengthening self-esteem, perceived self-efficacy, and self-determination (Wehmeyer & Schalock, 2001).

Moreover, special education also supports the family and institutional partners in a logic of co-construction, awareness-raising, and deconstruction of limiting representations. It thus acts on the child's relational and social environment, instilling a culture of respect, recognition, and participation, which are essential conditions for the emergence of empowerment.

Specialized education does not merely adapt the child to the system, but works to adapt the system to the child. It embodies an ethical and pedagogical stance that places the potential for development at the center, paving the way for genuine social participation and the recognition of the T21 child as a full-fledged individual. Following the intervention of specialized educators, the empowerment of children with Down syndrome unfolds along several axes. We will present the status of each of these areas in the following sections.

5.2.2. Functional Autonomy and Self-Determination

The empowerment of children with Down syndrome constitutes an essential dynamic in the development of their psychosocial skills. This research aims to analyze, through observation and content analysis, the concrete manifestations of the empowerment of these children in their educational and relational daily lives. The concept of empowerment is understood here as a process of gaining control over one's own life, enhancing self-esteem, and active participation in a favorable social environment (Rappaport, 1987; Zimmerman, 2000).

The observation of empowerment in children with Down syndrome requires a careful examination of their development in different contexts: educational, familial, therapeutic, and social. The content analysis of these observations allows for the identification of the ways in which their autonomy is expressed, their active participation in decision-making, and the development of a sense of competence, often hindered by stigmatizing social representations or poorly adaptive environments.

Observation reveals constant efforts towards autonomy in daily activities, particularly in dressing, managing routines, or communicating needs. These behaviors, although sometimes fragile, demonstrate a process of empowerment when supported by valuing interactions and positive reinforcements. Functional autonomy refers to the child's ability to perform daily life activities independently or with minimal support (Vygotsky, 1934/1997). For children with Down syndrome, this process is part of a unique developmental dynamic, characterized by slower learning but rooted in repetition, confidence, and the appreciation of initiatives.

5.2.2.1. *Acquisition of Cleanliness*

The acquisition of cleanliness is a crucial stage of child development, marking a progression towards autonomy. In children with Down syndrome, this process generally follows the same stages as in typically developing children, but at a slower pace, influenced by cognitive, motor, and sensory particularities specific to Down syndrome.

From a neurodevelopmental perspective, children with Down syndrome often exhibit muscle hypotonia and weaker overall motor coordination, which can delay sphincter control. In addition, there are language difficulties and a slower information processing speed, which

can make understanding instructions more complex. The child may have difficulty expressing their needs or interpreting internal signals related to urination or defecation.

The environment plays a crucial role in supporting this acquisition. A stable, predictable framework, supported by clear routines and visual aids (pictograms, reinforcement charts) is often recommended. Specialized education, in collaboration with families, offers individualized approaches based on positive reinforcement, respecting the child's pace, and valuing each progress. The timing of this acquisition varies greatly from one child to another. If some children with Down syndrome achieve toilet training between the ages of 4 and 6, others may achieve it later. This delay should not be interpreted as a failure, but as the expression of a unique journey towards bodily autonomy. Participant A is in the process of mastering toilet training; she agrees to go to the potty, even while wearing a diaper. This is also observed in participant B, who goes to the bathroom alone and can wipe himself; dress himself. This despite the fact that he works very slowly. Despite numerous difficulties noted, the acquisition of cleanliness is still emerging for C. Indeed, he does not wipe himself yet; he does not systematically go to the toilet when the need arises.

The issue of cleanliness for children with Down syndrome is not limited to a matter of hygiene: it also pertains to dignity, self-image, and inclusion in school and social spaces. In this sense, supporting this process with kindness and competence constitutes an essential act of support for the child's overall development.

5.2.2.2. *Autonomy in Eating*

The acquisition of food autonomy is a key stage in a child's development, promoting self-esteem, social integration, and a sense of competence. In children with Down syndrome (DS), this process can be delayed or hindered by factors related to the neurodevelopmental specifics of the syndrome.

On the motor level, the hypotonia and fine motor coordination disorders frequently observed in children with Down syndrome complicate the handling of utensils and the mastery of the gestures necessary for self-feeding. The movements can be clumsy, slow, and require significant repetition to be mastered. Moreover, oro-motor difficulties (chewing, swallowing) can make certain foods difficult to consume, affecting dietary variety and balance.

Cognitively, children with Down syndrome may have difficulty integrating complex sequences of actions, planning the steps of the meal (taking, spearing, bringing to the mouth), or staying focused throughout the entire meal. This requires appropriate support, based on patience, consistency, and visual or gestural aids to facilitate understanding. The family and educational environment plays an essential role: food autonomy is not imposed, it is built gradually. Offering ergonomic utensils, breaking tasks into smaller parts, encouraging every effort, and celebrating even partial successes are powerful levers. Special education professionals and occupational therapists can also intervene to strengthen the necessary skills. This is how A eats by herself, no longer appreciates being helped by adults. B eats alone and knows how to use cutlery well (knives, forks, spoons...). He can clear his table. Whereas at C's place, using cutlery is still difficult for him, especially the soup spoon. He particularly enjoys eating with cutlery.

Thus, developing autonomy in eating for a child with Down syndrome is much more than teaching them to use a spoon: it is enabling them to strengthen their self-confidence, actively engage in daily life, and build a positive image of their abilities, despite their vulnerabilities.

5.2.2.3. Autonomy in Mobility

Motor autonomy, particularly the ability to move independently, constitutes a major milestone in the overall development of the child. In children with Down syndrome (DS), this autonomy is often acquired later due to the neuro-motor particularities that characterize this syndrome.

Muscle hypotonia, ligament laxity, and balance disorders frequently observed in children with Down syndrome influence the quality and stability of walking. The acquisition of autonomous movement therefore requires specific, gradual, and sustained support. The first movements (crawling, walking on all fours, then walking upright) may appear several months, or even years, later than those of children the same age.

Motor coordination disorders can also make movements less fluid and journeys less safe. The child may hesitate, be afraid of stairs, or fall more often. The environment must then be arranged to promote motor exploration in complete safety (handrails, non-slip surfaces, caring supervision).

Multidisciplinary support, particularly from psychomotor therapists or physiotherapists, is often essential to strengthen postural muscles, improve balance, and allow the child to gradually discover and master the space around them. The encouragement of loved ones and the integration of playful motor activities also help to strengthen bodily confidence. A moves independently, appropriately avoids obstacles. B moves well; navigates well and can avoid obstacles. This is also the case for C, who moves well, navigates well, and can avoid obstacles.

Autonomy in movement for children with Down syndrome is not solely a matter of physical locomotion: it also involves the relationship with the body, self-confidence, and the desire to explore the world. By promoting this mobility, we not only support motor development but also the overall flourishing of the child in their social, emotional, and cognitive interactions.

5.2.2.4. Assimilation of rules

The assimilation of rules in children with Down syndrome (DS) constitutes a fundamental process in their social, educational, and familial development. Although these children exhibit cognitive particularities that can slow down or complicate this learning process, they are fully capable of integrating behavioral norms, provided that the teaching methods are adapted to their functioning.

Children with Down syndrome often exhibit a deficit in abstract understanding, less effective short-term memory, and a slower learning pace. These characteristics influence their relationship with rules, which need to be clear, concrete, repeated, and illustrated in various contexts. The use of visual aids, structured routines, and positive reinforcement promotes understanding and memorization.

The assimilation of rules also involves imitation, educational consistency between different living environments (school, home, specialized center), and emotional stability. The child with Down syndrome learns better when they feel safe and valued. It is therefore essential to adopt a caring educational stance, firm but flexible, that takes into account their specific needs.

The rules must be presented in connection with concrete everyday situations (waiting one's turn, tidying up after an activity, not shouting in class, etc.) and repeated consistently.

The child needs time and guidance to internalize them, but he can achieve it with perseverance and encouragement. With A, this behavior varies depending on the situations. Whereas with B, even though he knows the rules and prohibitions, he has difficulty properly adhering to the rules in the environments he frequents. This is also the case for C, who, even though he knows the rules and prohibitions in force in the class, often reoffends (he may want to wander around; he may sing or refuse to work).

The assimilation of rules in children with Down syndrome relies on an adapted, structured, and emotionally supportive pedagogy. It contributes to their inclusion, their autonomy, and their recognition as social subjects capable of interacting harmoniously with their environment.

5.2.2.5. *Ability to make choices*

The ability to make choices is a fundamental indicator of autonomy and the construction of subjectivity. For a child with Down syndrome (DS), this skill, although influenced by cognitive and developmental particularities, can be developed and supported from a perspective of inclusion and empowerment.

Making a choice involves several processes: recognizing options, understanding the consequences, formulating a preference, and expressing that preference. In children with Down syndrome, language difficulties, slow information processing, or an increased need for guidance can hinder these steps. However, these obstacles do not signify an incapacity, but a necessity for adaptation in educational approaches.

It is essential to offer the child simple, concrete, and limited choices in everyday situations: choosing a piece of clothing, a game, an activity, or what they want to eat. The use of pictograms, images, or real objects can help him better understand the available options. This secure and structured framework promotes his decision-making without placing him in a situation of failure or frustration.

Respecting the child's choices, even if they seem trivial, is a way to acknowledge their individuality, strengthen their self-esteem, and support their ability to position themselves in the world. This also implies that adults accept a degree of letting go and value the child's spontaneity. A makes appropriate choices, she knows how to say yes and no. B also makes good choices and clearly expresses his preferences. C, for his part, makes his choices well and

clearly expresses his preferences. But he may tend to limit himself to what he wants to achieve.

The ability to make choices in children with Down syndrome is a lever for personal and social development. It must be encouraged from a very young age through a benevolent educational approach, appropriate communication tools, and a facilitating environment. This contributes to her recognition as an active subject, capable of desiring, deciding, and existing according to her own preferences.

5.2.2.6. Curiosity (academic)

School curiosity represents the child's natural drive towards learning, discovery, and understanding of the world. In children with Down syndrome (DS), this curiosity indeed exists, although it may be expressed in a specific manner due to the cognitive, linguistic, and sensory particularities inherent to the syndrome.

Contrary to certain prejudices, children with Down syndrome are not passive when it comes to learning. On the contrary, in an adapted and stimulating environment, they show a genuine interest in social interactions, school routines, stories, educational games, and practical activities. This curiosity can be motivated by the pleasure of sharing, peer imitation, or the satisfaction of achieving success.

However, their curiosity can be hindered by an overly directive environment, inappropriate expectations, or a lack of recognition. That is why it is essential to offer a structured yet flexible school framework, based on differentiated pedagogy, play, visuals, and concrete experience. The teacher plays a key role in awakening this curiosity, by encouraging exploration, prompting simple questions, and valuing every effort, no matter how small. A is not very focused on academic learning. B shows a lot of enthusiasm in participating in class (occasionally volunteers to answer questions posed by the teacher, even if their answers are sometimes incorrect/incongruous). He is often resistant to the proposed learning tasks. School curiosity in children with Down syndrome is nurtured by an atmosphere of trust, patience, and enjoyment. It serves as a lever to strengthen motivation, class participation, and cognitive development. Supporting this curiosity means recognizing the child as a being capable of learning, marveling, and progressing at their own pace.

5.2.2.7. *Desire to learn*

The desire to learn is an inner disposition that drives the child to open up to the world, acquire new skills, and actively engage in learning situations. For a child with Down syndrome (DS), this desire is indeed present, even though it may manifest in a more fluctuating manner or in different ways compared to neurotypical children. The child with Down syndrome is often motivated by social interactions, play, repetition, and recognition. He is sensitive to encouragement, appreciative looks, and emotional support. Thus, his desire to learn is intimately linked to the relational bond with adults and peers. When the environment is caring, stimulating, and secure, the child can develop a genuine pleasure in learning, experimenting, and understanding.

Learning must be concrete, visual, and adapted to their abilities. The pace of acquisition may be slower, but the enthusiasm, perseverance, and pride in achieving it are just as present. It is therefore essential to recognize and respect their pace, to set realistic goals, and to positively reinforce every progress, no matter how small. With A, this desire to learn is observed in the new playing techniques. At B, this skill is emerging and visible in small group activities. Just like A, at C, curiosity and the desire to learn are developed through play. Fostering the desire to learn in a child with Down syndrome means betting on their strengths, encouraging their natural curiosity, and offering them educational experiences that make sense. It is also about believing in their potential, supporting them in a personalized, sustained, and rewarding learning journey.

The observations reveal microacts of self-determination, defined as the ability to choose and act according to one's own preferences (Deci & Ryan, 1985). This type of behavior only reflects functional progress but also a self-assertion in action. In several sequences, the children demonstrate clear choices: food preferences, decisions in games, or even open opposition to certain instructions. These manifestations show that the ability to make choices, even simple ones, contributes to the construction of agency. The environment plays a crucial role. Educators facilitate self-determination by establishing open routines. This flexible structure secures the child while giving them a decision-making space.

Finally, autonomy is not limited to efficiency but encompasses the ability to feel like the author of one's actions, which contributes to empowerment. According to Schalock &

Verdugo (2002), self-determination skills are essential to the quality of life of people with disabilities.

5.2.3. Self-esteem and recognition

The content analysis highlights the importance of social and familial recognition in the construction of self-esteem. Empowerment is manifested in the child's ability to identify positively, make choices, and express preferences, even in situations of cognitive or emotional vulnerability.

Self-esteem in a child with Down syndrome is built through constant interaction with the gaze of others, particularly that of educational and parental figures. It manifests through behaviors that value their successes and seek recognition. In the observations, several children respond positively to verbal or gestural encouragement. This need for recognition reflects the importance of the social mirror in the construction of the sense of personal value (Honneth, 2000).

The repetition of encouragements fosters a sense of competence. According to Bracken (1996), self-esteem develops when a child perceives that they have intrinsic worth, that they are capable, and that they are loved. Thus, successful experiences in tasks suited to their abilities reinforce a positive self-image. Peer recognition also plays a central role. These horizontal exchanges reveal a process of mutual support, strengthening self-confidence and confidence in others.

Moreover, self-esteem is also reflected in posture, the way one speaks about oneself, or the initiative to introduce oneself to a visitor. The inclusive and caring context fosters a dynamic where the child feels competent, worthy, and visible. The axis of self-esteem and recognition, within the framework of empowerment, therefore emphasizes that the child can only perceive themselves as an actor in their life if they feel valued in the social space that surrounds them. Here, positive reinforcement promotes identity affirmation. The child positions themselves in a process of self-affirmation mirrored by the adult's gaze.

5.2.4. Social interactions and active participation

Integration into school or social groups fosters the emergence of social skills. Children with Down syndrome develop forms of leadership, cooperation, or mediation, often through simple but meaningful gestures, such as offering help, initiating an interaction, or defending a peer.

Qualitative content analysis, whether thematic or categorical, thus makes it possible to highlight the often underestimated resources of children with Down syndrome. It reveals that their empowerment is less related to cognitive performance than to the quality of the bond, emotional support, and the ability to feel like actors in their own lives. This type of analysis is essential to adjust pedagogical and therapeutic practices to their specific needs while promoting their dignity and citizenship. Active participation is defined as the child's ability to voluntarily and meaningfully engage in individual and collective activities. For children with

Down syndrome, this participation is both an indicator and a driver of their empowerment. It strengthens the sense of usefulness, belonging, and nurtures social skills. In the observations, the children show a desire for interaction: This type of initiative reflects a desire for co-construction of social bonds, a valuable relational skill in the development of social autonomy (Vygotsky, 1934/1997). Moreover, their participation in collective tasks, such as tidying up the room or distributing materials, is perceived as rewarding: This functional role gives the child a status within the group, integrating them into a dynamic of contribution and trust.

The presence of supportive supervision (teachers, educators, caring peers) facilitates this active inclusion. Encouragement to express their choices (color to use, activity to do) also helps to strengthen their sense of agency (Zimmerman, 1995). Finally, interaction with others fosters essential emotional learning: waiting one's turn, recognizing the emotions of others, adjusting one's behavior all key dimensions of socio-emotional development.

Thus, active and relational participation constitutes a fundamental pillar of empowerment, as it allows the child to experience themselves as the subject of their own experience, within a supportive relational fabric. This behavior reflects an initiative, a sign of active participation in the collective and the development of the power to act within a secure framework.

5.2.4.1. Socialization

Socialization refers to the process by which an individual internalizes the norms, values, behaviors, and codes of their social environment in order to participate in it appropriately. In children with Down syndrome (DS), this process follows a particular trajectory, influenced by their cognitive, linguistic, and emotional specificities, but also by the quality of interactions and the educational framework. From a very young age, the child with Down syndrome (T21) shows a strong need for connection and a great sensitivity to the emotions of others. He seeks contact, attaches easily, and often develops warm relational skills. However, his difficulties with verbal communication and information processing can hinder certain social interactions, especially in poorly adapted environments.

Early support, specialized educational interventions, and inclusion in groups of children are essential levers to support his socialization. School, leisure activities, relationships with peers and adults allow the child to learn to cooperate, share, negotiate, and respect collective rules. This is how A approaches people their age and initiates contact. B In class, he is quite sociable (he initiates contact and creates positive relationships with classmates); outside of school, in unfamiliar social settings (supermarkets, swimming pools...), he is often teasing and provocative. In class, he is quite sociable (he initiates contact and creates positive relationships with his classmates); outside of school, in unusual social settings (supermarkets, swimming pools...), he is often teasing and provocative. He initiates a lot of contact with his classmates in class. Even without considering the approval of his peers.

The family plays a fundamental role: by promoting varied social situations, encouraging autonomy, and valuing the child's efforts, it strengthens their self-esteem and sense of belonging. Social acceptance, the patience of adults, and education about differences in the broader society are also crucial for successful socialization. The socialization of a child with Down syndrome is possible, rich, and evolving, provided there is caring, structured support tailored to their specific needs.

5.2.4.2. Adaptation to an unknown environment (both social and physical)

Adaptation to an environment, whether familial, educational, or social, refers to an individual's ability to understand, integrate, and respond to the demands of a given framework. In children with Down syndrome (DS), this adaptation depends on several

factors: their cognitive abilities, emotional development, the stimulation they receive, and the quality of the support they benefit from. Due to the intellectual disability associated with Down syndrome (DS), the child may have difficulty quickly adjusting to changes, understanding implicit rules, or managing new situations. However, with an individualized educational approach, a structured environment, and stable reference points, he can develop effective coping strategies.

Routine, repetition, and visual aids (pictograms, illustrated schedules, simple instructions) facilitate the integration of expectations. Encouragement, recognition of achievements, and the kindness of adults strengthen the child's confidence and support their motivation to get involved. A adapts easily to new environments. With B, adaptation happens slowly. In new environments, he has difficulty adopting appropriate behaviors. However, in familiar environments, he behaves relatively well. As for him, he adapts relatively well to changes.

The environment must also adapt to him: school inclusion with accommodations, longer learning times, respected pace, guided social interactions. When he feels safe, understood, and supported, the child with Down syndrome demonstrates a strong capacity for imitation, perseverance, and openness to novelty. Thus, the adaptation of the child with Down syndrome is not a simple unilateral adjustment: it relies on a dynamic interaction between their potential and the quality of the environment. Providing a stable, stimulating, and caring environment is an essential condition for their harmonious development.

5.2.4.3. Mastery of Everyday Life Skills

Daily life relies on a set of practical knowledge essential for autonomy: feeding oneself, dressing, washing, moving around, managing time, or interacting socially. In children with Down syndrome (DS), the acquisition of these skills often follows a slower pace but remains accessible with appropriate support. Children with Down syndrome (T21) exhibit difficulties related to fine motor skills, language, working memory, and abstraction, which can impact their ability to learn and generalize everyday actions. However, with structured, concrete, and repeated learning in varied contexts, they can gradually acquire these skills. Specialized education plays a key role here.

Through practical life activities, visual routines, symbolic games, or the use of pictograms, the child is guided to understand sequences of actions, anticipate, name their

needs, and develop their functional autonomy. The family environment must also encourage daily experimentation and value efforts. Emotional support, patience, and the appreciation of small successes strengthen the child's motivation and self-confidence. As his skills progress, he can contribute to simple household tasks, manage his schoolwork, or participate in smoother social interactions. At A's, this skill is in the process of being acquired. At B This aspect is not fully mastered. he still does not understand the concept of time, financial management, security, and prevention are not assimilated by him, so he will need guidance to achieve this. C, on the other hand, knows how to say hello when he meets a new person. He knows where to put away his belongings and the household items.

Thus, mastering everyday life skills in a child with Down syndrome is an evolving process that requires a coherent, caring, and stimulating framework. This development is essential for their social inclusion and sense of competence in a world structured by these fundamental learnings.

5.2.4.4. Mastery of daily life skills

For children with Down syndrome (DS), mastering the gestures of daily life is an essential pillar of their development towards autonomy. These actions include simple yet fundamental tasks such as dressing, eating, washing, tidying up, using the toilet, and even participating in household chores. Their acquisition represents a crucial step in the process of social, educational, and familial inclusion.

Children with Down syndrome often face motor challenges (hypotonia, coordination), cognitive challenges (memory, attention), and sometimes sensory challenges. These particularities slow down learning, but do not prevent it. With early, structured, and supportive guidance, they can develop motor and functional skills adapted to their daily lives. The learning of these gestures relies on repetition, the structuring of the environment, the use of visual supports (pictograms, action sequences), and individualized scaffolding. Specialized education, in collaboration with families, offers concrete situational practices, values initiative, and fosters self-esteem. These gestures are often learned through imitation, through ritualized routines, and in an atmosphere of emotional trust. A knows the gestures of politeness, respects the elders, and masters the basic hygiene gestures (washing hands before meals, after using the toilet). B has mastered the gestures of daily life, for example, dressing

and undressing, washing hands and taking care of personal hygiene, brushing teeth, taking a shower—these are tasks he performs when assisted. With C, this skill is emerging.

The active participation of the child in real-life contexts (meals, dressing, play, outings) helps to reinforce the generalization of learning. The patience of adults, the recognition of successes, even partial ones, and the consistency in expectations are all facilitating factors. In short, mastering daily life skills in children with Down syndrome is not just a functional competence: it constitutes a source of identity, recognition, and belonging. It allows the child to feel capable, useful, and an actor in their own life, while strengthening social and family bonds.

The empowerment of children with Down syndrome is manifested through progressive dynamics, supported by nurturing guidance, controlled freedom spaces, and rewarding participation experiences. The content analysis conducted based on observations in specialized educational settings has identified four central axes: The children are showing increasing initiative in daily life activities (dressing, tidying up, eating). This practical autonomy, even if partial, strengthens their self-confidence and promotes their individuation (Deci & Ryan, 1985).

They express simple choices (activities, playmates, favorite objects), a sign of a process of subjectivation. Respecting their preferences, even modest ones, constitutes an important lever for the sense of personal agency. The child engages in social interactions and group activities with pleasure and involvement. These moments of cooperation develop socio-emotional skills and support the sense of usefulness and belonging. Signs of recognition (encouragements, congratulations, assigned responsibilities) strengthen self-esteem. The child feels capable, important, and accepted in their uniqueness, despite cognitive limitations.

Empowerment in a child with Down syndrome is neither a linear nor uniform process, but a dynamic construction rooted in connection, recognition, and experiences of partial autonomy. It is less an achievement than a journey, where appropriate support plays a crucial role.

CHAPTER 6: INTERPRETATION AND DISCUSSION OF RESULTS

In this chapter, we will interpret the results that were presented in the previous chapter.

6.1. Interpretation of the Results

First, let us recall that the empowerment perspectives all propose in their own way a socialization of autonomy mechanisms in a world where individualism constitutes the dominant form of socialization to collective life. For example, for Le Bossé et al. (2009, p. 184), "In the DPA-centered approach, the practitioner's effectiveness criterion focuses on the ability to develop a solution with the person being supported that aligns with what is important to them." How do we recognize that what is important to someone is truly important for "them," and not just in response to the individualistic injunction of self-fulfillment, thus for the other? According to Pierre-Henri Castel (2012), individualism is a social form imposed on everyone; it is not the individual who makes society. It would rather be the constitutive illusion of the society of individuals to believe that self-governance, of the individual, creates society: No one ever spontaneously conceives that the individual-being is a social form—without being stupid or blind, because that is precisely what it means to belong to the "society of individuals": to attribute to oneself, in value, the status of a creator agent of society... which, in fact, socializes you as an individual-who-believes-they-are-self-producing. "The more a definition remains implicit, unjustified, unargued, the more its discussion proves difficult, and its reasoned correction improbable" (Karsz, 2011, p. 15).

This new form is autonomy-condition. The aspiration autonomy gave the leading role to guilt, but no longer the conditional autonomy (Castel, 2012, p. 355-356). According to this author, no one can want anything other than autonomy these days. It is this autonomy that creates the social and makes it effective, because we rely on the autonomy of others to fulfill ourselves. Castel (2012), echoing Ehrenberg (2010), describes the regime of autonomy in which we currently find ourselves as "conditional autonomy" (immanent condition of dignity) as opposed to aspirational autonomy, which urged each of us to spread over time the process of acquiring developing autonomy. The condition-autonomy rather demands this self-fulfillment here and now. It is a particular relationship with oneself where empowerment is likely to be a relationship of voluntary submission, thus in a relationship of authority (voluntary submission) or domination (involuntary submission) to the injunction to

"emancipate oneself." Paradox to consider when it comes to theorizing empowerment from both the perspective of the recipients of the intervention and that of the interveners.

Moreover, we have seen that one of the theoretical benchmarks of the environmentalist perspective of empowerment for judging social purpose was "the good life," inspired by the philosophical reflections of Ricoeur. But what is a good life today? The one that the individual has chosen to live or the one to which they submit? How do we distinguish between these two postures? As Castel (2012) points out, currently neuroscience attempts to explain social bonds as residing in the brain, and the more autonomous you are made, the happier you will be, because that is precisely the good life of today. For empowerment, the question of the margin of maneuver for individuals and communities regarding their liberation in terms of the effective possibility to choose what is good for themselves then arises sharply: between liberating accountability (Hache, 2007) and liberation from conformity, how do the promoters of empowerment problematize the issues of social empowerment? Recurring paradox where each individual believes they are an individual by themselves, while there is nothing more socially imperative than to individualize oneself even more, reaches a climax here. The individual feels tossed between the distressing sense of abnormality in overly unique situations and the rejection of the impersonal conformity of overly normalized situations. (Castel, 2012, p. 363)

This paradox calls into question the possibility for practitioners of empowerment to not directly or indirectly induce certain norms of the good life, as some authors prescribe to practitioners: Clearly inscribed in the perspective of a reformist aim, this objective that we attribute to social practices is based on a non-prescriptive logic that grants a central place to negotiation and the simultaneous consideration of the individual and structural dimensions of each situation. This, in order to allow individuals or groups to continue their pursuit of the good life (Le Bossé, 2012, p. 128).

This paradox represents one of the blind spots in the theoretical reflection on empowerment. It is, moreover, one of the structural dimensions of collective practices of power appropriation that is not considered here, and which would take the form of authority relations induced by current social norms of individual empowerment. For example, this would explain why, in the context of collective practices, the group often feels compelled to serve each individual.

According to Castel (2012), we would be caught in a paradoxical context where we need to question the conditions of the embarrassment of acting. Constraints on autonomy would create all sorts of situations, including the choice of not choosing. In short, the link between intention and action is fragile. There are not necessarily logical links between the two, even though neuroscience reduces intention and action to a cognitive logic. Taking action puts us in a dilemma of acting. How is this embarrassment interpreted and addressed in an empowerment process? Castel adds that in our societies, individuals are asked to overcome this embarrassment of acting by taking on the responsibilities that accompany it, up to assuming the consequences and the consequences of the consequences. Feeling responsible has become an imperative, and it creates shame if we fail. Under these conditions, how can we truly understand what people desire for and by themselves? Constraints are increasingly internalized to ensure self-management as a responsible agent monitoring oneself in their intentions. Thus: "Being autonomous and happy is essentially achieving the self-regulation of one's own self-regulation for the better, that is, according to the self-regulated expectations of others" (Castel, 2012, p. 458). Would helplessness become a pathology, a disability? Will we soon witness the emergence of autonomy therapies? This structural hypothesis of contemporary socialization towards autonomy concerns not only the perspective of accountability that we have previously exposed, but the entirety of the ambient social normativity, despite the repeated efforts of other empowerment perspectives to criticize its finality.

The injunction to participate is part of a global social phenomenon that is based on an anthropological conception according to which the human being must be considered, indeed, in the tension between autonomy and vulnerability, but under the normative horizon of activity and performance. To the exclusion, inherited from the 19th century, according to a division of beings based on capacities defined once and for all in objectivity, is thus replaced by a dynamic division where abilities and skills must constantly be maintained, enriched, and demonstrated. Faced with calls to be performant and participative, the individual constantly grapples with multiple demands that force them to keep up but also constantly expose them to falling behind or demonstrating their shortcomings. (Genard, 2013, p. 60) For example, autonomy is perceived by employers as a source of productivity and often, by employees, as a subjective reward and a means of recognition (Castel, 2012, p. 362). Once again, we could congratulate this state of affairs where everyone can now access social

emancipation, but the catch is that this emancipation is a permanent injunction in the face of changing contexts that require constant flexibility.

For being able to "change oneself" is also a strength, even a marketable talent. It seems that this power, or even this obligation to change oneself, but also to be "an actor in one's own change," significantly influences the moral and psychological economy of individuals in the age of conditional autonomy. One thing is to aspire to become oneself; another is to have to constantly reinvent oneself in a "liquid" environment, according to Zygmunt Bauman's expression. (Castel, 2012, p. 362-363)

These reflections raise the fundamental question of individual freedom; a question at the very heart of empowerment goals, but insufficiently problematized. In *The Singularist Society*, Martuccelli (2010) also proposes to consider the paradox linking the individual to the conditions of social life when it comes to defining freedom other than by the belief in a person's potential. Doesn't freedom reside in individuals? Of course, individuals have their own inventive force. But one thing is to grasp its role from the differential possibilities offered by social life, and another is to understand it by burying it as a mystery, deep within the human psyche (creation) or as a metaphysical capacity of existence (freedom). [...] It is in the social world itself and not in the individual that this irrepressible possibility of action ultimately resides. It is the *sui generis* manner in which social life conditions our actions (constrains or enables them) that accounts for it. To conceive of the individual as someone who has an irreducible capacity for action therefore paradoxically requires going beyond the individual alone and situating this possibility within social life itself (Martuccelli, 2010, p. 104-105).

The process of empowerment for children with Down syndrome (DS) can be interpreted as a dynamic of gradual transformation of their social position, their ability to act, and their self-awareness as subjects. Far from being a simple process of individual empowerment, empowerment for these children involves a constant interaction between personal, relational, institutional, and cultural factors.

On the intrapsychic level, empowerment relies on the development of self-esteem, a sense of competence, and self-determination (Deci & Ryan, 2000). The child with Down syndrome, often confronted with devaluing social representations, needs to be recognized for their potential and supported in the construction of their identity. Specialized education,

parental support, and inclusive integration provide a fertile ground for this subjective development.

At the interactional level, empowerment involves access to meaningful social interactions, where the child is perceived and welcomed as an active participant. The quality of the bond with the key adults – educators, teachers, therapists – is essential to create a climate of trust and security, prerequisites for any initiative-taking. The process is therefore mediated by giving the child a voice, listening to their needs, and recognizing their emotions. Finally, from a sociocultural perspective, the empowerment of children with Down syndrome requires an inclusive institutional and societal environment, capable of transcending the deficit logic to adopt an approach based on rights and abilities (UNICEF, 2013). This involves deconstructing ableist norms and integrating models of education and citizenship based on the active participation of everyone, regardless of their condition.

Thus, empowerment cannot be reduced to the acquisition of functional skills: it is a comprehensive process of self and world appropriation, supported by educational, clinical, and social practices oriented towards recognition and participation. It constitutes an ethical and political response to the issues of dignity and justice for children living with Down syndrome.

6.2. Discussion of the results

The educator is the first to intervene with the families. He stimulates the child more holistically so that they become interested in their environment. Access to autonomy and the socialization of the child are his main objectives, which involve the development of verbal and non-verbal communication (expression of feelings, emotions, for example). The educator also connects with external partners and provides support to families for registrations at the nursery, school, and medical visits. The child is therefore at the center of their intervention here. (Bénédicte, de Fréminville, et al, 2007, p.278).

Empowerment, defined as the process by which a person develops control over their life and choices (Zimmerman, 2000), is a major issue in supporting children with Down syndrome (DS). For these children, the notion of empowerment is closely linked to the development of autonomy, social inclusion, and self-assertion in contexts still marked by stigma and underestimation of cognitive abilities. Contemporary research emphasizes the importance of environmental and relational factors in the construction of agency. According to Lachapelle

and Wehmeyer (2003), self-determination an essential component of empowerment can be encouraged from a young age through an education focused on strengths, choice, and responsibility. In this context, empowerment is not limited to individual capacity but is rooted in systemic support, including family, educators, and institutions.

Field observations indicate that children with Down syndrome show clear signs of taking ownership of their skills, particularly in inclusive school environments, where they are invited to make simple decisions, express themselves, and participate in joint projects. The inclusive approach, by reducing social and symbolic barriers, acts as a catalyst for empowerment (Shogren et al., 2015). Furthermore, educational practices that promote augmentative communication, the adaptation of teaching materials, and respect for the child's pace are effective levers. The recognition of their progress strengthens their self-esteem, a determining factor in maintaining motivation and social participation (Deci & Ryan, 2002). However, obstacles remain. Parental overprotection, low expectations from some professionals, and deficient representations of Down syndrome sometimes limit the development of autonomy. That is why continuous training for stakeholders and a societal paradigm shift are necessary: it is no longer just about taking care, but about co-constructing ambitious and realistic development trajectories with the child. Ultimately, the empowerment of children with Down syndrome relies on a dynamic interplay between the child's personal resources, educational mediations, and the sociocultural context. The challenge is to open spaces of recognition, competence, and participation, so that each child can build themselves as a subject, an actor in their own life.

6.3. Implications and Perspectives

Conducting research focused on the empowerment of children living with Down syndrome (DS) raises both theoretical, practical, social, and ethical implications. From a theoretical perspective, such a study allows for repositioning the child with Down syndrome (T21) as an active agent in their own development, breaking away from deficit-based approaches. It enriches the fields of developmental psychology, special education, and social sciences by questioning the notions of autonomy, participation, and agency in a context of disability.

On a practical level, this research can guide the development of pedagogical and educational interventions aimed at strengthening decision-making skills, communication, self-

representation, and the active participation of children with Down syndrome in school, family, and social life. It also offers evaluation and support tools better suited to the specific needs of these children, emphasizing their potential rather than their limitations.

The social implications are also significant: by helping to deconstruct stereotypes about the passivity or dependence of people with disabilities, this research supports the promotion of an inclusive society based on the recognition of the rights, abilities, and dignity of children with Down syndrome. Finally, from an ethical standpoint, it invites a rethinking of the place of the child's voice and experience in the production of knowledge, ensuring the adoption of participatory methods that respect their pace, understanding, and subjective experience.

CONCLUSION

At the conclusion of this work dedicated to the empowerment of children with Down syndrome, several essential observations can be made. The study demonstrated that, despite the cognitive limitations associated with Down syndrome, these children possess a genuine potential for self-determination and social participation, provided their family, educational, and institutional environments engage in an inclusive and empowering dynamic (Schalock et al., 2007; Wehmeyer, 2013).

The analysis highlighted that the empowerment of children with Down syndrome cannot be approached independently of the social interactions in which they evolve. Indeed, it is in the relationship with adults – teachers, educators, parents – that the recognition of their ability to make choices, express preferences, and exercise control over their daily lives takes place (Booth & Ainscow, 2011). The environment then becomes not just a protective framework, but a lever for activating skills, based on a positive vision of development. The results also highlight the need for structured support, promoting the progression of functional autonomy, socialization, and identity construction. Adapted educational tools, ritualized routines, and mediations tailored to the cognitive pace of the T21 child prove crucial in this perspective (Nader-Grosbois, 2011).

From a theoretical standpoint, this research calls for a renewal of the care paradigm, emphasizing the co-construction of agency between the child and their environment. It is part of a socio-constructivist and humanistic approach to disability, where the effective participation of the child becomes a criterion for the quality of educational practices (UNESCO, 2020). Finally, on an ethical and political level, promoting the empowerment of T21 children requires rethinking inclusion and children's rights policies, valuing their expression in social spaces, and combating forms of exclusion that are often internalized or institutionalized.

This thesis thus opens up perspectives for action and research, particularly on the concrete conditions that promote empowerment in inclusive schools, families, and specialized structures, while emphasizing the need for a reflective and respectful stance towards otherness.

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