

Causal Agency Theory: Reconceptualizing a Functional Model of Self-Determination

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Abstract

This paper introduces Causal Agency Theory, an extension of the functional model of self-determination. Causal Agency Theory addresses the need for interventions and assessments pertaining to self-determination for *all* students and incorporates the significant advances in understanding of disability and in the field of positive psychology since the introduction of the functional model of self-determination. Causal Agency Theory provides a theoretical framework for developing and enhancing supports to enable youth to engage in agentic action through instruction in goal setting and attainment strategies, to influence self-determination, causal agency, and overall well-being across diverse social-contextual contexts.

Causal Agency Theory: Reconceptualizing a Functional Model of Self-Determination

In the December 1992 issue of (the then-named) *Education and Training in Mental Retardation*, Wehmeyer introduced what eventually came to be referred to as the “functional model of self-determination,” and discussed its application to students with intellectual disability (Wehmeyer, 1999). That article (and the functional model) was one of the outcomes of a U.S. Department of Education, Office of Special Education Programs (OSEP) model demonstration project that was one of more than 25 of such projects funded by OSEP between 1990 and 1996 (Ward & Kohler, 1996).

Prior to the OSEP model demonstration project initiative, there were only two references to self-determination and students with disabilities in the literature. In 1972, Swedish philosopher Bengt Nirje published a chapter in a text on the Normalization Principle (Wolfensberger, 1972) titled *The Right to Self-Determination*, which discussed the human rights basis for supporting people with intellectual disability to make decisions about and be actively involved in their lives. In 1986, Deci and Chandler published an article discussing the importance of internal motivation (based upon Self-Determination Theory, discussed briefly in a subsequent section) to students with learning disabilities. The OSEP initiative and a parallel competition (1992-1994) funding five projects to develop assessments of self-determination served as the catalyst to a focus on promoting self-determination for students with disabilities during the transition process.

Much in special education and psychology has changed since 1990 when those initial self-determination model demonstration projects were funded, including the emergence of the discipline of positive psychology and a strengths-based focus on understanding disability, the former of which includes a focus on self-determination and the latter in which self-determination

plays a leading role. Given these changes, discussed subsequently, in the intervening quarter century, we believe it is time to revisit how self-determination is conceptualized and defined in the context of the education of students with (and without) disabilities. We begin with a brief summary of self-determination, the functional model and its iterative changes over time, and how self-determination is currently conceptualized in research and practice in special education and in positive psychology. We then articulate the reasons for a reconceptualization of the functional model and describe the parameters under which such a reconceptualization should occur. Finally, we propose Causal Agency Theory as a way to understand self-determination that addresses the reasons for a reconceptualization.

Self-Determination and the Functional Model of Self-Determination

What is Self-Determination?

Self-determination is a noun referring either to the determination of one's own fate or course of action (a personal sense of the term) or to the rights of nations or groups of people to autonomy and self-governance (American Heritage Dictionary, 1992). The latter is the most common use of the term in the modern era, but the former is the oldest and, for our purposes, the most relevant. It refers, in some sense, to a quality or characteristic within a person who determines his or her own fate or course of action. The personal sense of the term emerged from the philosophical doctrine of determinism, which suggests that all action (including human behavior) is in some way "caused." In the early 20th century, as psychology emerged as a discipline distinct from philosophy, the notion of self-determinism was coopted to begin to understand personality development. Angyal (1941), in proposing the foundations for a science of personality, suggested that an essential feature of a living organism is its autonomy, where autonomous means self-governing or governed from inside. According to Angyal, an organism

"lives in a world in which things happen according to laws which are heteronomous (e.g., governed from outside) from the point of view of the organism" (p. 33). Autonomous-determinism, or as it subsequently became, self-determination, refers to self- versus other-caused action.

The Functional Model of Self-Determination

Wehmeyer (1992) canvassed the psychological and educational literature to propose an initial definition of self-determination for use in special education, suggesting that self-determination "refers to the attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (p. 305). Wehmeyer reasoned that self-determination involves "autonomy (acting according to one's own priorities or principles), self-actualization (the full development of one's unique talents and potentials) and self-regulation (cognitive or self-controlled mediation of one's behavior)" (1992; p. 395). The notion of causal agency reflected the links of the constructs to determinism: people who are causal agents are people who make or cause things to happen in their lives, rather than others (or other things) making them act in certain ways.

In 1996, Wehmeyer, Kelchner, and Richards published an empirical evaluation of what by then had become known as the functional model of self-determination which provided both a refinement of the definition and a theoretical structure within which the development of the construct could be framed. This was called the "functional" model of self-determination because one could not define self-determination in a response-class manner (e.g., by a list of specific behaviors), but instead had to consider the "function" that the action served for the person. Self-determination, at this juncture, was defined as "acting as the primary causal agent in one's life

and making choices and decisions regarding one's quality of life free from undue external influence or interference" (p. 632).

The current iteration of the definition shares much with the Wehmeyer (1992) version, but moved toward a more action-oriented focus... self-determination is "acting" as the primary causal agent in one's life. People who acted in such a way—that is, to be causal agents in their lives—were said to have the dispositional characteristic (e.g., an ongoing quality or characteristic of the person) of self-determination. The notion of causal agency remained at the heart of the definition, and in many ways, the second half of the definition in both 1992 and 1996 (e.g., ...making choices and decision regarding ... etc.) simply was intended to more explicitly define what it meant to be a causal agent, since that term was not as widely understood at that time. Further, Wehmeyer and colleagues (1996) conducted a series of discriminant function analyses that identified four "essential characteristics" of self-determined behavior: autonomous functioning, self-regulation, psychological empowerment, and self-realization. As the term "essential" suggests, to be self-determined, one had to act autonomously, self-regulate behavior, and act from a basis of psychological empowerment and self-realization. These essential characteristics became the domains that were measured by The Arc's Self-Determination Scale (Wehmeyer & Kelchner, 1995), which operationalized the functional model's structure to measure personal self-determination.

In 2005, Wehmeyer addressed ongoing issues that were impacting the understanding (or misunderstanding) of the self-determination construct, particularly as it pertained to people with more severe intellectual impairments. By and large, people with the most extensive support needs were deemed not to be able to be self-determined because the term was interpreted to mean having control over one's life. What was missing from discussions in the field up to that

point, Wehmeyer argued, was the importance of self-determination as volitional action; where volition refers to the act of making a conscious choice. Thus, he proposed a refinement to the functional model's definition of self-determination, suggesting that self-determined behavior "refers to volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life" (p. 117). Again, this refinement emphasizes the role of acting and, in this iteration, the fact that one acts volitionally as a causal agent.

As noted previously, the functional model has been empirically validated (Shogren et al., 2008; Wehmeyer et al., 1996); operationalized by the development of an assessment linked to the theory (Wehmeyer & Kelchner, 1996); served as the foundation for intervention development, particularly with regard to the development of the *Self-Determined Learning Model of Instruction* and related efforts (Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012; Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000; Wehmeyer et al., 2012); and provided impetus for a variety of research activities (see Wehmeyer et al., 2007).

Self-Determination in Special Education

Since the introduction of the self-determination construct to special education through the OSEP model demonstration initiative and early publications such as Wehmeyer (1992), promoting the self-determination of adolescents with disabilities has become a best practice in secondary education and transition services (Field, Martin, Miller, Ward, & Wehmeyer, 1998; Shogren, 2013a; Wehmeyer, Abery, Stancliffe, & Mithaug, 2003; Wehmeyer et al., 2007) for several reasons. Before recounting these, it is worth noting that this article focuses on revisions and reconceptualizations to the functional model of self-determination, but we would be remiss if we did not acknowledge that the theoretical and intervention frameworks of Abery, Field,

Martin, Mithaug, and Powers, among others (see Wehmeyer et al. 2003), have contributed significantly to establishing the importance of self-determination to youth with disabilities.

First, self-determination status has been linked to the attainment of more positive academic (Konrad, Fowler, Walker, Test, & Wood, 2007; Fowler, Konrad, Walker, Test, & Wood, 2007; Lee, Wehmeyer, Soukup, & Palmer, 2010; Shogren et al., 2012) and transition outcomes, including more positive employment and independent living (Martorell, Gutierrez-Rechacha, Pereda, & Ayuso-Mateos, 2008; Shogren, Wehmeyer, Palmer, Rifenshark, & Little, in press; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997) and recreation and leisure outcomes (McGuire & McDonnell, 2008), and more positive quality of life and life satisfaction (Wehmeyer & Schwartz, 1998; Lachapelle et al., 2005; Nota, Ferrari, Soresi, & Wehmeyer, 2007; Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006).

Second, research across special education disability categories has established the need for intervention to promote self-determination (Shogren, Kennedy, Dowsett, & Little, in press) documenting that students with intellectual disability (Wehmeyer & Metzler, 1995), learning disabilities (Field, 1996; Field, Sarver, & Shaw, 2003; Pierson, Carter, Lane, & Glaeser, 2008), emotional and behavioral disorders (Carter, Lane, Pierson, & Glaeser, 2006; Pierson et al., 2008) and autism (Chou, Palmer, Wehmeyer, & Lee, 2013; Wehmeyer & Shogren, 2008) are less self-determined than their non-disabled peers.

Third, there is clear evidence that if provided adequate instruction, students with disabilities can become more self-determined. In a meta-analysis of single subject and group subject design studies, Algozzine, Browder, Karvonen, Test, and Wood (2001) found evidence for the efficacy of instruction to promote component elements of self-determined behavior, including interventions to promote self-advocacy, goal setting and attainment, self-awareness,

problem-solving skills, and decision-making skills. Cobb, Lehmann, Newman-Gonchar, and Morgan (2009) conducted a narrative metasynthesis—a narrative synthesis of multiple meta-analytic studies—covering seven existing meta-analyses examining self-determination and concluded that there is sufficient evidence to support the promotion of self-determination as effective. Also, research documents the positive impact of efforts to promote student involvement in educational and transition planning (Martin et al., 2006; Mason, Field, & Sawilowsky, 2004; Test et al., 2004) and more positive transition outcomes and self-determination (Williams-Diehm, Wehmeyer, Palmer, Soukup, & Garner, 2008).

Recently, researchers at the University of Kansas (Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2012) conducted a randomized trial control group study of the effect of interventions to promote self-determination in high school students receiving special education services under the categorical areas of intellectual disability and learning disabilities. Students in the treatment group ($n=235$) received instruction using a variety of instructional methods to promote self-determination and student involvement in educational planning meetings over three years—which will be detailed in a subsequent section—while students in the control group ($n=132$) received no such intervention. The self-determination of each student was measured using two instruments, *The Arc's Self-Determination Scale* (Wehmeyer & Kelchner, 1995) and the *AIR Self-Determination Scale* (Wolman, Campeau, Dubois, Mithaug, & Stolarski, 1994) across three measurement intervals (Baseline, After 2 Years of Intervention, After 3 Years of Intervention). Using latent growth curve analysis, Wehmeyer and colleagues (2012) found that students with cognitive disabilities who participated in interventions to promote self-determination over a three-year period showed significantly more positive patterns of growth in their self-determination scores than did students not exposed to interventions to promote self-determination.

Subsequently, in a follow-up study of the treatment and control group students from Wehmeyer et al., (2012), Shogren et al., (in press) investigated adult outcomes one and two years after leaving school. The study measured employment, community access, financial independence, independent living, and life satisfaction outcomes. Results indicated that self-determination status at the end of high school predicted significantly more positive employment, career goal, and community access outcomes. Students who were self-determined were significantly higher in all of these areas. These two studies study provided causal evidence that promoting self-determination results in enhanced self-determination, and that enhanced self-determination results in more positive adult outcomes, including employment and community inclusion. A recent randomized-trial study by Powers et al., (2012) also provided causal evidence of the effect of promoting self-determination on community inclusion.

One could argue, and we would be inclined to do so, that we know as much about the importance of promoting self-determination as any transition-related topic. It is with this in mind, then, that we describe the reasons for a reconceptualization of how we understand the self-determination construct.

Reasons for Reconceptualizing the Functional Model of Self-Determination

Given the aforementioned evidence of the importance of promoting self-determination and the efficacy of the functional model to drive research, assessment development, and intervention design and evaluation, one might question why a reconceptualization is needed. As should be evident from the previously described changes over time in how self-determination has been defined and operationalized within the functional model, conceptualizing a complex construct like self-determination is not a static process: It is a process that is impacted by research on the construct, the context in which the construct is hypothesized to exert its effects,

and changing understandings of human behavior. We have a number of reasons that we have chosen to revisit the functional model at this point in time, but perhaps most importantly has been the emergence of the discipline of positive psychology. Positive psychology involves the pursuit of understanding optimal human functioning and well-being and a prominent construct in positive psychology is self-determination (Ryan & Deci, 2000). As described subsequently, research in self-determination in positive psychology has focused on the construct in the context of motivational psychology, and while research and theory in self-determination in special education was derived from Deci and Ryan's early work, most of the theoretical perspectives within special education have focused more broadly on self-determination as, in essence, a personality construct and less specifically on motivational aspects pertaining to self-determination.

Additionally, how disability itself is understood is changing, and those changes are affecting practice in the field, including special education practices. These changing understandings of disability are strengths-based and focus on improving the fit between the person's capacities and the demands of the environment or context (Shogren, 2013b). It will be of benefit if issues pertaining to self-determination and students with disabilities are seen through the lens of these strengths-based conceptualizations, and to achieve this, we need a common language and understanding between the use of the self-determination construct in both special education and positive psychology. The functional model was developed incorporating knowledge from early work in motivational psychology and shares common understandings of self-determination as a construct, but there is a need to reconsider the ways in which the construct is conceptualized within a functional model to better align with research and practice in positive psychology.

Not only is there a need to align with research and practice in positive psychology, the knowledge about issues relevant to self-determination has exploded as the field of positive psychology has begun to investigate constructs such as optimism, hope, well-being, lifestyle satisfaction, and so forth. Knowledge exists today in areas relevant to self-determination that simply didn't exist in the early 1990s and a reconceptualization of the functional model would benefit from that progress. Further, the functional model conceptualizes self-determination within a person-environment interaction framework, so it is relevant to the social-ecological approaches prevalent in positive psychology.

Further, the context in which special education “happens” has changed dramatically over the past quarter century. With the emphasis on inclusive practices, access to the general education curriculum, and multi-tiered systems of supports, there is a need to design and test interventions for students with disabilities within the context of school-wide interventions that focus on all students. Indeed, all students can benefit from interventions to promote self-determination and interventions developed through the auspices of the functional model, particularly the *Self-Determined Learning Model of Instruction*, discussed previously, are applicable for all students and as school-wide interventions. To evaluate the efficacy of such interventions, however, we need measures that are not disability-specific. Just as the OSEP self-determination model demonstration projects served as a catalyst to the development of the functional model in the early 1990s, so too is a similar event providing impetus for us to revisit the functional model's conceptualization. Specifically, we are engaged in the development of a new assessment of self-determination that will, importantly, be normed with adolescents and young adults with and without disabilities and therefore, can be used to measure the efficacy of interventions for all students in schools.

The confluence of a need for interventions and assessments pertaining to self-determination for all students and the expansion of knowledge in the field of positive psychology along with the opportunity to develop a new assessment to meet this need has led us to revisit the functional model. In doing so, however, we sought to retain the basic understanding and framework of the functional model, so as not to abandon the progress using the model to this point. In 2006, Wehmeyer and Mithuag proposed “Causal Agency Theory” as a means to move beyond simply conceptualizing the self-determination construct, but to better understand how a person becomes self-determined. Given the centrality of casual agency to the functional model, we have combined aspects of the original version of Causal Agency Theory with the framework of the functional model of self-determination to propose Causal Agency Theory as an extension and revision of the functional model. This is described in the following section.

Causal Agency Theory: A Reconceptualization of the Functional Model of Self-Determination

Causal agency theory conceptualizes self-determination as a general psychological construct within the organizing structure of theories of human agentic behavior. Human agentic theories “share the meta-theoretical view that organismic aspirations drive human behaviors” (Little, Snyder, & Wehmeyer, 2006, p. 61). An organismic perspective views people as active contributors to, or *agents* of, their behavior. An agentic person is the “origin of his or her actions, has high aspirations, perseveres in the face of obstacles, sees more and varied options for action, learns from failures, and overall, has a greater sense of well-being” (Little, Hawley, Henrich, & Marsland, 2002, p. 390). An agentic person engages in self-regulated and goal-directed *action*, they “plot and navigate a chosen course through the uncertainties and challenges of the social and ecological environments... continuously interpreting and evaluating actions and their

consequences” (Little et al., 2002, p. 390). This continually evolving and actively monitored self-system gives rise to a sense of personal agency, or of the agentic self. The agentic self has a “sense of personal empowerment, which involves both knowing and having what it takes to achieve one’s goals” (Little et al., 2002, p. 390). Figure 1, which will be referenced throughout this section, represents this conceptualization of the agentic self as the highest “layer” of human agency.

Unlike stimulus-response accounts of behavior, human agentic action is understood to be: (a) motivated by biological and psychological needs; (b) directed toward self-regulated goals; (c) propelled by understandings of agents, means, and ends, and (d) triggered by contexts that provide supports and opportunities, as well as hindrances and impediments (Wehmeyer, Little, & Sergeant, 2009). An organismic approach to self-determination requires an explicit focus on the interface between the self and context (Little et al., 2002). Organisms influence and are influenced by the contexts in which they live and develop. It is within this person-context interaction that people become agents of their own action, or *causal agents* over their lives. This context is represented in Figure 1, as the socio-contextual supports and opportunities and threats and impediments that are influencers of and influenced by the layers of human agency.

Foundations for Causal Agency Theory

Self-Determination in Philosophy. As noted previously, the self-determination construct’s origins lie in the philosophical doctrines of *determinism* and *free will*. Determinism is the philosophical doctrine positing that events, such as human behavior, are effects of preceding causes. Free will is conceptualized as the human capacity to act (or not) as we choose or prefer, without external compulsion or restraint. According to philosophers like John Locke, though, human behavior can be both caused and free, as long as the distinction is made between the

agent, as actor, and the action, as caused. That is, a person (the agent) is free to act or not, as one chooses, even if the action itself is caused by some deterministic factor.

Self-Determination in Personality Psychology. In *Foundations for a Science of Personality* (1941), Angyal proposed that an essential feature of a living organism is its autonomy, where autonomous means self-governing or governed from inside. According to Angyal, an organism "lives in a world in which things happen according to laws which are heteronomous (e.g., governed from outside) from the point of view of the organism" (p. 33), and that "organisms are subjected to the laws of the physical world, as is any other object of nature, with the exception that it can oppose self-determination to external determination" (p. 33).

Angyal (1941) suggested that the *science of personality* is the study of two essential determinants to human behavior, autonomous-determinism (self-determination) and heteronomous-determinism (other-determined). Angyal placed primary importance for laying the foundation for a science of personality in the fact that a central process of an organism is the movement toward autonomous determination, noting that "without autonomy, without self-government, the life process could not be understood" (p. 34).

Self-Determination in Motivational Psychology. The most visible application of self-determination as a psychological construct has been *Self-Determination Theory* (SDT; Deci & Ryan, 2002), which integrates conceptualizations of innate human tendencies, social contexts, and motivators for human action to illustrate how congruence between one's basic needs and social contexts spur personal agency that, ultimately, results in improved overall well-being. Specifically, SDT proposed three basic psychological needs—competence, autonomy, and relatedness—that are either supported or challenged by social contexts (see Little et al., 2002, for a discussion of how these psychological needs mesh with evolutionary-based biological needs).

These basic psychological and biological needs are represented as the foundation in Figure 1, as meeting these basic needs is necessary to progress to the other layers of human agency and to improve overall well-being, one of the key outcomes and influences of the layers of human agency, demonstrated on the right side of Figure 1.

SDT research has demonstrated that social environments can facilitate or create barriers to the integration of these psychological needs, which can help or harm overall well-being (Ryan & Deci, 2002). This perspective views the process of self-regulation as an organizational function that “coordinates” systemic behaviors and serves as a foundation for autonomy and the sense of self (Ryan & Deci, 2004). Essentially, SDT holds that people’s basic needs for competence, autonomy, and relatedness driven them toward action, and when environments are supportive of such action, over well-being is improved.

Causal Agency Theory

Drawing on the foundational understanding of self-determination as (a) self-caused action from philosophy, (b) a central process of an organism in the movement toward autonomous determination, from personality psychology, and (c) motivated by the basic psychological needs of competence, autonomy, and relatedness from SDT, we propose Causal Agency Theory to explain *how* people become self-determined, that is how they define the actions and beliefs necessary to engage in self-caused, autonomous action that addresses basic psychological needs. Causal Agency Theory represents the “layers” of human agency that fall in between the drive to meet basic psychological and biological needs and the agentic self. This is represented in the four shaded circles in Figure 1. Causal agency (top right box) is the outcome (and an influencers) of the agentic self, and there are three essential characteristics that lead to causal agency, volitional action, agentic action, and action-control beliefs (shaded boxes in the middle

of the layers of human agency). We argue that it is at the level of promoting volitional action, agentic action, and action-control beliefs through which instructional and environmental supports can be created to promote the growth of causal agency and ultimately the agentic self.

Definition of Self-Determination

Within the context of Causal Agency Theory, which represents specific layers of human agency, we define self-determination as a

...dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined *people* (i.e., causal agents) act in service to freely chosen goals. Self-determined *actions* function to enable a person to be the causal agent in his or her life.

Key Terms and Assumptions

Dispositional Characteristic. A dispositional characteristic is an enduring tendency used to characterize and describe differences between people; it refers to a tendency to act or think in a particular way, but presumes contextual variance (i.e., socio-contextual supports and opportunities and threats and impediments). As a dispositional characteristic, self-determination can be measured, and variance will be observed across individuals and within individuals over time, particularly as the context changes (e.g., supports and opportunities are provided for self-determined action).

Causal Agency. Broadly defined, *causal agency* implies that it is the individual who makes or causes things to happen in his or her life. Causal agency implies more, however, than just causing action; it implies that the individual acts with an eye toward *causing* an effect to *accomplish a specific end* or to *cause or create change*. Self-determined actions enable a person to act as a causal agent.

Self-Caused Action vs. Control. Organismic theories differentiate between self-determination as self-*caused* action and self-determination as *controlling* one's behavior. As Deci (2004) observed, "the concept of personal control ... refers to having control over outcomes" (p. 23). Control is defined as "authority, power, or influence over events, behaviors, situations, or people" (VandenBos, 2007, p. 228). Self-determined action does not imply control over events or outcomes. Instead it refers to the degree to which action is self-caused; that is the degree to which behavior is *volitional* and *agentic*, driven by beliefs about the relationships between actions (or means) and ends.

Essential Characteristics of Self-Determined Actions

Self-determined *action* is characterized by three essential characteristics – volitional action, causal action, and action-control beliefs. These **essential characteristics** refer not to specific actions performed or the beliefs that drive action, but to the *function* the action serves for the individual; that is, whether the action enabled the person to act as a causal agent:

Volitional Action: Self-determined people act volitionally. Volition refers to making a conscious choice based upon one's preferences. Conscious choice implies intentionality; self-determined actions are intentionally conceived, deliberate acts that occur without direct external influence. As such, volitional actions are self-initiated and function to enable a person to act autonomously (i.e., engage in self-governed action). Volitional actions involve the initiation and activation of causal capabilities—the capacity to cause something to happen—and something to happen in one's life.

Agentic Action: An agent is someone who acts; a means by which something is done or achieved. Agency refers to action in the service of a goal. Self-determined people act to identify pathways that lead to a specific ends or cause or create change. The

identification of pathways is a proactive, purposive process. As such, agentic actions are self-regulated and self-directed. Such actions function to enable a person to make progress toward freely chosen goals and respond to opportunities and challenges in their environments. Such actions involve agentic capabilities; the capacity to direct it to achieve an outcome.

Action-Control Beliefs: Self-determined people have a sense of personal empowerment; they believe they have what it takes to achieve freely chosen goals. There are three types of action-control beliefs: beliefs about the link between the self and the goal (control expectancy; “When I want to do ____, I can”); beliefs about the link between the self and the means for achieving the goal (capacity beliefs; “I have the capabilities to do ____”); and beliefs about the utility or usefulness of a given means for attaining a goal (causality beliefs; “I believe my effort will lead to goal achievement” vs. “I believe other factors – luck, access to teachers or social capital – will lead to goal achievement”). Positive action-control beliefs function to enable a person to act with self-awareness and self-knowledge in an empowered, goal-directed manner.

Socio-Contextual Influences

People who are causal agents respond to challenges (opportunities or threats) to their self-determination by employing causal and agentic actions, supported by action-control beliefs. This leads to self-determined action that allows them to initiate and direct their behavior to achieve a desired change or maintain a preferred circumstance or situation. In response to challenges, causal agents use a *goal generation process* leading to the identification and prioritization of needed actions. The person frames the most urgent action need in terms of a goal state, and engages in a *goal discrepancy analysis* to compare current status with goal status. The outcome

of this analysis is a *goal-discrepancy problem* to be solved. The person then engages in a *capacity-challenge discrepancy analysis* in which capacity to solve the goal discrepancy problem is evaluated. The person maximizes adjustment in capacity (e.g., acquires new or refines existing skills and knowledge) or adjusts the challenge presented to create a “just-right match” between capacity and challenge to optimize the probability of solving the goal discrepancy problem.

Next, the person creates a discrepancy reduction plan by setting causal expectations, making choices and decisions about strategies to reduce the discrepancy between the current status and goal status. When sufficient time has elapsed, the person engages in a second goal discrepancy analysis, using information gathered through self-monitoring to self-evaluate progress toward reducing the discrepancy between current and goal status. If progress is satisfactory, they will continue implementing the discrepancy reduction plan. If not, the person either reconsiders the discrepancy reduction plan and modifies that or returns to the goal generation process to re-examine the goal and its priority and, possibly, cycle through the process with a revised or new goal.

Development of Self-Determination

Self-determination develops across the life span, emerging as adolescents develop and acquire multiple, interrelated skills, referred to as component elements of self-determined action that enable the expression of the essential characteristics, including learning to make choices and express preferences, solve problems, engage in making decisions, set and attain goals, self-manage and self-regulate action, self-advocate, and acquire self-awareness and self-knowledge.

Self-determination is also an important contributor to the individuation process during adolescent development. Individuation refers to the process of moving from being primarily dependent upon others (for a child, typically his or her family), to being primarily dependent

upon oneself; the “physiological, psychological, and sociocultural processes by which a person attains status as an individual human being and exerts him- or herself as such in the world”

(VandenBos, 2007; p. 477).

Layers of the Agentic Self

To summarize, self-determination is a general psychological construct within the organizing structure of theories of human agentic behavior. Figure 1 describes the multiple layers of human agency described through this paper and their reciprocal influence on each other. The agentic self is the overarching layer. Basic psychological and biological needs represent a foundational layer as the motivation to meet these needs promotes overall well-being and also creates the conditions for volitional action, agentic action, and means-beliefs which define self-determined action, lead to causal agency, and ultimately the development of the agentic self. Within Causal Agency Theory, the expression and development of the three essential characteristics of self-determined action are shaped by socio-contextual supports and opportunities and threats and impediments and people use a *goal generation process* and *goal discrepancy analysis* to identify the component elements that must be used to enable self-determined action.

The motivation to address basic psychological and biological needs described in SDT also influences each of these essential characteristics as well as responses to socio-contextual supports and opportunities and threats and impediments. As people have opportunities to engage self-determined action, they become causal agents, which then influence the degree to which basic needs are met and overall well-being flourishes. Together, each of these elements leads to the overall agentic self. Figure 1 both organizes these patterns of relationships but also demonstrates the that reciprocal influence of each of these layers of human agency on the agentic

self, and even the relationship of the agentic self, with each of the elements that contribute to it. Further, it highlights how Causal Agency Theory and the elements associated with it can be used to promote causal agency by creating opportunities for people to learn and use skills associated with self-determined action (the component elements of Causal Agency Theory). For example, as youth learn to engage in agentic action through instruction in goal setting and attainment strategies, this will likely not only influence their agentic actions and causal agency, but also overall well-being, as these beliefs might lead to increases in the ability to meet basic psychological needs described by SDT. Further, they may also have greater access to supports and opportunities, and be able to better address threats and impediments. All of which influences one's agentic self.

Conclusion

Causal Agency Theory extends previous work on the functional model of self-determination, integrating the need for interventions and assessments pertaining to self-determination for *all* students and the expansion of knowledge in the field of positive psychology. Causal Agency Theory situates self-determination within the context of the multiple layers of human agency, and places significant emphasis on self-determined *action*, rather than self-determined behavior, as the concept of action represents a broader understanding of what contributes to causal agency. Research on self-initiation and self-direction, as well as on the role of beliefs regarding the relationship between actions and goals has provided an additional context for understanding both how to define and support self-determined action. The essential characteristics defined in the functional model of self-determination— autonomy, self-regulation, psychological empowerment, and self-realization - remain part of Causal Agency Theory. These characteristics are merged, however, into newly defined essential characteristics,

representative of emerging knowledge in the field of positive psychology – volitional action, agentic action, and action-control beliefs. Table 1 highlights the essential characteristics of self-determined action under Causal Agency Theory, the associated essential characteristics from the functional model of self-determination and additional elements that now define each of the essential characteristics of Causal Agency Theory.

Overall, Causal Agency Theory provides a theoretical framework for developing and enhancing supports to enable youth to engage in agentic action through instruction in goal setting and attainment strategies, this will likely not only influence their agentic actions and causal agency, but also overall well-being. Further work is needed to develop tools to measure these new essential characteristics and to identify effective interventions to support their development. Such work has the potential to build on the existing foundation of knowledge on promoting self-determination in the transition field, while addressing the need to broaden our perspective to include students with and without disabilities, the tenants of positive psychology, and changing understandings of disability, leading to more positive outcomes for all.

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Table 1.

Relationship between the essential characteristics of Causal Agency Theory and the functional theory of self-determination

New Essential Characteristics under Causal Agency Theory	Associated essential characteristics from functional model of self-determination (Wehmeyer, 2003)	Additional Constructs incorporated in Causal Agency Theory Essential Characteristics
Volitional Action	Autonomy	Self-Initiation
Agentic Action	Self-Regulation	Self-Direction Pathways Thinking
Action-Control Beliefs	Psychological Empowerment Self-Realization	Control expectancy Agency beliefs Causality beliefs

Figure 1. The multiple layers of human agency

