Theoretical Perspectives on Self-Determination

1. The Arc’s Concept of Self-Determination (Wehmeyer 1996, etc.)
   - This concept is based on a functional theory of self-determination, under which self-determined behavior is defined as “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” (Wehmeyer 2006). In this theory, there are four essential characteristics of people that lead to such actions:
     o Autonomy
     o Self-regulation
     o Psychological empowerment
     o Self-realization
   - This theory posits that self-determination emerges as students learn skills (e.g., problem-solving skills) and develop attitudes (e.g., self-knowledge) that enable them to be causal agents in their lives.

2. The AIR Concept of Self-Determination (Mithaug 1993, etc.)
   - This concept is based on self-determined learning theory, which focuses on the process through which students become self-determining. This theory posits that self-determination depends on students’ capacities and opportunities:
     o Capacity refers to the knowledge and abilities that enable students to become self-determined.
     o Opportunity refers to the chances provided to students at home and at school to apply their knowledge and abilities related to self-determination.
   - Under this theory, students’ development of self-determination is dependent on their capacities and opportunities to interact with their environment.
   - Self-determined people have learned to express their needs, set appropriate goals, act more independently, etc.

3. The differences between these theories suggest that the Arc and AIR scales measure different aspects of the self-determination construct, implying that researchers and practitioners, when deciding which assessment to use to evaluate interventions to promote self-determination, should consider the theoretical perspective that is guiding their work.

Self-Determination Scales

- The Arc’s self-determination scale is calculated based on a 72-item student self-report (survey)
  - 32 questions on autonomy, 9 on self-regulation, 16 on psychological empowerment, and 15 on self-realization
  - A total self-determination scale (SDS) can be calculated, as well as subscales corresponding to the four essential characteristics (AUT, SREG, PSYE, and SREA) identified in the functional theory.
- The AIR self-determination scale is available in three versions, all pertaining to the student. These are based on student, educator, and parent assessments (surveys).
  - The student assessment consists of 12 questions on capacity and 12 on opportunity.
    - A total self-determination scale based on the student assessment can be calculated (AIR-S), as well as subscales corresponding to capacity (AIRSC) and opportunity (AIRSO).
  - The educator assessment consists of 18 questions on capacity and 12 on opportunity.
    - A total self-determination scale based on the educator assessment can be calculated (AIR-E), as well as subscales corresponding to capacity (AIREC) and opportunity (AIREO).
  - The parent assessment consists of 6 questions on capacity and 12 on opportunity (not used in this study).
- Assessment tools and instructions for calculating the self-determination scales are available at: http://www.ou.edu/content/education/centers-and-partnerships/zarrow/self-determination-assessment-tools.html
Empirical Assessment of the Theoretical Underpinnings of the Self-Determination Scales: Methods

- **Study participants.** 407 high school students in six plains states who were receiving special education services. 42% had developmental disabilities and 29% had learning disabilities.
- **Data collection.** Teachers administered the Arc and AIR-S assessments to the sampled students. Teachers of those students completed the AIR-E assessment.
- **Analytic procedures.** The authors used structural equation modeling to test the theories underlying the two self-determination scales and to assess the interrelationships among the assessment items, subscales, and scales. Variables at three different levels entered this analysis:
  - Assessment items—responses to individual questions in the various self-determination assessments
  - Subscales—eight constructs formed directly from the individual assessment items: AUT, SREG, PSYE, SREA, AIRSC, AIRSO, AIREC, and AIREO
  - Scales—three higher-order constructs formed from subscales: SDS (AUT, SREG, PSYE, and SREA), AIR-S (AIRSC and AIRSO), and AIR-E (AIREC and AIREO)

Empirical Assessment of the Theoretical Underpinnings of the Self-Determination Scales: Results

1. Correlations of subscales within SDS, AIR-S, and AIR-E
   - SREG, PSYE, and SREA are all strongly intercorrelated, whereas AUT is only weakly correlated with the other subscales → autonomy is a more distinct component of SDS than the other subscales.
   - AIRSC and AIRSO are strongly correlated → students view their capacities and opportunities as being related.
   - AIREC and AIREO are weakly correlated → teachers do not view students’ capacities and opportunities as being related.

2. Structural modeling of the higher-order scales (SDS, AIR-S, and AIR-E) as functions of the component subscales
   - All subscales of SDS were significantly, positively, and relatively strongly correlated with the higher-order construct.
     - This supports the underlying functional theory that self-determination comprises these domains.
     - However, correlation with SDS was distinctly weaker for PSYE than for the other three subscales.
   - Both subscales of AIR-S were significantly, positively, and strongly correlated with the higher-order construct.
     - This supports the central tenet of the underlying theory of self-determined learning—that capacity and opportunity both contribute to self-determination.
   - There were problems with the analysis results for AIR-E.
     - AIREC (capacity) was negatively correlated with AIR-E. This is inconsistent with the underlying theory.
     - This appears to be related to the weak correlation between the two subscales, AIREC and AIREO.
     - The authors concluded that the data did not support the use of AIREC and AIREO to create a higher-order self-determination scale, AIR-E.
   - The authors found a statistically significant but not especially strong relationship between SDS and AIR-S.
     - This suggests that these two scales are assessing different aspects of self-determination, aspects linked to differences in the underlying theories.

Implications for Research

- It is possible that the AIR-S, given its focus on capacity and opportunity, is actually measuring the precursors to the development of self-determined behavior.
- Researchers must consider the goals of their research in relation to the theoretical frameworks underlying the SDS and AIR-S to determine which is the more appropriate theory and measure for their objectives.

Implications for Practice

- These findings suggest that SDS and AIR-S (but not AIR-E) are viable tools to assess the self-determination of students with disabilities.
- Practitioners should consider whether they are trying to learn about about the autonomy, self-regulation, psychological empowerment, and self-realization of students, or about their capacities and opportunities for self-determined behavior.
- The weak correlation between AIREC and AIREO suggests that it may be difficult for teachers who lack training in instructional practices for promoting self-determination to effectively identify and create opportunities for the development of these skills in their classrooms.