

# The promotion of self-determination in adults with intellectual disabilities: the state of the art and the research progress

## La promozione dell'autodeterminazione negli adulti con disabilità intellettive: lo stato dell'arte e il progresso della ricerca

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The importance that the self-determination construct has in people with intellectual disabilities' life projects is the main paradigm of reflection of this paper. The most significant criticalities, identified by the scientific literature of reference, within the application of the construct in people with disabilities, push the author of this work towards the consideration of which are the operative modalities that are able to promote the construct. For this reason, an international overview is carried out of the most cited published reviews, meta-analyses and syntheses of research concerning programs, interventions, strategies, and activities that the studies identify as being able to implement the construct. In line with the current challenges of special pedagogy, we are outlining some of self-determination's implementation hypotheses, in order to offer to people with intellectual disabilities the necessary opportunities to properly enter into the adulthood route.

**Keywords:** self-determination; intellectual disabilities; international overview; educative interventions; supports.

abstract

Revisione sistematica 204

a. meta-analisi; b. Evidence Based Education

## 1. Introduction

The complicated recognition of the adult dimension in people with disabilities, still marks, today, a pedagogical emergency that is reflected both in the life path of the person with disability, and within their family ecosystem (Curryer *et al.*, 2015). The common consideration of people with disabilities such as ‘children’ means that the focus is finite on their care practices, instead of educational ones. Moreover, the goal of ‘look forward’, typical of every life project, is lacking. In order to rediscover the dimension of ‘pro-iacere’ and to be able to balance the terms of “assistance” and “education” in taking charge of people with disabilities, we present, in this work, some guidelines that relaunch the concept of adulthood through the full legitimation of the self-determination domain (Giaconi, 2015). The reference that the scientific literature (Wehmeyer, 1998; Wehmeyer, & Bolding, 1999; 2001; Powers *et al.*, 2012; Cottini, 2016; Shogren *et al.*, 2016) offers, indeed, is the possibility to reflect on the potential of operational practices aimed at implementation of this domain in people with disabilities, inscribable within the multidimensional Quality of Life phenomenon (Wehmeyer, & Schwartz, 1998; Schalock *et al.*, 2010; 2012; Giaconi, 2015).

The complexity that characterizes the projection towards adult life for people with disabilities and the taking in charge of them by families, or whoever takes care of them, can be characterized by moments of criticality and vulnerability, especially during the transition phases (for example, after the end of school, the inclusion in structures for the “After us”, etc.). For these reasons, paying attention to the domain of self-determination in young people with disabilities allows us to focus on key issues such as autonomy, self-realization and self-regulation (Wehmeyer, 1992), to promote the adult life.

The challenge of adulthood in the disability field requires to the special pedagogy a redefinition in both observations and design procedures; since understanding at what levels people with disabilities experience a self-determined life can allow those who work with them to intervene specifically in educational activities focused on individual preferences and the process of choice. In this sense, providing meaningful opportunities and sensible trajectories of life to those who are preparing to become adults means «allowing the person with disabilities, depending on their possibilities, to be able to venture independently into the world. Every aid should make the disabled person experience autonomy, effectiveness and determination, finding the push to overcome the inevitable obstacles to reach a goal achieved independently» (Dainese, 2015, p. 141).

For these reasons, our reflection in this paper goes on to focus on the main critical issues related to the application of self-determination in people with disabilities, to then orient ourselves towards the consideration of the most significant interventions that the literature proposes in this direction and, lastly, suggest operational guidelines for those who work with people with disabilities.



## 2. State of the art: critical issues in promoting self-determination in people with disabilities

The complaint by people with intellectual disabilities to enjoy limited opportunities in making choices and expressing preferences on some fundamental aspects of their lives (Stancliffe, Abery, & Smith, 2000; Stancliffe, 2001), as well as the confirmation, from researches, concerning the lower level of self-determination in this population than their peers without disabilities (Stancliffe, Abery, Springborg, & Elkin, 2000; Wehmeyer, & Abery, 2013; Shogren, Wehmeyer, Palmer, Forber-Pratt, Little, & Lopez, 2015), led different social areas to question themselves concerning the possibility of strengthening the construct of self-determination also in people with intellectual disabilities, in order to guarantee greater protection and better life expectancy for all.

In this direction, the growth of self-representation and self-promotion groups, networks and associations born in support of the rights of people with disabilities is identified; a testimony of the attention and development of a growing sensitivity in favoring processes that support people with disabilities (Welsby, & Horsfall, 2011; Del Bianco, 2018).

The promotion of self-determination has also attracted the interest of many professionals and researchers in the field of special education, in this regard Wehmeyer, Field and Thoma (2012) affirm: «Over the past two decades, promoting the self-determination of students with disabilities has become a best practice in secondary education and transition services» (Wehmeyer, Field, & Thoma, 2012, p. 171). In the special pedagogy viewpoint, there is, in fact, a widespread recognition of how the construct implementation assumes the connotation of a fundamental vehicle for feeding expectations, satisfactions (Wehmeyer, & Bolding, 2001; Chambers *et al.*, 2007; Shogren, 2011; Shogren *et al.*, 2016) and motivations in people with disabilities (Frielink, 2018), creating specific opportunities for learning useful skills in adult life (Wehmeyer, & Palmer, 2003). Promoting self-determination «means to enhance access to the general education curriculum for students with disabilities as well as to promote more positive transition related outcomes for these youth» (Lee *et al.*, 2015, p. 237), and being able to create opportunities to learn specific skills «such as expressing preferences, making choices, solving problems, making decisions, setting an attaining goals, self-managing and self-regulating action, self-advocating, and acquiring self-awareness and self-knowledge» (Shogren *et al.*, 2016, p. 216). As Wehmeyer and his colleagues argue (2018), the promotion of self-determination is of fundamental importance, as it «is at the heart of the process that will be necessary to enable youth and young adults to learn to self-regulate learning, planning, goal setting and attainment, and to achieve the life and career outcomes that reflect their preferences, interests, abilities, and values» (Whemeyer *et al.*, 2018, p. 60). The research shows that high levels of self-determination in people with intellectual disabilities translate into positive outcomes during adulthood, such as the achievement of academic goals (Fowler *et al.*, 2007; Konrad *et al.*, 2007; Lee, Wehmeyer, Soukup, & Palmer, 2010; Shogren *et al.*, 2012), work access (Martorell, Gutierrez-Rechacha, Pereda, & Ayuso-Mateos, 2008), inclusion and social participation (Wehmeyer, & Palmer, 2003; Walker *et al.*, 2011), as well as a general improvement in their Quality of Life

(Lachapelle *et al.*, 2005; Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006; Nota, Ferrari, Soresi, & Wehmeyer, 2007; Giaconi, 2015). The achievement of these results is supported, in educational actions, by the numerous intervention programs that have the objective of increasing the active and direct involvement of people with disabilities, favoring their opportunities of choice in multiple directions (Palmer *et al.*, 2004; Wehmeyer, 2007; Lee *et al.*, 2008). Indeed, the research points out that the structure of specific interventions and practices prove to be effective in raising levels of self-determination in people with disabilities, regardless of the person's intellectual functioning (Algozzine *et al.*, 2001; Malian, & Nevin, 2002; Wehmeyer *et al.*, 2012; Shogren, 2013; Shogren, Wehmeyer, Palmer, Rifenshark, & Little, 2015). Numerous studies have shown that adolescents with intellectual disabilities have become more self-determined, thanks to specific instructions to promote the construct, compared to groups that have not been exposed to interventions (Powers *et al.*, 2012; Shogren *et al.*, 2012; Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2013). For example, Wehmeyer and his collaborators (2013) demonstrate that during a period of three years, students with intellectual disabilities have achieved a particularly positive growth in their self-determination standards compared to other students who have not participated in practices to increase the construct. Also the recent study conducted by Chou *et al.* (2017) outlines how didactic activities and opportunities, specifically focused on certain components (for example, setting/achieving goals, making choices, self-representing, self-regulating or problem solving), are essential for students with disabilities, in order to raise their levels of self-determination.

However, we agree with Caouette and collaborators (2018) that «setting up interventions for developing self-determination remains difficult» (Caouette *et al.*, 2018, p. 5) in the practical implementation field, because the complex concept of self-determination requires appropriate skills, knowledge and attitudes (Abery, & Stancliffe, 2003). Despite having found significant progress in the literature, especially internationally (Wehmeyer *et al.*, 2011; Shogren *et al.*, 2016), the research highlights the significant challenges that remain in the implementation of self-determination in people with disabilities (Algozzine *et al.*, 2001; Malian, & Nevin, 2002; Wehmeyer, Abery, Mithaug, & Stancliffe, 2003; Cobb *et al.*, 2009).

Among the most important criticalities, those related to the multidimensional nature and the evolutionary connotation that characterize self-determination emerge most.

Researchers have long oriented their studies towards the delineation of empirical bases concerning the difficult boundaries of the construct (Wehmeyer, 1998; 2005; Wehmeyer, Abery, Mithaug, & Stancliffe, 2003; Ward, 2005). Self-determination turns out to be an elusive concept (Shogren, 2013) that is «extraordinarily multifaceted and complex» (Cobb *et al.*, 2009, p. 113) and is characterized by multiple and overlapping components (Luckner *et al.*, 2019), so if these are considered separately, they do not contribute to a meaningful global definition (Chou *et al.*, 2017). The multidimensional nature that characterizes the construct has led to a plurality of theoretical and practical visions; a variety of models and theories of reference (Wehmeyer, 1992, 1999; Mithaug, 1993, 1996; Abery, & Stancliffe, 1996, 2003; Stancliffe, Abery, & Smith, 2000; Shogren *et al.*, 2015a, 2015b), within which it is possible to differentiate definitions (Wehmeyer, 1998, 2005; Wehmeyer, Abery, Mithaug, & Stancliffe, 2003; Turnbull *et al.*, 2010;



Shogren *et al.*, 2015a), tools used for the survey (Wolman *et al.*, 1994; Wehmeyer, & Kelchner, 1995; Wehmeyer, & Bolding, 1999; Abery *et al.*, 2000, 2007; Abery, & Stancliffe, 2003; Shogren *et al.*, 2014a, b), as well as operational and teaching materials for its implementation (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Wehmeyer, Abery, Mithaug, & Stancliffe, 2003; Wehmeyer, & Palmer, 2011; Shogren *et al.*, 2018). The lack of coherence in the conceptualizations concerning the construct has provoked «confusion and misunderstanding as frequently as clarity and utility» (Wehmeyer, 2004, p. 338), leading professionals to question themselves about what it really means to 'promote self-determination' (Shogren *et al.*, 2008). Since there is no single and univocal systematization, considering all the variables that differently describe the operationalization of the construct, it becomes critical to implement a design that can promote the development of self-determination in people with disabilities. As Field and collaborators (1998) state: «access to these materials remains difficult due to the difficulty in finding them» (Field *et al.*, 1998, p. 72).

The educational research also undelines the life-span connotation of self-determination, or rather a sensitivity of the construct to the space-time development, which is characterized by a mutability both on the diachronic axis, and on the synchronic one. Therefore, to be emphasized is the possibility of variations and/or enhancements of the construct in space and time, during the course of life (Sands, & Wehmeyer, 1996; Malian, & Nevin, 2002; Shogren *et al.*, 2016; Wehmeyer, Shogren, Little, & Lopez, 2017). The various phases of the life journey can be affected by diversified possibilities, but can still have a common thread. In this direction, researchers have repeatedly identified self-determination as an evolutive construct (Shogren, 2013) and an ecological phenomenon (Malian, & Nevin, 2002), because «it is not a fixed characteristic, but instead is fluid (i.e. it is situational and changes according to the context» (Malian, & Nevin, 2002, p. 73), suggesting that attitudes associated with self-determination develop over time as children and young people have the opportunities to learn and apply these skills (Shogren, 2013). As the person becomes an adult, there could be a shift towards the integration of autonomy, self-regulation, psychological empowerment, and self-realization (Ginevra *et al.*, 2015), as well as greater general satisfaction with life (Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006). Therefore, the life-span realization and the mutability that characterize the self-determination construct significantly influence its own applicability. Considering the marked variability of human behavior over time and the environmental conditions that may or may not affect the process of developing self-determination, it is certainly a challenge for those who accompany people with disabilities into adulthood. For these reasons, a well structured practice of self-determination calls into question the systematic commitment and competence of those who have to carry out the educational design of this population.

The criticalities that can emerge from the concrete implementation of self-determination in people with disabilities push our reflection towards the analysis of the existing literature concerning the main interventions able to promote the construct; in the next section we will consider some of the most significant studies realized in this direction.

### 3. The research progress: international overview

In recent decades, the remarkable scientific literature confirms considerable attention aimed at the importance of self-determination in educational practices for people with disabilities (Agran, 1997; Wehmeyer *et al.*, 2003; Carter *et al.*, 2006; Wehmeyer *et al.*, 2007; Wehmeyer, & Field, 2007; Shogren, 2013; Caouette *et al.*, 2018). The literature that will be presented in this section, concerns, for the most part, studies and research that are limited to the self-determination of young people with disabilities. Analyzing these researches becomes important for our perspective of interest since make possible to know and understand which are necessarily relevant for the adult life. Considering the lack of research and procedures in the adult age perspective, the research we are going to outline turns into interesting points of reference, becoming the precursors of the principles useful for the relevance of self-determination in every phase of the life path.

Among the most cited reviews, meta analysis and synthesis of research carried out from 1998 (Field *et al.*, 1998) to the present (Luckner *et al.*, 2019), concerning the various programs, interventions, strategies and activities that the literature identifies for raising levels of self-determination in people with disabilities, are the focus of investigation. Field and colleagues (1998) find 35 different teaching materials aimed at teaching self-determined skills; in this analysis emerges a differentiation of materials into sections, subsections and detailed descriptors, in order to allow educators to quickly identify the resources necessary to implement teaching practices. Milian and Nevi, in their article “A review of Self-determination Literature. Implications for practitioners”, in 2002, examine curricula and research results (categorized as evaluation models or programs, assessments and research on teaching strategies) showing how, through systematic instructions, different models are effective to acquire self-determination skills for students with disabilities. In the reviews conducted by Algozzine and collaborators (Algozzine, Browder, Karvonen, Test, & Wood, 2001) the studies that have empirically deepened the impact of the strategies to promote self-determination turn out to be 51, where most of the interventions, addressed to students with intellectual and learning disabilities, are aimed at feeding specific components of the construct (among these, self-representation and decisional process are privileged). The same authors (Karvonen, Test, Wood, Browder, & Algozzine, 2004) underline, through an approach of multiple case studies, that the construct of self-determination is typically divided into at least nine components and many of these (for example, self-awareness and self-efficacy) need to be investigated further through other investigations. The review carried out by Wood and colleagues (2005) differs from the previous ones for a focus on self-determination interventions to address people with severe disabilities. The results of this study want to «increase awareness of teaching self-management, problem solving, goal setting, decision making, and self-advocacy» (Wood *et al.*, 2005, p. 121) even in individuals with profound disabilities. The research conducted by Konrad *et al.* (2007) pays attention, instead, to the interventions that literature presents to promote academic and self-determination skills in students with learning difficulties and/or attention deficit/hyperactivity disorder. What emerges is the consideration that the highest number of interventions concerns self-management strategies, followed by those that combine self-management with one or more characteristics



of self-determination. The authors, in line with US federal laws, also review the literature with the aim of examining the effects of practices that promote academic and self-determination skills in students with intellectual disabilities. Their results suggest that the majority of interventions concern abilities geared towards supporting academic performance – such as organizing academic tasks – (Fowler, Konrad, Walker, Test, & Wood, 2007). The work of Chambers and colleagues (2007) is intended to differentiate from previous studies for a vision of self-determination as a global construct by reviewing interventions and results that measure general self-determination in students with disabilities. There are several implications that emerge from this research including: «(a) need for teacher training and support, (b) implementation of strategies in educational context, (c) need for instruction and involvement of families in supporting self-determination, and (d) promotion of self-determination in younger students» (Chambers *et al.*, 2007, p. 11). A “metasynthesis” is carried out in 2009 by Cobb and collaborators, with the aim of comparing the narrative revisions and meta-analyses present in the literature. Specifically, they intend to emphasize academic curricular and didactic intervention techniques for obtaining outcomes concerning self-determination in people with disabilities. Corresponding to the selection criteria chosen by the authors, six articles are identified in journals and a dissertation, within which the most positive or maximized results from didactic or curricular interventions are those that contain a higher number of components of the construct of self-determination. Also Wehmeyer and collaborators (2011) examining the effectiveness of their intervention “Whose Future Is It Anyway?”, declare the presence of a series of programs and models designed to promote the involvement of students with disabilities in educational planning, establishing a link between participation and self-determination. The authors also add that the most consistent scientific evidence has been established by Martin and collaborators (2006), thanks to the program “SelfDirected IEP” (Martin, Marshall, Maxson, & Jerman, 1993). The randomized study of the “SelfDirected IEP” control efficacy group shows that the involvement process has significantly increased in the 130 secondary school students who were involved. The examination of the literature related to the investigations focused on the promotion of self-determination in all students, with and without disabilities, both at school and post-school level, is conducted by Shogren and collaborators (2016). The aim of this research is to provide indications on how this approach can involve the widest possible number of students, since it is the need for a development that can guarantee the universal applicability of self-determination. Burke and colleagues (2018) carry out a meta-analysis of the literature on interventions to promote self-determination and the skills associated with them in students with disabilities in the school context. Specifically, the results show that interventions to promote self-determination are effective for students of all school grade levels, settings and all disability labels, for these reasons, it is necessary to promote self-determination within educational contexts. “Curricula to Teach Skills Associated with Self-Determination: A Review of Existing Research” is titled the work of Raley *et al.* (2018), conducted to examine the empirical studies that propose curricula, and their implementation, capable of raising skills associated with self-determination in students with disabilities. The conclusion reached by the authors suggests that the curricula are limited in availability (five different curricula identified in seven studies) and re-

search in this area is in decline. The most recent revisions include the work of Lukner and collaborators (2019), focused on studies containing the use of programs, interventions, strategies and activities that have been adopted in other research. The systematic review led the authors to analyze 31 studies reporting the trends of the intervention studies, the rate of replication studies, the percentage of agreements between the results of the original and replication studies and the types of research projects used together with the recommendations for future research.

The vast number of studies conducted with the aim of synthesizing or analyzing the reference literature, concerning programs or interventions related to the development of self-determination, leads our reflection towards some of the possible modes of action that family members or professionals that work with people with disabilities can attempt to implement in this field. In the next section we will outline some of the main guidelines in this direction.

#### 4. Redagogical reflections and perspectives

The importance that the construct of self-determination has for the achievement of a greater Quality of Life, especially in adults with intellectual disabilities (Lachapelle *et al.*, 2005; Giaconi, 2015), allows us to orient our pedagogical reflection towards educational actions that family members and professionals (educators, educationalists, psychologists, etc.) can turn into effect to implement the construct. The main critical points, linked to the multidimensional and evolutionary nature of self-determination make it possible to project our view towards paths that are able to re-launch these weak points into a solution-based perspective.

Among the most marked complexities, which literature presents, we take into consideration the lack of organic and systematic interventions and more generally the fleeting boundaries of self-determination; critical issues that contribute to raising confusion in the promotion of the construct in adults with disabilities, both within the family system and within the service in which the person can live. The heterogeneous nature that characterizes self-determination leads some research to a limited focus on specific components of the construct (such as choice-making or self-awareness), with insufficient information on the other components (such as the definition of objectives/achievement, self-regulation or capacity of problem solving), thus compromising an overall vision for those who want to approach the domain (Algozzine *et al.*, 2001). The multicomponentiality that characterizes the construct pushes our reflection to the considerable impossibility of a “limited” focus of components, opening, rather, our perspective of research towards the variegated possibilities that allow people to identify practical goals and alternatives, to reach desirable goals for their future (Ward, & Kohler, 1996). Self-determination takes shape in a “personal” way in relation to the characteristics of each person with disabilities, representing a human right to be protected and not a unique set of skills to be achieved or a program that works for everyone equally (Moseley, Gettings, & Cooper, 2005; O’Brien, 2000).

Furthermore, self-determination being a developmental construct that looks different over time, often improves through a continuum of activities that can





take shape during the course of life (Malian, Nevin, 2002; Abery, Stancliffe, 2003; Shogren *et al.*, 2016). Therefore, developing self-determination requires continuous, constant and lasting work focused on different opportunities, strategies and personalized support for each person with disabilities (Wehmeyer, 2003; Shogren *et al.*, 2013). We are aware that self-determination is not always easy to implement in the life contexts of people with intellectual disabilities, as it does not concern the achievement of specific objectives that are the same for everyone (even if the tangible results appear to be important and desirable) (Ward, 2005). For this reason, our reflection is directed towards perspectives of guidelines that are aimed to increase levels of self-determination in this population. The operational proposals can be articulated in two directions, taking shape within the paradigm of support (Thompson *et al.*, 2009).

Schalock (2010) defines supports as «resources and strategies that aim to promote development, education, interests, and personal well-being of a person and enhance individual functioning» (Schalock *et al.*, 2010, p. 105). As stated by Thompson and colleagues (2009) the support shifts the focus from the correction of the deficits to the understanding of the disability (and more generally of the human functioning) because the interaction between environmental opportunities and personal skills turns out to be decisive: «when there is a mismatch between demands and competencies, the person experiences a need for support» (Shogren *et al.*, 2016, p. 213). In the construction of a complete system of interventions, that is «planned and integrated use of individualized support strategies and resources» (Schalock *et al.*, 2010, p. 106), it is clear that to implement self-determination, there is a need to design support systems for the decision-making process, in order to allow even people with disabilities to participate in their life project (Schalock *et al.*, 2010).

We agree with Shogren and her collaborators (2016) that: «Individualized supports for the person are critically important, but effective systems of supports must be aligned across ecological contexts (Bronfenbrenner, 1979, 2005), including home, school, neighborhood, and community and the broader societal environment that shapes norms, expectations, and public policies that directly and indirectly impact human functioning» (Shogren *et al.*, 2016, p. 213). In fact, the environmental structures, allow the experimentation of control and choice in the environments of everyday life in order to apply and generalize modalities and skills able to increase self-determined processes. Very often, people with intellectual disabilities continue to live in family contexts until adulthood or reside in community environments, whose rules may limit choices and staff may not always honor or know their wishes (Heller *et al.*, 2011). Specifically, research shows that communities with large numbers of guests hinder the development and the expression of self-determination (Heller, Miller, & Hsieh, 2002), as adults living in these contexts generally have less opportunities to take important decisions concerning their own life (Stancliffe, 2001) and in general, only a few possibilities to exercise their independence (Morris, 1994, 2004). The expression of self-determination turns out to be favored in adults who live in semi-independent structures; environments in which it is possible to further facilitate general decision-making and daily choices (Stancliffe, Abery, & Smith, 2000; Heller *et al.*, 2011). Since the opportunities to increase self-determination, influenced by environments and structural circumstances, are characterized by extreme variability,

specific interventions and support efforts must be considered in the life projects of people with disabilities. In this perspective, we believe that it is important to emphasize that work on personal skills is directly proportional to work on supports. We agree with Cottini (2016) that capabilities and supports are closely related, and specifically, self-determination is a necessity that requires personal skills (such as knowing how to make choices, planning goals, directing and self-monitoring), but it is also favoured by appropriate environments and a series of support efforts. Instructions, repeated opportunities and adequate support become, therefore, essential for the implementation of the construct (Wehmeyer *et al.*, 2012).

For these reasons, the operational methods that can be followed, referring to the support system, can be directed, on the one hand, towards support able to promote the person's abilities, and on the other hand, to support contextual opportunities, influenced by living environments (Wehmeyer, & Bolding, 1999, 2001; Abery, & Stancliffe, 2003; Wehmeyer, 2003; Walker *et al.*, 2011; Schalock, & Verdugo Alonso, 2012; Caouette *et al.*, 2018).

In the first direction, we consider appropriate, as necessary steps for the realization of goals concerning the implementation of self-determination in people with intellectual disabilities, a personalized search on how to promote the individual potentials connected to the process that leads to increase the construct (Shogren, & Wehmeyer, 2015). In this sense, a specific mode of action is the consideration of the strengths (interests, motivations...) of the person with disabilities. In fact, the studies (Shogren *et al.*, 2016; Niemiec *et al.*, 2017) state that stressing the person's potential, understanding the subjective profile and offering them tools to identify their personal abilities, have positive implications in the design of useful interventions to improve achievable results, contributing to the implementation of personal factors linked to self-determination. Self-determination, not being simplified in the choice, but rather concerning the choice process or the decision-making process based on a series of alternatives to which the person is facing (Agran, & Wehmeyer, 2003), allows a possible work path based on the decision-making process through the support of mediators (verbal, iconic...), relevant to the functioning profile of the person with disabilities (Shogren, & Wehmeyer, 2015). The field of action, in this way, expands beyond the assessment and correction of deficits, moving toward approaches that give priority to the study and practice of personal forces, in both the evaluation and the intervention (Niemiec *et al.*, 2017).

The second direction we want to emphasize, as an implementation hypothesis to increase the construct of self-determination in people with intellectual disabilities, concerns the possibilities of environmental supports, such as the organization and structuring of the life contexts where the person is inserted. Among the various implementation possibilities there are opportunities offered by aids that allow the adaptation or modification of domestic or living environments. Assistive technologies have shown positive effects on the function and participation of people with intellectual disabilities in the processes of choice (Hammel, Lai, & Heller, 2002; Mirza, & Hammel, 2009; Lee *et al.*, 2011). As evidenced by Besio (2009) «the technologies, which belong fully to the living environment of each of us, have always met the world of disability: and, thanks to the development and the growing complexity that they have encountered in the last fifty years,



their role has gradually become more crucial and more widely recognized as a driver of independence, autonomy and participation for people with disabilities» (Besio, 2009, p. 35). Technological fruition by people with intellectual disabilities can be directed towards the pursuit of self-realization, guaranteeing greater forms of independence and autonomy, in daily choices, towards the achievement of ever higher levels of self-determination. The environmental organization, supported by technological aids, allows, in fact, the central role of the person. New devices can guarantee greater functionality and usability even by people with disabilities, since they are equipped with systems tailored to their particular needs. As mentioned in other works: «Applications of technology-based solutions are flexible and variegated in forms; therefore, it is possible to exploit these potentialities, calibrating for each person the most appropriate technological system, with the final aim to enable every person to live his/her life to the fullest in a qualitative way» (Giaconi, & Del Bianco, 2017, p. 49).

The support paradigm, that can be articulated in different levels and can be flexible in relation to the peculiarities of the person, allows family members and/or professionals to implement a wide range of strategies and methods, in order to favor the implementation of self-determination in people with intellectual disabilities. The previously described directions and procedures do not represent the only possible pedagogical actions. For these reasons, hypotheses of perspectives for further research may concern both the reconstruction of the state of the art of self-determination actions within the family ecosystem of adults with intellectual disabilities, and a recognition of the main modalities that professionals use in practices with this population and whether such achievements are shared within the various national organizational services (day centres, semi-residential facilities, independent living, etc.). Reconstructing the implementation possibilities of how the construct is increased in different educational agencies would, therefore, allow the search to advance in terms of theoretical-practical connections and to orient future and systematic planning in this direction.

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