

## **Models and Theories of Self-Determination Among Students with Intellectual and Developmental Disabilities**

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### **Abstract**

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*Approximately one-quarter of American adults live with at least one disability that affects their ability to engage in daily activities. The field of self-determination has made remarkable strides, offering hope and optimism for individuals with disabilities. While some disabilities manifest in childhood and persist throughout life, others are acquired later due to injury or illness. Disabilities that originate in childhood and continue into adulthood are referred to as developmental disabilities, encompassing a wide range of diagnoses, needs, and abilities. Individuals with disabilities who have a personal desire for empowerment and/or support from their families often cultivate self-advocacy and self-determination skills. These skills enable them to achieve greater independence in vital areas, including social interactions, independent living, employment, academics, and career development. The concept of self-determination has been discussed in scholarly literature since 1683 and remains highly relevant. In 1980, the idea was formally introduced into psychology, sparking inquiries about the extent to which individuals can exert control over their own lives. This concept subsequently became integral to the theory of intrinsic motivation. During the 1990s, self-determination garnered considerable attention in the United States, particularly within inclusive education, special education, and rehabilitation services for individuals with Intellectual and Developmental Disabilities (IDD). This article examines the historical evolution of self-determination and its impact on individuals with disabilities, aiming to enhance the theoretical framework and critically evaluate its development over time, thereby providing a deeper understanding of contemporary perspectives and the essential role of self-determination.*

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**Keywords:** Self-Determination Theory; Intellectual and Developmental Disability; Functional Model; Student and Research.

## Introduction

Research on Intellectual and Developmental Disabilities (IDD) has expanded significantly, often introducing new terminology that considers both intellectual functioning and adaptive behavior as equally crucial for diagnosing IDD (Tassé et al., 2016). This widely accepted and empirically validated research perspective suggests that adaptive behavior can serve as a practical framework for developing individualized educational and habilitative goals and support strategies (Luckasson & Schalock, 2012). The push for new terminology related to intellectual functioning and adaptive behavior is further supported by the inaccurate claim in the DSM-5 about a causal relationship between these two factors. As a result, this article recommends revising the text to clarify this incorrect assumption (Tassé et al., 2016; Santos, & Morato, 2012a).

The most recent conceptualization of IDD proposes a framework in which concomitant limitations and scores two standard deviations below the mean in both intellectual functioning and adaptive behavior manifest across conceptual, practical, and social domains before the age of 22 (Schalock et al., 2021), or during the developmental period (American Psychiatric Association [APA], 2022). The traditional reductionist model, which confines the notion of disability to the individual level, is currently facing critical evaluation (Frielink et al., 2018). The text emphasizes the significance of understanding how societal engagement, attitudes, roles, and policies affect individuals with IDD (Cavendish, 2017). It highlights the need to recognize their diverse characteristics, strengths, and competencies within the context of age and social engagement. Additionally, it calls for a reassessment of factors that influence interactions between individuals with IDD and their social environments (Frielink et al., 2018; Schalock et al., 2021).

The construct of self-determination is vital in education and rehabilitation, particularly for vulnerable populations, given the tendencies toward stigma, devaluation of abilities, and undue protective measures (Raley et al., 2021). Self-determination requires an empowering vision that aligns personal characteristics, functional skills, and effective professional practices, especially relevant to the subgroup of individuals with IDD, who are often considered among the most stigmatized social groups, alongside those facing mental health issues (Schalock et al., 2020). Despite evolving paradigms within the IDD population and new trends in classification and evaluation, research on self-determination remains scarce (Simões, 2016). The promotion of self-determination for individuals with IDD is a critical global issue, as underscored by various United Nations initiatives (Carey, 2019). Many nations have not prioritized the development of policies to empower individuals with IDD (Shogren et al., 2020). This lack of action indicates a systemic undervaluation of this population, allowing external entities to influence their autonomy and decision-making improperly (Carey, 2019; Raley et al., 2021).

## Literature Review

Recent research in contemporary literature highlights a trend focused on self-determination in educational settings (Ahn et al., 2021; Cook, 2017; Joseph et al., 2019; Kubiak, 2015; Santos & Morato, 2012a). The studies of Frielink et al. (2018) indicated that scholars and educators are exploring how fostering autonomy and personal agency in students enhances their learning experiences and overall development. This field of self-determination emphasizes empowering learners to take charge of their education, resulting in more engaged and motivated individuals (Raley et al., 2021). Scholars and educators alike are delving into how fostering autonomy and personal agency among students can significantly enhance their learning experiences and overall development (Bureau et al., 2018). This burgeoning field of study highlights the importance of empowering learners to take charge of their educational journeys, ultimately leading to more engaged and motivated individuals (Cook, 2017; Frielink et al., 2018).

This uptick highlights a significant shift in how we understand and support IDD students' autonomy and decision-making skills in their learning journeys. Additionally, Bureau et al. (2018) highlighted a national synthesis project on self-determination literature, noting that 450 articles published between 1972 and 2000 included references to self-determination. However, most of that literature focused on two main areas—teaching choice-making to individuals with moderate or severe intellectual disabilities and teaching self-advocacy to individuals with specific learning disabilities (SLDs) or mild intellectual disabilities (Frielink et al., 2018). Not surprisingly, most of the studies also involved IDD students of transition age or adults with disabilities (May et al., 2022). The literature on self-determination discussed in this section includes studies on education, transition, rehabilitation, and self-determination in teacher preparation programs (Frielink et al., 2018; May et al., 2022).

Moreover, a closer examination of the literature suggests that developing autonomous goals is likely to be a collaborative process centered on interpersonal relationships and shared objectives (Wood, 2016). Consistent with the transactive model of goal pursuit, personal goals are developed within our interpersonal environments (Templeton et al., 2022). An individual's social environment can significantly influence how they pursue their goals. Extensive literature provides evidence that autonomy-supportive goal environments benefit the growth of autonomous motivation (Ahn et al., 2021). *Autonomy support* is defined as support that enhances volition or choice for a person diagnosed with SLDs (Frielink et al., 2018; Wood, 2016).

Autonomy support for goals has recently been measured in terms of whether individuals diagnosed with SLDs feel that their supporters listen to how they would like to approach things and understand their perspective regarding their personal, academic, and professional goals (Slemp et al., 2021). Autonomy support has been used as a measure of how openly supportive the motivational environment is for persons diagnosed with SLDs (Schalock et al., 2021). Autonomy support establishes the context for developing autonomous motivation, which is self-directed, personally meaningful, and pleasurable (Frielink et al., 2018). Across various contexts, autonomy-supportive teachers, parents, managers, peers, and partners have been shown to enhance autonomous motivation in others (Frielink et al., 2018; Slemp et al., 2021).

Heightened autonomy has, in turn, been associated with improved goal progress, achievement, well-being, and relationship satisfaction (Cavendish et al., 2017). The studies of Raley et al. (2021) showed that Self-determination theory acknowledges the benefits of supportive environments during goal pursuit but has yet to examine the reciprocal part of the transactive goal model (i.e., how goal striving occurs within the context of our interpersonal environments). Individuals do not pursue goals in isolation, and perceptions of support may influence their goal environment and pursuit (Boot et al., 2020). Although there is clear support for a causal relation between autonomy support and autonomous goal motivation, research has yet to examine the reverse question, whether more autonomously motivated individuals seek out, perceive, or elicit more autonomy-supportive relationships and social contexts (Haqquee et al., 2020). That autonomous goal motivation would lead individuals to seek environments that support their volition and avoid environments that are controlling is consistent with personality-environment fit theory, which posits that individuals select environments that fit their dispositional styles and exert personal influence on their environments (Boot et al., 2020; Burns et al., 2018).

Psychological mechanisms may be deployed to reinforce preexisting traits or dispositions (Ryan, & Deci, 2020). Autonomous persons may select the autonomy-supportive environment because they are responsive to this motivation-congruent support style (Schalock et al., 2021). By applying personality-environment fit theory to goal motivation, we can begin to understand how autonomously motivated individuals select and create environments that support their dispositional motivation (Ahn et al., 2021). Over time, motivation and environmental support may mutually contribute to each other, resulting in a dynamic, reciprocal, autonomous goal system, which can lead to subsequent achievement and well-being (Haqquee et al., 2020). Alternatively, the reciprocal relation between autonomous motivation and autonomy support may be fueled by the positive emotions gained during this process (Ahn et al., 2021; Ryan, & Deci, 2017).

The study by Boot et al., (2020) aimed to examine the dynamic reciprocal relationship between goal motivation and support, determining how motivation influences support and goal outcomes over time. Goal striving is not isolated (Sibley et al., 2019). The study by Ryan and Deci (2020) found that the dynamic reciprocal relation between autonomous motivation and support has yet to be examined from a self-determination theory perspective. The relevant literature suggests that support can enhance motivation, and conversely, that IDD students with more autonomous motivation may be better at seeking out or creating autonomy-supportive interactions with their peers or family members (Ahn et al., 2021). This study aims to investigate the impact of self-determination theory by exploring how increased autonomy can lead to improved motivation, and how this, in turn, affects goal progress and positive outcomes (Burns et al., 2018; Shogren & Ward, 2018).

### **Historical Framework of Self-Determination**

The concept of self-determination has its origins in the Disability Rights Movement of the 1960s. This pivotal era sought to empower individuals with disabilities by advocating for their rights and autonomy (Vicente et al., 2018). This movement aimed not only to challenge societal perceptions and stigma but also to promote a deeper understanding of the importance of personal agency (Frielink et al., 2018).

According to Alam (2021), self-determination encompasses seven critical domains that interplay to foster an individual's independence and empowerment. These domains include:

1. **Choice-Making:** The ability to make informed choices about one's own life and circumstances, recognizing personal preferences and values.
2. **Decision-Making:** Engaging in processes that involve evaluating options and outcomes, which nurtures a sense of responsibility and control.
3. **Problem-Solving:** Developing skills to identify challenges and creatively find practical solutions, essential for navigating everyday life.
4. **Goal-setting:** The practice of establishing personal, academic, and professional goals, which provides direction and a framework for measuring progress.
5. **Self-Advocacy:** The skill to articulate one's needs, rights, and desires, ensuring that individuals can effectively communicate and assert themselves in various situations.
6. **Self-Management:** The capacity to manage one's behavior, emotions, and life circumstances, fostering resilience and personal accountability.
7. **Self-Awareness:** Understanding one's strengths, weaknesses, and motivations, which is fundamental to personal growth and informed decision-making.

The domains of self-determination are integral to empowering individuals to lead fulfilling lives and actively participate in their communities, remaining highly relevant in discussions about rights, independence, and personal empowerment today (Joseph, 2019). The underlying assumption is that IDD students with special needs are more likely to demonstrate greater self-determination in adulthood when they receive instruction and modeling of these domains from elementary school through high school graduation (Sibley et al., 2019). As inclusive education has gained prominence—integrating IDD students with special needs into general education classrooms alongside their non-disabled peers—there is a belief that general education teachers play a vital role in the self-determination process for these IDD students (Alam, 2021; Burić, 2019).

While the right to make personal life decisions has long been regarded as an inalienable right for citizens of the United States, this right has not always been prioritized for individuals with disabilities (Burić, 2019). However, people with disabilities have engaged in a struggle for this right for decades, and significant progress has been made (Simões, 2016). The concept of self-determination, rooted in the Disability Rights Movement of the 1960s, has seen individuals with disabilities adopt ideas from other civil rights movements, such as the right to integration and meaningful equality of opportunity (Vicente et al., 2018). They yearned to make their own choices, find their place, and actively engage as valued members of society, embracing the full experience of belonging and participation (Shogren & Ward, 2018). Necessary legislative measures that supported the Disability Rights Movement include the Architectural Barriers Act of 1968 (PL 90-480) and Section 504 of the Rehabilitation Act of 1973 (PL 93-112; Shogren & Ward, 2018). The Architectural Barriers Act requires that all facilities funded by the federal government be accessible to individuals with various disabilities (Lin et al., 2005; Toutain, 2019).

Moreover, the prescribed requirements included features such as ramps, designated parking spaces, accessible doors, elevators, restrooms, assistive listening systems, fire alarms, and signage (Toutain, 2019). Naturally, these regulations applied to school buildings, thereby increasing access to education for more individuals. For instance, the installation of ramps and elevators in schools made it easier for IDD students with mobility impairments to move around the campus (Ziegler, et al., 2020). Several years later, Section 504 of the Rehabilitation Act was enacted, significantly advancing the rights of individuals with disabilities (Shanley, 2010). This legislation mandates that all federally funded programs must be accessible, ensuring full participation for individuals with disabilities (Vicente et al., 2018). It aims to protect educational opportunities for those whose disabilities affect major life functions, fostering an inclusive environment for academic and social growth (Ziegler, et al., 2020). These mandates created a necessary atmosphere for further progress for individuals with disabilities. For example, it ensured that IDD students with disabilities could receive the necessary accommodation and support throughout their educational journey (Shanley, 2010; Simões, 2016).

The Self-Advocacy Movement gained traction in the 1970s and 1980s, influenced by Bengt Nirje's normalization principle, which stressed the need to provide individuals with intellectual disabilities with everyday conditions that mirror those of mainstream society (Shogren et al., 2015a).

Nirje's experiences working with individuals with intellectual disabilities in Sweden inspired a greater focus on both self-advocacy and self-determination (Shogren & Ward, 2018). These principles were introduced to the United States in 1974, beginning in Oregon with an organization called People First (Ward et al., 2010). That same year, 16 self-advocacy groups were established nationwide (Shogren & Ward, 2018). By 1994, the number of self-advocacy groups had grown to 505 (Ward et al., 2010), a testament to the power of collective action in the Disability Rights Movement. The Self-Advocacy Movement significantly empowered individuals with disabilities, giving them a platform to voice their needs and concerns, and played a crucial role in shaping the Disability Rights Movement (Shogren et al., 2015a; Shogren & Ward, 2018.)

In just two decades, the participation of individuals with disabilities in these groups more than doubled, increasing from 5,000 to 11,600 people (Ward et al., 2010). In the late 1980s, the Office of Special Education and Rehabilitation Services hosted a self-determination conference that included more than half of the participants who had disabilities (Cook, 2017). This conference, which focused on activities that would encourage individuals with disabilities to have a greater say in personal decision-making, resulted in almost 30 recommendations for activities across federal agencies (Bigby et al., n 2022). This conference marked a significant milestone in the Disability Rights Movement, offering a platform for individuals with disabilities to express their needs and concerns. Around this time, the first comprehensive statement of self-determination theory (SDT) was introduced (Ryan & Deci, 2017). Although this theory was not specifically centered on education, it made a significant contribution to understanding why self-determination is essential. From the Office of Special Education and Rehabilitation Services' conference until the mid-1990s, projects promoting self-determination for young people with disabilities were funded (Cook, 2017; Frielink et al., 2018).

Finally, self-determination was first used as a concept in social sciences by Ryan and Deci (2017) who examined the extent to which individuals control decisions about their own lives, leading to the development of the theory of intrinsic motivation. Years later (1985), forms of extrinsic motivation and self-regulation were incorporated into this theory: that is, external and social feedback (e.g., positive or punishment) influence (stimulating or inhibiting) behavior (Ryan & Deci, 2020). Motivation is a cohesive psychological construct that empowers individuals to act, think, develop, and shape their activities and behaviors (Bandura, 1996). The term originates from the Latin word "movere", which means "to move" or "to produce something." It is closely related to the factors that drive us, sustain our efforts, and assist us in completing specific tasks (Ryan & Deci, 2020); Schunk, et al., 2014).

### **The Conceptualization of Self-Determination: Definition**

Self-determination is a concept that empowers individuals to make intentional choices, highlighting the importance of purposeful decision-making (Shogren et al., 2020). Key elements like "voluntary behavior" and "intentional action" emphasize the relevance of thoughtful actions. This concept contrasts with aimless behavior and reflects active engagement with one's choices, underscoring personal agency and mindfulness (Alam, 2021). This evolving idea, particularly in the field of Intellectual and Developmental Disabilities (IDD) since the 1990s, focuses on individuals asserting control over their life choices (Frielink, et al., 2017). It has influenced the Quality of Life (QoL) framework, which prioritizes individual needs and preferences, even within institutional settings (Simões & Santos, 2017). Understanding the distinctions between self-determination, independent functioning, and autonomy is crucial for effectively supporting the agency of individuals with IDD. A strong sense of self-regulation associated with self-determination enhances well-being and success in pursuing personal goals. Self-determination has a historical background, first defined in 1683 as the mind's ability to assert direction toward an object (Alam, 2021; Raley et al., 2021).

Slemp et al. (2021) emphasize the importance of autonomous choice and personal agency in self-determination, which is about defining one's destiny without external influence. It involves genuine desire and personal endorsement, allowing individuals to act in alignment with their true selves (Frielink et al., 2018). Raley et al. (2021) noted that self-determined individuals actively make choices, while Shogren et al. (2018) describe it as shaped by opportunities for autonomy and self-regulation. Shogren et al. (2020) define it as making choices free from external pressures, highlighting its role in fulfilling fundamental needs and promoting engagement. This concept is vital in education, emphasizing the value of independent action (Simões et al., 2016) and is significant for both educators and researchers (Frielink et al., 2018; Slemp et al., 2021).

## Models and Theories

The theoretical framework of Self-Determination primarily addresses learners with disabilities, recognizing their unique challenges and strengths (Ryan & Deci, 2017). The study of Frielink et al. (2018) offered an in-depth exploration of Self-Determination Theory, illuminating its essential principles and framework. They emphasized the crucial roles of autonomy and agency, demonstrating how these fundamental aspects profoundly influence individuals' lives, shaping their motivations, behaviors, and overall well-being. This comprehensive overview highlights the importance of fostering self-determination, as it empowers people to pursue their own goals and make choices that resonate deeply with their values and desires (Burns et al., 2018). Within this broader context, Ryan and Deci (2017) indicated there are six specific sub-theories of self-determination, each providing valuable insights into the concept. These six micro-theories are: (1) cognitive evaluation theory, (2) basic needs theory, (3) organismic needs theory, (4) goal contents theory, (5) causality orientations theory, and (6) relationships motivation theory. Each of these micro-theories contributes to a more comprehensive understanding of self-determination, highlighting the diverse factors that influence individuals' motivation and autonomy (Burns et al., 2018; Ryan and Deci, 2017).

### *Micro-Theory 1: Cognitive evaluation theory*

The central theme of cognitive evaluation theory (CET) revolves around the impact of social, environmental factors—such as rewards, assessments, and feedback—on an individual's intrinsic motivation (Ryan & Deci, 2017). According to Ryan (1982), CET is a nuanced micro-theory that examines how external influences can either enhance or diminish intrinsic motivation. It explores the role of rewards, communication styles, and feedback mechanisms in fostering a sense of competence during various activities (Ryan, 1982; Ryan & Deci, 2017).

When individuals experience feelings of competence in their actions, it positively influences their intrinsic motivation, as it satisfies a fundamental psychological need for competence (Sibley et al., 2019). For example, educators who design challenging tasks while providing constructive feedback cultivate an environment that nurtures both competence and independence in their IDD students Ryan & Deci, 2017. However, CET further articulates that the amplification of intrinsic motivation hinges on the presence of autonomy (Waterschoot, et al., 2019; Ryan & Deci, 2017).

In scenarios where a teacher presents a tangible reward for a student's achievement, this can inadvertently lead to a decline in the student's inherent drive to learn and succeed (Ryan & Deci, 2020). Furthermore, Oluoch and Gogo (2022) discovered that when individuals are subjected to unrealistic or overly demanding expectations—such as stringent deadlines, confusing directions, excessive competitiveness, or undue pressure—their motivation tends to wane. This highlights the delicate balance between external influences and the intrinsic factors that inspire motivation, underscoring the complexity and depth of the topic. Ultimately, CET emphasizes the importance of autonomy alongside competence in fostering a thriving learning environment (Daniel & Cooc, 2018; Oluoch and Gogo, 2022).

Ryan and Deci (2017) stated that a person's innate drive towards performance increases when teachers encourage autonomy in their IDD students by offering choices. SDT asserts that teachers who support or thwart a student's need for independence and competence in the classroom can help or hinder intrinsic motivation. Intrinsic motivation is more likely to strengthen when a student engages in an activity that they find exciting, challenging, or valuable (Daniel & Cooc, 2018). According to Ryan and Deci (2017), IDD students learn more profoundly, are more inventive, and perform better on tasks requiring high-quality engagement when they are intrinsically motivated and feel competent. Providing a sense of competence relates to a student's understanding of self-efficacy or the belief that one can achieve a desired goal (Deci & Ryan, 2014; Ryan & Deci, 2017).

Ryan and Deci (2020) highlight that an individual's intrinsic drive for performance is significantly amplified when educators actively promote autonomy among their IDD students by presenting them with choices. Their framework of Self-Determination Theory (SDT) emphasizes that teachers wield the power to either nurture or suppress a student's fundamental needs for autonomy and competence within the learning environment, thereby influencing their intrinsic motivation (Slemp et al., 2021). When IDD students engage in activities that are not only challenging and stimulating but also resonate with their values, they are much more likely to experience a deepened sense of intrinsic motivation (Fishbach & Woolley, 2022). This reiterates the importance of autonomy and competence in fostering a thriving learning atmosphere (Fishbach & Woolley, 2022; Slemp et al., 2021).

As noted by Ryan and Deci (2017), IDD students who are intrinsically motivated not only absorb information more profoundly but also tend to be more innovative and demonstrate superior performance on tasks that demand high levels of engagement and creativity (Frielink et al., 2018). This intrinsic motivation is closely linked to a student's sense of competence, which ties into their self-efficacy—the belief in their ability to achieve desired outcomes (Shogren & Ward, 2018). Thus, fostering a sense of competence is crucial, as it empowers IDD students to pursue their goals with confidence and determination. This underscores the potential of intrinsic motivation to enhance learning outcomes significantly, fostering a sense of optimism and hope in the audience (Burić, 2019; Shogren & Ward, 2018).

### ***Micro-Theory 2: Basic Needs Theory***

According to Ahn et al. (2021), basic needs theory revolves around the fulfillment of essential psychological requirements that are vital for every individual's well-being. These needs include autonomy—the profound sense of psychological freedom and self-determination; competence—the feeling of being effective and capable in one's actions; and relatedness—the intrinsic desire to connect and bond with others. When these fundamental psychological needs are met, individuals experience what is known as basic psychological need satisfaction, which significantly enhances their intrinsic motivation (Ryan & Deci, 2017). Conversely, when these needs remain unfulfilled, individuals may find their motivation not only diminished but, in some cases, regressed entirely (Schunk et al., 2014). This highlights the pivotal role that psychological needs play as innate and intrinsic sources of motivation. Ryan & Deci (2017) emphasize that these basic needs profoundly impact a student's motivation, engagement, functioning, and overall mental health.

The fulfillment of one's basic psychological needs is not merely beneficial; it is foundational to achieving and maintaining overall wellness, as posited by Ryan and Deci (2017). When individuals successfully satisfy these needs, they are better equipped to tap into their mental and physical resources, allowing them to pursue activities that ignite their passion and enthusiasm (Schunk et al., 2014). Vitality emerges as an essential characteristic of individuals, transcending mere arousal to represent their capacity to act, thrive, and truly engage with the world around them (Römhild & Holleder, 2024). When individuals experience a sense of vitality, they are more inclined to devote greater effort toward personal growth and self-improvement (Ryan and Deci, 2017; Römhild & Holleder, 2024).

Flourishing, a concept eloquently articulated by Aristotle, refers to eudaimonia—a profound state of well-being in which individuals realize their highest potential by diving into activities that resonate with personal meaning and enjoyment (Taxer et al., 2019). Within the realm of education, it is particularly illuminating to understand that when IDD students' basic psychological needs are honored and fulfilled, they are more likely to excel, not only academically but also in their personal development (Laurence & Kim, 2021). Aristotle begins his "Nicomachean Ethics" by underscoring the profound importance of human excellence and growth, demonstrating that the journey toward fulfillment and achievement is deeply intertwined with the recognition and satisfaction of these basic psychological needs (Chen, 2019; Taxer et al., 2019).

### ***Micro-Theory 3: Organismic Integration Theory***

Organismic Integration Theory (OIT) serves as a crucial framework for unraveling the complexities behind IDD students' academic achievements (Wang et al., 2016). This theory explores the multifaceted nature of extrinsic motivation, aiming to uncover the underlying reasons that motivate learners to engage in socially significant behaviors even when they lack intrinsic motivation (Reeve, 2019). Positioned within the broader context of Self-Determination Theory (SDT), OIT categorizes various forms of extrinsic incentives and examines why certain IDD students excel in their academic endeavors while others struggle (Reeve, 2019; Rucinski et al., 2018).

As children navigate their developmental journey, they naturally and gradually shift from intrinsic to extrinsic motivations (Ryan & Deci, 2020). This transition, a key aspect of OIT, is primarily influenced by the mounting social and cultural expectations that shape their behavior. Consequently, these external factors begin to significantly affect their actions and decision-making processes, shedding light on this natural process (Ryan & Deci, 2017; Wang et al., 2016).

At the core of OIT lie the essential concepts of internalization and integration, which give rise to four distinct types of motivational regulation: external, introjected, identified, and integrated as highlighted and explained below (Aelterman et al., 2019). Each of these motivational styles is characterized by varying degrees of autonomy and exerts different influences on an individual's behaviors and actions (Reeve, 2012). According to SDT, fostering a greater sense of independence is not merely an aspirational goal; it is fundamental to cultivating high-quality behaviors and enhancing persistence in IDD students (Rucinski et al., 2018). This insight can inspire educators and researchers alike to prioritize the development of autonomy, offering a hopeful vision of improved academic outcomes and a more engaged learning environment (Aelterman et al., 2019; Reeve, 2012).

**External Regulation:** As described by Ryan and Deci (2017), regulation represents a specific type of motivation that is characterized by its controlled and non-autonomous nature. It is the first subtype of extrinsic motivation within self-determination theory, primarily influenced by external factors such as rewards and punishments imposed by others (Ryan & Deci, 2020). For example, consider a student who completes an assignment not solely for the sake of learning, but to receive praise from their teacher or, more significantly, to avoid potential conflict with their parents. In this case, the student's behavior is a direct response to external influences, underscoring the crucial role of external regulation in maintaining harmony and peace in various aspects of life (Guay et al., 2017). However, while this type of motivation can be effective, it may sometimes overshadow intrinsic desires. This can lead individuals to prioritize external validation over personal satisfaction, creating a potential conflict (Boruchovitch et al., 2017; Guay et al., 2017).

**Introjected Regulation:** The internal rewards of self-esteem govern the second category of extrinsic motivation for achievement, as well as the avoidance of feelings of dread, embarrassment, or guilt associated with failure (Boruchovitch et al., 2017). These sentiments are triggered when an individual perceives that they have not met their goals (Ryan & Deci, 2020). Introjected regulation is partially internalized, resulting in internal regulation, as the individual's self-esteem is linked to the outcomes of their actions (Tisuela & Callo, 2022). One's internalized norms and demands result from a person feeling pressure to comply, along with feelings of shame or the promise of rewards. Introjected regulation is a mode of regulation that is not a component of the integrated self; therefore, it is not regarded as self-determined (Guay et al., 2017). For instance, IDD students experience introjected regulation if they attend class on time to avoid being perceived as a bad student or to avoid a teacher judging them harshly. The fear of these negative feelings is what causes them to act, as they have not internalized the school rule, making punctuality not a choice the student makes willingly (Burić, 2019; Tisuela & Callo, 2022).

**Identified Regulation:** The third subtype of extrinsic motivation is identified regulation. A person consciously identifies with or personally endorses the value of an activity when they experience a high degree of volition or willingness to act (Ryan & Deci, 2020). Since the regulatory process has become integral to the individual, they engage in the activity with a greater sense of volition (Burns et al., 2018). An example of this would be a student who readily completes additional assignments in mathematics because they believe that doing so is necessary to continue their success in the subject area. The motivation is extrinsic, as the activity is performed because of its usefulness or instrumental value in enhancing mathematical performance and achieving success in future endeavors rather than because it is inherently interesting (Daniel & Cooc, 2018). Even so, IDD students' actions are primarily self-directed because they are done voluntarily and for essential reasons rather than under pressure from others (Daniel & Cooc, 2018; Deci & Ryan, 2014).

**Integrated regulation:** As discussed by Ryan and Deci (2020), integrated regulation is a type of extrinsic motivation focused on personal empowerment. It occurs when individuals recognize the value of an activity, aligning it with their interests and values, thus providing a sense of control. While integrated regulation is the most autonomous form of extrinsic motivation, it differs from intrinsic motivation, which is driven by inherent interest and enjoyment (Taxer et al., 2019). In integrated regulation, an individual's self-perception merges with their values, as seen in cases such as a teenager who identifies as a good student or athlete (Vicente et al., 2019). A successful internalization process requires harmony between these identities and their overall sense of self (Cavendish, 2017). Behaviors stemming from integrated regulation reflect personal values, and evidence of this integration includes voluntary actions, creativity, and deeper understanding. Although similar to intrinsic motivation, integrated regulation emphasizes actions that are valuable for achieving desired outcomes, rather than simply being inherently interesting (Alam, 2021; Taxer et al., 2019).

#### ***Micro-Theory 4: Goal Contents Theory***

Goal Contents Theory (GCT) is the fourth micro-theory of Self-Determination Theory (SDT). GCT focuses on individuals' goals and ambitions, highlighting the connections between these goals, basic needs, motivation, and overall wellness (Ryan & Deci, 2017). The primary focus of Goal Contents Theory is the distinction between intrinsic and extrinsic goals, emphasizing the "what" aspect of motivation. GCT explains that pursuing intrinsic goals contributes to the satisfaction of basic psychological needs and enhances well-being (Ryan & Deci, 2017; Reeve, 2012).

In contrast, the pursuit of extrinsic goals neglects basic psychological needs and can undermine overall well-being (Reeve, 2012). A person's balance of intrinsic and extrinsic aspirations, which lead to goals is likely to change over time due to various life events (Haqee et al., 2020). Research by Ryan and Deci (2017) indicates that a person's well-being fluctuates in alignment with these shifting goals. Three longitudinal studies, the longest of which spanned 12 years, focused on how changes in personal goals influenced well-being. The findings revealed that as individuals became more intrinsically engaged, their happiness increased, whereas a shift toward extrinsic focus led to a decrease in their happiness (Haqee et al., 2020; Ryan & Deci, 2017).

**Intrinsic Aspirations:** Intrinsic aspirations are goals that are fulfilling on their own and address basic psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2017). Engaging in the pursuit of intrinsic goals, such as personal growth and fostering deeper interpersonal relationships, satisfies these fundamental needs and enhances both effort and psychological well-being (Reeve, 2012). Examples of intrinsic aspirations include self-acceptance, belonging to a community, and making a positive contribution to society (Raley et al., 2021). This focus emphasizes the importance of cultivating one's inner potential and recognizing a person's inherent value (Morsink et al., 2022; Raley et al., 2021).

**Extrinsic Aspirations:** Extrinsic aspirations, which focus on external expectations like material wealth, fame, and appearance, can lead to negative outcomes such as anxiety and sadness (Ryan & Deci, 2017). Pursuing these goals often neglects basic psychological needs, impacting overall well-being. In contrast, setting intrinsic goals that foster personal growth and community contribution can enhance psychological well-being (Collings et al., 2014). Ultimately, the types of goals individuals pursue—extrinsic or intrinsic—are more important for their well-being than whether they achieve those goals (Collings et al., 2014; Reeve, 2012).

#### ***Micro-Theory 5: Causality Orientations Theory***

Causality Orientation Theory (COT) is a significant tool that helps us understand the various ways in which IDD students utilize motivation to engage in their educational pursuits (Reeve, 2012). Some IDD students lean heavily on external stimuli and controls, relying on environmental cues, rewards, or the expectations of others to ignite and maintain their involvement in classroom activities. In stark contrast, other IDD students are propelled by a deep-seated intrinsic motivation, drawing upon their interests and passions as guiding lights for their actions (Reeve, 2012). Understanding COT is crucial for educators, researchers, and IDD students interested in educational psychology and motivation (Morsink et al., 2022). A student's level of motivation can vary significantly depending on the specific context or circumstances they face. For instance, a student may diligently study physics under the pressure of their parent's expectations, striving to meet a certain standard or outcome. Conversely, if a student finds themselves engaged in the fascinating world of history—particularly when taught by an energetic educator who brings the subject to life through creative methods—they are more likely to develop a sense of curiosity and ignite their imagination (Daniel & Cooc, 2018). This engaging teaching approach can transform the learning experience, making it more vibrant and appealing (Morsink et al., 2021). Additionally, three theoretical subtypes of Self-Determination drive this concept: 1) Autonomy Orientation, 2) Control Orientation, and 3) Impersonal Orientation (Daniel & Cooc, 2018; Morsink et al., 2021).

**Autonomy Orientation:** Individuals can enhance their actions by aligning them with personal priorities. A study by Morsink et al. (2022) showed that IDD students exposed to autonomy-related phrases experienced greater satisfaction, improved performance, and higher self-worth compared to those exposed to control-related terms. Self-determination theory emphasizes the importance of social environments that foster competence, relatedness, and personal control (Raley et al., 2021). Promoting autonomy not only boosts intrinsic motivation but also supports self-determination. For instance, feedback from teachers enhances motivation more effectively when it encourages autonomy.

Additionally, involvement from parents and teachers can boost motivation, but intrinsic motivation develops only when parents support their child's autonomy (Guay et al., 2017). Research by Shogren et al. (2020) indicated that relatedness support enhances motivation only when coupled with autonomy support.

**Control Orientation:** Students often modify their behavior based on the influences of teachers and parents (Morsink et al., 2022). In the U.S., educational standards and practices can be viewed as controlling, which negatively impacts students' ability to self-regulate autonomously (Ryan & Deci, 2017). This concerning trend highlights the need for change, as creating a more autonomous educational environment can significantly enhance student motivation. Deci and Ryan (2014) emphasize that autonomy is essential for fostering intrinsic motivation in the classroom. Educators can play a vital role in encouraging student autonomy instead of control, which can lead to higher levels of motivation, curiosity, and engagement in challenging tasks (Moore et al., 2017). Conversely, overly controlling teachers may undermine student initiative and performance, particularly in areas where students feel less empowered (Moore et al., 2017; Morsink et al., 2022).

**Impersonal Orientation:** An impersonal attitude can lead to feelings of demotivation because it underscores an individual's lack of control over the outcomes in social situations and their perceived incompetence (Ryan & Deci, 2017). People exhibiting this attitude often demonstrate a lack of intentionality, initiative, and personal purpose (Oluoch, & Gogo, 2022). When someone loses their sense of agency, purpose, and engagement, they may feel helpless and struggle to achieve their goals (Schunk et al., 2014). This shift often occurs due to significant frustrations regarding their core psychological needs, which play a crucial role in the adoption of an impersonal view. As a result, they may feel non-autonomous, ineffective, and anxious (Sibley et al., 2019). Furthermore, without a sense of control in their lives, these individuals find it challenging to manage their circumstances of motivation (Oluoch, & Gogo, 2022; Schunk et al., 2014).

#### ***Micro-Theory 6: Relationships Motivation Theory***

According to the Relationship Motivation Theory (RMT) developed by Ryan and Deci (2017), the innate need for relatedness drives individuals to seek out and engage in emotionally intimate relationships. When all three foundational psychological needs—autonomy, competence, and relatedness—are fulfilled in a relationship, individuals experience a secure attachment, authenticity, and a profound sense of connectedness. These elements are crucial, enhancing not only the vitality of the relationship but also the overall well-being and health of those involved (Bakadorova & Raufelder, 2018). In the realm of relationships, when one person truly prioritizes their partner's well-being, a deep and enriching bond begins to blossom (Carey, 2019). This genuine care comes from a place of selflessness, free from the desire for personal gain or the weight of external expectations (Ryan & Deci, 2017). It reflects our inherent capacity for empathy and compassion, as well as a sincere wish to see the other person flourish and thrive (Römhild & Holleder, 2024). Such authentic care is demonstrated through thoughtful acts of kindness, unwavering support, and encouraging words—all given freely, without conditions or hidden motives (Bakadorova & Raufelder, 2018; Carey, 2019).

This absence of ulterior motives showcases a heartfelt commitment to another's happiness and growth, providing reassurance and security within the relationship (Römhild & Holleder, 2024). In this nurturing environment, love becomes a sanctuary of selfless giving, wholeheartedly embraced by the giver while highlighting the beauty of mutual understanding and support (Carey, 2019). This dynamic is closely linked to the foundational concepts of Bowlby's Attachment Theory and the idea of Secure Attachment, as discussed by Holmes (2014). These frameworks emphasize the importance of trust and emotional safety, which are essential for healthy relationships (Holmes (2014; Holmes (2020) .

**Bowlby's Attachment Theory:** John Bowlby's 1979 research emphasizes the significance of a newborn's innate desire to explore as a crucial aspect of psychological development (Holmes (2014). Early curiosity and social interest in infants are crucial for integrating experiences within social groups, supported by secure and empathetic caregiver relationships (Beyooki et al., 2020). This aligns with Self-Determination Theory (SDT), which notes that lack of care can diminish intrinsic motivation, as seen in children with indifferent caregivers (Carey, 2019). Furthermore, Daniel and Cooc (2018) found that students with unsympathetic teachers exhibited decreased motivation, underscoring the importance of secure relationships. Additionally, Bosman et al. (2018) noted that students with insecure attachments may exhibit disruptive behavior when neglected. Overall, emotional support is vital for fostering a positive learning environment, which is essential for both academic and social development (Beyooki et al., 2020; Holmes, 2014).

**Secure Attachments:** Holmes (2020) explores Bowlby's attachment theory, highlighting the influence of attachment styles on children's behavior. Securely attached 2-year-olds show longer attention spans, more positive emotions during play, greater confidence with tools, and are more likely to seek help from their mothers (Hernández et al., 2017). In contrast, children interacting with avoidant individuals may exhibit emotional distance and coldness in relationships. A nurturing environment is built on sensitivity, empathy, and responsiveness to an infant's emotional cues (Joseph, 2019). To feel active, confident, and safe, individuals need not only secure connections but also consistent support for their autonomy, competence, and connectedness. Caregivers who meet their child's emotional needs foster curiosity, resilience, and initiative (Ryan & Deci, 2017). Healthy relationships fulfill the psychological needs for relatedness, autonomy, and competence, enhancing well-being (Hernández et al., 2017; Holmes (2020).

### **The influence of self-determination theory on students' academic success.**

Self-Determination Theory (SDT) offers a compelling lens through which to view motivation, intricately weaving together the threads of internal drives and external influences, including the often-overbearing weight of societal expectations (Hernández et al., 2017). For example, consider a student with a vibrant passion for the arts whose heart is alive with creativity and expression (Schalock et al., 2020). However, this same student may find themselves wrestling with the pressures to embark on a more traditional career path, such as medicine, which society may deem more prestigious or secure. SDT is driven by the concept of intrinsic motivation, a powerful force that propels individuals beyond the allure of external rewards (Joseph, 2019). However, the role of external rewards should not be discounted. They can serve as initial motivators, especially for tasks that may not inherently interest the individual (Simões & Santos, 2017). This intrinsic drive can significantly alter students' behaviors and bolster their social-emotional well-being (Ryan & Deci, 2017). The capacity for transformation inherent in intrinsic motivation not only inspires hope but also reveals the profound potential of SDT within educational contexts, encouraging students to engage deeply and personally with their learning journeys (Schalock et al., 2020; Simões & Santos, 2017).

An essential facet of SDT is the notion of relatedness, which plays a critical role in cultivating a deep sense of belonging and community among students (Leo et al., 2023). This emphasis on interpersonal connection and support, when fostered by educators, creates an environment where students feel valued and recognized as integral participants in the educational process (Alam, 2021). Consequently, enhancing their intrinsic motivations and overall well-being becomes a natural byproduct of such a nurturing atmosphere, reinforcing the educators' role in the process (Daniel & Cooc, 2018; Leo et al., 2023).

The self-determination theory plays a transformative role in the educational experiences of students diagnosed with intellectual and developmental disabilities (IDD) by thoughtfully addressing their fundamental psychological needs: competence, autonomy, and relatedness (Slemp et al., 2021). Furthermore, the studies of Oluoch adn Gogo (2022) indicated that these students frequently struggle academically compared to their peers without IDD, facing numerous challenges that span various critical areas, including participation in classroom activities, attentiveness during instruction, academic motivation, social skills development, and self-regulation, such as completing assignments punctually. Furthermore, adolescents with IDD often grapple with increased susceptibility to social, health, and economic hurdles as they transition into adulthood, making the support of their educational environment even more crucial (Bigby et al., 2022; Slemp et al., 2021).

This robust self-determination theory posits that individuals possess an innate desire to learn, enhance their understanding, and discover the world around them (Raley et al., 2021). However, in many learning environments, educators often impose external controls and rigid structures that can inadvertently erode the sense of relatedness between teachers and students (Slemp et al., 2021). This disconnect may impede the natural and intentional processes essential for fostering high-quality learning experiences. For students with IDD, cultivating an awareness of their thoughts and feelings is paramount to unlocking their intrinsic motivation and understanding their emotional responses (Waterschoot et al., 2019). This self-awareness empowers them to make informed choices, enabling them to prioritize one avenue of possibility over another (Daniel & Cooc, 2018; Slemp et al., 2021).

By harnessing the power of intrinsic motivation, students are empowered to take charge of their own learning and personal growth, cultivating an enduring sense of independence and compassion (Fishbach & Woolley, 2022). The insights offered by SDT not only motivate students but also equip educators with the necessary tools to foster a sense of collaborative responsibility (Guay et al., 2017). This shared responsibility between students and educators creates vibrant environments that nurture intrinsic motivation and promote holistic well-being, leading to a more fulfilling educational experience for all involved (Fishbach & Woolley, 2022; Römhild & Holleder, 2024).

However, authentic growth emerges when these students openly share their experiences with others (Römhild & Holleder, 2024). Engaging in dialogue not only broadens their perspectives but also highlights the importance of emotional support within their learning journeys (Schalock et al., 2021). Such growth is particularly pronounced when interactions are rooted in mutual understanding and respect for autonomy, emphasizing the invaluable role of collaboration and community within the educational process (Römhild & Holleder, 2024). By fostering an environment that encourages connection and mutual support, educators can help IDD students thrive both academically and personally, paving the way for brighter futures (Kalkbrenner et al., 2019; Römhild & Holleder, 2024).

### **Implications for Practice**

This section reviews highlights of several practice-oriented strategies for advancing self-determination among individuals with intellectual and developmental disabilities (IDD). First, embed self-determination goals in person-centered planning for clients with IDD. Social workers can use the ARC Self-Determination Scale (Wehmeyer, 2013), or the Self-Determination Inventory (Shogren & Wehmeyer, 2017b) to baseline and track change. Social Workers can then align case plans with the client's volitional preferences to satisfy SDT's autonomy, competence, and relatedness needs, thereby improving quality of life. Social workers should drive guardianship conversations toward supported decision-making (Bigby et al., 2022). SDT emphasizes that externally controlled environments undermine volition. Social workers can advocate for SDM statutes and create practical toolkits that let adults with IDD retain legal agency while receiving tailored support (Kohn et al., 2013). Social workers can integrate self-advocacy skill-building into social-emotional curricula. Classroom and group-based interventions (e.g., Self-Determined Learning Model of Instruction) have demonstrated gains in goal-attainment for youth with disabilities (Kohn et al., 2013; Shogren & Wehmeyer, 2017b).

Self-determination theory models provide practical guidelines for integrating autonomy and agency into individualized education planning. When practitioners are well-versed in these models, they can improve the quality and effectiveness of Individualized Education Programs (IEPs) and 504 plans, especially in preparing students with Intellectual and Developmental Disabilities (IDD) for post-secondary success and independent living. Social workers play a crucial role in facilitating student-led IEP meetings by encouraging students to introduce themselves and share their goals. They can guide students in developing SMART goals regarding postsecondary education, employment, or independent living, which can then be translated into formal transition objectives within the IEP. Additionally, social workers can implement behavioral contracts that include self-monitoring components to promote accountability for social and emotional goals. They should also incorporate self-determination skills into specially designed instruction, explicitly outlined in the IEP under "services and supports." Practitioners can organize person-centered planning meetings that prioritize the student's lived experiences, cultural identity, and long-term aspirations.

To be truly effective, these professionals should embrace a multilevel practice approach that addresses the varying needs of their students as suggested by Burić (2019). At the micro level, practitioners can incorporate motivational interviewing techniques that are thoughtfully adapted to resonate with the principles of Self-Determination Theory (Brinkmann, 2013). This customized approach empowers clients with IDD to clearly express their personal goals and identify specific tasks that can enhance their sense of competence and confidence. Moving to the mezzo level, social workers take on a crucial role in facilitating dynamic peer mentoring and self-advocacy groups (Carey, 2019). These structured environments foster a culture of autonomy and support, allowing individuals with IDD to engage actively (Frielink et al., 2018). By creating safe and inclusive spaces, social workers encourage these students to articulate their needs, make informed choices, and exercise their self-determination, all while being supported and affirmed by peers and mentors. This comprehensive, supportive framework not only bolsters their skills but also fosters a deeper sense of belonging and agency (Brinkmann, 2013).

At the macro level, social workers can advocate for policies that support inclusive education funding, community living support, and anti-stigma campaigns (Werner, 2015). This entails lobbying for federal and state funding to fully implement the Individuals with Disabilities Education Act (IDEA) as well as advocating for the hiring of school social workers, paraprofessionals, and transition specialists trained in culturally responsive and autonomy-supportive practices (Burić, 2019; Werner, 2015).

Social work educators and field instructors can incorporate SDT concepts into MSW competencies: IDD students should demonstrate the ability to (a) assess basic-psychological-need satisfaction, (b) design autonomy-supportive interventions, and (c) critique policies that limit client self-direction (Chen et al., 2015). Social work researchers and practitioners with the necessary expertise should evaluate agency programs based on SDT outcomes—autonomy, competence, and relatedness—as well as quality-of-life indicators (Collings et al., 2014). Through either the use of single-case designs or pre-/post-quasi-experiments there is a need to monitor the improvements to self-determination-focused practice. Social workers should be on the front line to coach teachers, vocational counselors, and healthcare providers in autonomy-supportive communication strategies identified in the review (e.g., “listen, reflect, offer meaningful choices”) to create consistent environments across settings (Chen et al., 2015; Ryan & Deci, 2017).

### **Final considerations**

With this article, we intend to contribute to a better clarification and understanding of the conceptualization of self-determination as well as its theories that have evolved over time. And for this, a literature review of definitions and theories was carried out, until reaching the most used theory today, the causal agent theory (in the original, causal agency theory – Shogren et al., 2020), implies a more complex conceptualization and dynamics of the self-determination construct (Shogren et al., 2017b) and the most accepted definition: “dispositional characteristic manifested [by the person] assuming the role of causal agent in their own life” (Shogren et al., 2015a, p. 258 ), refers to volitional actions that allow the individual to choose their options, with a direct relation to their quality of life (Simões & Santos, 2017; Shogren et al., 2020).

For many years, self-determination was part of the disciplines of philosophy, political science – as the right of nations to self-government and synonymous with independence and freedom; and psychology in the context of personality and motivation theories, especially regarding the determinants of human behavior (Waterschoot et al., 2019). Self-determination has always held worldwide importance both at the political and research levels, but only recently has there been a substantial increase in interest at the national level, given the central importance of this construct in the investigation and practice of people with IDD, one of the domains of the conceptual model of quality of life today (Simões & Santos, 2017). Mainly at this moment, where the reductionist view of the exclusivity of the disability in the person is refuted, emphasizing the contextualizing and influencing role of involvement – and the impact that attitudes, roles and social policies have on the life of the person with IDD, as well as the subjective perception of people with IDD themselves in the decision about their own life (Daniel & Cooc, 2018; Waterschoot et al., 2019)

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