A SOCIAL-COGNITIVE EXPLORATION OF THE CAREER AND COLLEGE UNDERSTANDING OF YOUNG ADULTS WITH INTELLECTUAL DISABILITIES

Students with intellectual disabilities (ID) are less likely to continue their education or become employed after high school. Although transition services are provided, little is known about students' understanding of their post-high school options. Using a social cognitive framework, the authors interviewed students with ID to determine their career and college understanding. Qualitative content analysis revealed varying amounts of perceived barriers and supports, including limited college and career knowledge. This article includes implications for school counselors.

The American Association on Intellectual and Developmental Disabilities (AAIDD, 2011) and the American Psychiatric Association (APA, 2013) define an intellectual disability (ID) as limitations both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behavior. Adaptive behavior assesses conceptual skills (e.g., language, money, and time concepts), social skills (e.g., interpersonal skills and social problem solving), and practical skills (e.g., activities of daily living, occupation). An intellectual disability also originates before the age of 18. The AAIDD (2011) also purports that the life function of a person with ID will improve with appropriate supports and services over a sustained period of time. The term intellectual disability is used in this article in accordance with the comprehensive definition assembled by the AAIDD (2011) and includes the wide range of disabilities within the ID classification.

More than 447,000 students ages 3 to 21 diagnosed with ID receive special education services while in school (U. S. Department of Education, 2013). One of the most difficult transitions that students with ID and

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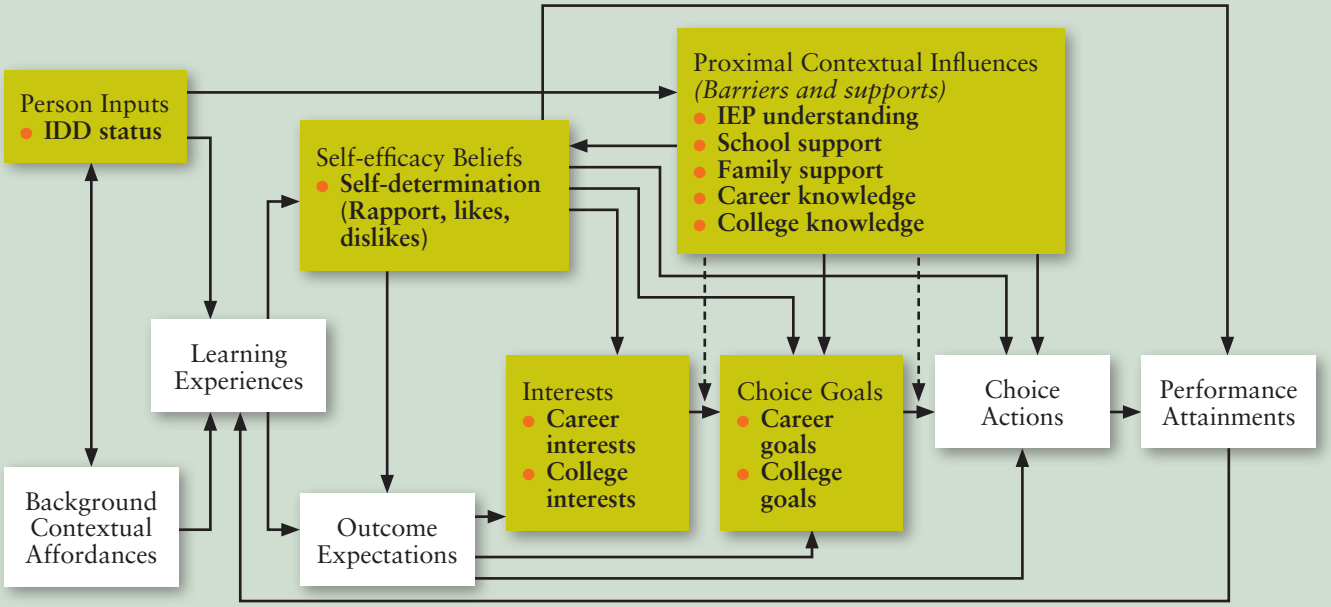
FIGURE 1 SOCIAL COGNITIVE CAREER THEORY MODEL, WITH STUDY CONSTRUCTS IN BOLD.



Note. Adapted from Lent, Brown, & Hackett (1994).

their families face is leaving the public school system and entering the adult world (Wehman, 2012). Important decisions, such as where to work and live and how to access friendships and leisure opportunities, need to be made (Foley, Dyke, Girdler, Bourke, & Leonard, 2012). The student will be leaving the public school system, which offers services on an entitlement basis, and entering an adult service system that operates on the basis of eligibility. This means that employment and living opportunities are not guaranteed for every person and that families will face many unknowns as they plan for the future (Kim & Yurnball, 2004). Most youth with ID exit high school without the knowledge, skills, and experiences necessary to successfully find work (Carter, Trainor, Cakiroglu, Swedeen, & Owens, 2009).

Until recently, most students with ID had no educational options after completing high school (Think College, 2009). The introduction of the Higher Education Opportunity Act (HEOA, 2008) increased postsecondary and career options for these students, with more than 200 specially designed higher education programs existing across the U.S. as of 2014 (Think College, 2014). Although these programs vary in scope, services, and sequence, they all have the goal of helping students achieve gainful employment and increased independence (Grigal, Hart, Smith, Domin, & Sulewski, 2013). Even with the recent addition of specialized programs, only 20% of people with ID are employed, those who are employed are more likely to work only part time, and most people with ID lack postsecondary education (Bureau of Labor Statistics, 2013).

> MOST YOUTH WITH ID EXIT HIGH SCHOOL WITHOUT THE KNOWLEDGE, SKILLS, AND EXPERIENCES NECESSARY TO SUCCESSFULLY FIND WORK.

With the new postsecondary programs available, more students with ID are continuing their education on a college campus. As a result, transition planning procedures are beginning to include postsecondary education as a possible next step in student development for students with ID. As high schools are being pushed to have all students be college and career ready, it is essential that individuals with ID are adequately prepared. Moreover, the American School Counselor Association (ASCA) mandates that school counselors should serve the needs of all K-12 students, and transition planning for students with disabilities falls within the appropriate activities for middle and high school counselors (ASCA, 2012). Finding and utilizing a model for the social-cognitive understanding of the baseline career and college knowledge of students with ID is a crucial first step to identify gaps in the educational and career preparation of this population.

SOCIAL COGNITIVE CAREER THEORY AND STUDENTS WITH ID

Social cognitive career theory (SCCT) includes a variety of constructs that researchers have shown to contribute to career development. SCCT is highly researched and has been used to explain career development in a variety of multicultural groups (e.g., Brown et al., 2008; Gibbons & Borders, 2010; Hutchinson, Versnel, Chin, & Munby, 2008). Figure 1 identifies the various SCCT constructs and includes those explored in the current

study. SCCT frames disability status as a person input, or an individual variable that influences career development (Lent, Brown, & Hackett, 1994). According to SCCT, disability status then frames all learning experiences, which ultimately affect career and college self-efficacy and outcome beliefs (Lent, Morrison, & Ezeofor, 2014). Some primary barriers for people with disabilities include limited career access, minimal career and college information, and social discrimination, making it more difficult for these young adults to make career-related decisions. Traditional career approaches often focus on connecting interests with career options, yet because of their unique issues and barriers, students with ID may need a more sophisticated approach to career development. SCCT provides a broad understanding of career development and a specific focus on individual self-efficacy and perceived barriers to success. Thus, the SCCT framework is useful for understanding a population as diverse as young adults with intellectual disabilities.

Self-Efficacy and Self-Determination

Self-efficacy, or people's belief in their ability to complete tasks toward a goal, directly affects outcome expectations, or what individuals believe will happen should they undertake a certain course of action (Lent et al., 1994). Self-efficacy beliefs are developed through learning experiences, perceived barriers and supports, and background characteristics. Self-efficacy drives the level of effort an individual will exert in completing a task and the level of persistence exerted in completing that same task (Bandura, 1997). The greater the self-efficacy relative to a particular task, the greater the effort and the length of time exerted toward accomplishing it. Research demonstrates the link between current self-efficacy beliefs and future career and postsecondary outcomes (Nauta & Epperson, 2003), including increased understanding of interests, goals, and actions related to career (Betz & Hackett, 2006).

Although self-efficacy alone rarely has been explored in students with ID, the related construct of self-determination appears to be a key component of transition planning. Self-determination has been described 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, 2005, p. 117). Students who are self-determined perceive control over their own lives and are able to advocate for their desired quality of life. Self-determination includes choice or intention, a sense of autonomy, and belief in competence level, or self-efficacy (Ryan & Deci, 2000). Whereas views of competence may be difficult to measure in this population, those with a sense of self-determination have increased self-reliance and belief in their own abilities (Wehmeyer, 2005). Further, those who are self-determined believe they can act of their own will and not simply be pushed by others. Considering self-determination within a frame of self-efficacy helps link a primary construct in the understanding of people with ID to SCCT's explanation of career development.

TRANSITION PLANNING PROCEDURES ARE BEGINNING TO INCLUDE POSTSECONDARY EDUCATION AS A POSSIBLE NEXT STEP.

Perceived Barriers and Supports

SCCT links academic and career plans with contextual influences, also known as perceived barriers and supports (Lent et al., 1994). Lent, Brown, and Hackett (2000) noted the influence of perceived supports and barriers on overall beliefs about career and educational pursuits, and stated that the stronger the perception of one's ability to cope with perceived barriers, the less those barriers will affect goals and plans. Being able to identify barriers and find ways to cope with them is a salient part of the career development process.

Students with ID face multiple barriers as they consider career and college opportunities. They may lack knowledge of career and college opportunities, which is vital to creating realistic and positive postsecondary goals (Tierney, Colyar, & Corwin, 2003). The general student population, including those without disabilities, vary in their knowledge about college and careers (Bell, Rowan-Kenyon, & Perna, 2009), with some research showing that early high school students possess very little information about career and postsecondary options (Gibbons, Borders, Wiles, Stephan, & Davis, 2006). Career and college knowledge is likely even more limited for students with disabilities. Wagner, Newman, Cameto, Garza, and Levine (2005) found that two years post high school, only 25% of young adults with ID were employed. Furthermore, Hitchings et al. (2001) noted that students with disabilities often lack knowledge about career options and how to make career-related decisions. Most of their participants had only general career goals and many found their transition services to be inadequate. Another study established that adolescents with ID had limited knowledge of different types of available occupations and minimal understanding of what different occupations actually required (Cinamon & Gifsh, 2004).

Another potential barrier relates to transition planning. For students with disabilities, an Individualized Education Program (IEP) is a required component of the transition process. IEPs must include what students need to do to reach their career and/or college goals (U.S. Department of Education, 2000). Transition services in the IEP should be based on student needs and interests related to employment, independence, and postsecond-

ary training. Getzel and Thoma (2008) learned that college students with disabilities identified setting career-related goals as a key factor in postsecondary success. However, Beveridge, Craddock, Liesener, Stapleton, and Hershenson (2002) found that young adults with disabilities often lack access to career-related activities and have limited understanding about the world of work, thus making it difficult for these students to make career-related decisions.

Perceived supports for students with ID include family and school support. Researchers (e.g., Metheny & McWhirter, 2013; Raque-Bogden, Klingaman, Martin, & Lucas, 2013; Tierney et al., 2003) consistently note the importance of parental support for successful career and college planning. Metheny and McWhirter (2013) found that family support may serve a protective role for students from families with limited resources, and Raque-Bogden et al. (2013) found that all types of parental support reduce perceived educational barriers and serve as a coping tool for students. Although these studies were not specific to students with ID, their results indicate that family support is vital for these students.

Although the relationship of career and college knowledge to career decision making and postsecondary planning is clear for traditional students, little research exists regarding the level of knowledge students with ID have about these topics. The purpose of this study was to use SCCT variables as a framework to better understand the career and college knowledge and levels of self-determination of high school students with intellectual disabilities so school counselors can provide appropriate transition planning services to help these students enter the world of work and/or college.

METHOD

Beail and Williams (2014) argue that, although the number of qualitative studies with this population has increased recently, more are needed to "hear the voices of people who have intellectual disability" (p. 93). As noted by Beail and Williams, qualitative research with participants with ID needs to consider various factors. First, participants must have adequate verbal abilities. Second, interview questions should be simple and concrete, and should be shorter than traditional qualitative interviews. Third, interviews should include a mix of open questions that are concrete in format (Clarke, Camilleri, & Goding, 2015). Last, Beail and Williams (2014) noted that qualitative research with people with ID is needed to add those individuals' voices to existing research. The authors of the present study used these guiding principles along with SCCT constructs to direct structured interview development and analysis for high school students with ID.

TABLE 1 PARTICIPANT DEMOGRAPHICS

Pseudonym	Gender	Ethnicity	Age/Grade Level	School
April	F	Caucasian	Over 18	3
Betsy	F	Caucasian	Over 18	1
Brian	M	Caucasian	Over 18	3
John	M	Caucasian	12th grade	1
Katie	F	Caucasian	Over 18	1
Marcus	M	African American	Under 18	2
Max	M	Caucasian	Under 18	1
Melissa	F	Caucasian	Over 18	2
Sam	M	African American	Over 18	2
Tevin	M	African American	Under 18	2
Tonya	F	African American	Over 18	2
Trevor	M	African American	Over 18	2

STUDENTS WHO ARE SELF-DETERMINED PERCEIVE CONTROL OVER THEIR OWN LIVES AND ARE ABLE TO ADVOCATE FOR THEIR DESIRED QUALITY OF LIFE.

Participants

Twelve high school students who had been diagnosed with moderate ID based on functional adaptability and IQ scores participated in the interviews. Participants (see Table 1) came from three different high schools in one southeastern U.S. school district, and all received special educational services in the special education classrooms referred to as comprehensive development classrooms (CDCs). CDCs are designed for students needing small class sizes and structured environments, and students in these classrooms receive at least 32.5 hours of special education services per week (Tennessee Department of Education, 2012). Therefore, in this study, moderate ID refers to students who needed a separate classroom setting because they demonstrated both significant cognitive and adaptive skills deficits. The participants varied demographically; seven were male and five were female, and seven were Caucasian and five were African American. All but three were over age 18 but still enrolled in a public secondary school. The authors assigned pseudonyms to all participants to protect their identities.

Procedure

Following IRB and school district approval, participants were interviewed by one of three doctoral students who were trained in working with young

adults with ID in general and in the interview protocol for this project in particular. CDC teachers at several schools were contacted about the study, and both teachers and school administrators gave the authors permission to conduct the interviews. Parent permission and student assent was obtained for all students regardless of age. All interviews were completed at the student's school during class time. Teachers sat in on some of the interviews to help interpret student responses or to increase student comfort level as needed. Participation was completely voluntary.

STUDENTS WITH ID FACE MULTIPLE BARRIERS AS THEY CONSIDER CAREER AND COLLEGE OPPORTUNITIES.

The interview was designed by the first two authors specifically for this study. Due to the cognitive limitations of participants, the authors decided to use a structured interview protocol rather than a survey or loosely structured interview. As noted by Lloyd, Gatherer, and Kalsy (2006), the phrasing of questions to avoid leading but offering some direction is vital to increase trustworthiness of the findings. Therefore, the interviewers for this study used open-ended questions that were clear and simple (see examples below). Interviews took between 20 and 40 minutes each, a typical length for interviews with this population (Beail & Williams, 2014). All interviews were audiotaped and transcribed. Prior to analysis, all transcriptions were coded using pseudonyms to protect participant identities.

Interview Protocol

The interview was designed using social cognitive career theory (SCCT; Lent et al., 1994) constructs. The authors selected SCCT as a framework because of its direct inclusion of cultural and demographic variables, and its complex perspective on career development. Also supporting this framework selection was researchers' (e.g., Hutchinson et al. 2008; Lent et al., 2014, Tenenbaum, Byrne, & Dahling, 2014) previous use of SCCT in career development studies with people with disabilities. The links between SCCT and the interview protocol were direct and focused. The current research examined only part of the SCCT model (barriers and supports, self-efficacy, interests and choice goals), but was founded on the idea that the entire SCCT model was an accurate description of career development.

The interviewers began by asking participants about their general likes and dislikes (e.g., "What do you like to do for fun?"). Next, questions addressed their school experience, focusing on their likes and dislikes about school, their understanding of their IEP ("Tell me about your IEP—how does it help you in school?"), and their recognition of school-based supports ("How is school helping you plan for your future?"). Likes and dislikes helped reflect self-determination (related to self-efficacy; see Figure 1), and IEP understanding and school support linked to perceived barriers and supports.

The interviewers then asked participants about their family, including what their parents did for work and what their parents wanted for them after high school (e.g., "What do you think your parents want you to do for a job or career after high school?"). These questions helped identify perceived family support. The next questions asked participants to talk about their job or career hopes and plans. The interviewers inquired about what they liked about their proposed job, how they learned about careers, and what was needed to enter their career of choice. These questions helped the researchers understand participants' *career knowledge*, *career interests*, and *career goals*. Knowledge linked to perceived barriers and supports.

Last, the interviewers asked a series of questions about college, including "What is college?", "What do people in college do?", and whether participants considered going to college. The interviewers also inquired about perceived barriers to attending college and how participants might prepare for postsecondary education. The responses to these questions helped in understanding participants' *college knowledge*, *college interests*, and *college goals*. Again, levels of knowledge linked to perceived barriers and supports. All information was collected within the frame of having an intellectual disability.

Data Analysis

The authors analyzed the data using qualitative content analysis (QCA). In content analysis, researchers attempt to identify meaning within context, or how a group of similar people comprehend a construct (Krippendorff, 1989). In the present study, career and college knowledge was the context and the structured interview was the way to elicit data. Four researchers (the first two authors and two doctoral students not involved in the interviewing process) coded the transcripts. Before starting, the research team discussed the content analysis process, reviewed the interview protocol, and conversed about team members' preconceived notions about the research topic. This last discussion was completed to increase trustworthiness of the data by reducing bias (Moustakas, 1994; Tracy, 2010). Considering their own experiences with students with ID helped the researchers view the transcripts with less overall bias.

In QCA, coding can be data driven or concept driven (drawn from theory; Schreier, 2012). The team used what is sometimes referred to as directed content analysis (Hsieh & Shannon, 2005), a concept-driven coding frame based on constructs derived from SCCT. This study's predetermined categories were perceived barrier/support (IEP understanding, school and family support, career and college knowledge) and self-determination

(self-efficacy), although the authors also attended to interests (career and college) and future plans (career and college). They intentionally asked about these categories in the interview and examined each transcript for information about these categories while still attending to new themes that evolved from the interviews (Hsieh & Shannon, 2005; Schreier, 2012).

The researchers coded interviews both individually and as a group. Because the team used QCA, they gave special attention to consistency in coding, so that material coded into one of the predetermined categories could not also be coded into another category (i.e., they were mutually exclusive) (Schreier, 2012). First, an individual researcher coded each transcript, identifying information for the predetermined categories and adding new data-driven themes as they emerged from each participant. Schreier (2012) noted that in most cases, QCA coding results in a mix of data-driven and concept-driven themes, where themes based on theory are identified first and data-driven themes emerge later. Next, the research team met multiple times and compared coding; in cases of disagreement, the team discussed the data until consensus was reached. After coding each individual interview, the authors identified themes across participants, attending to both concept- and data-driven themes.

Trustworthiness and Credibility

Tracy (2010) recommended eight criteria to help illuminate quality of qualitative studies: relevant topic, rigor, transparency, credibility, transferability of findings, contribution, ethical, and connected to prior research. The present study demonstrates most of these criteria, including worthiness of the topic, rigor in data collection and analysis, triangulation and consistency checking during data analysis, and consideration of ethical practices. Typically, member checking following data analysis also increases rigor. Due to the intellectual limitations of this study's participants, however, the authors chose not to complete this step because participants' cognitive limitation makes it difficult for them to think thematically or recall some events. This omission is an unfortunate yet necessary limitation to the study, and the authors recognize that it may limit perceived creditability of the results. Sandelowski (1993) discussed abstractness related to member checking, stating, "members may also simply not be in the best position to check the accuracy of an account" (p. 6). She pointed to the typical readers of qualitative research and their differences from the participants as an example of why member checking may not always be appropriate. Nevertheless, this study's authors followed Tracy's (2010) other criteria for rigorous and credible qualitative work.

> MOST [PARTICIPANTS] DEMONSTRATED AN UNDERSTANDING OF THEIR LIKES, DISLIKES, ABILITIES, AND LIMITATIONS, ALL OF WHICH ARE INDICATORS OF SELF-DETERMINATION.

RESULTS

Results describe both the predetermined coding themes and two data-driven themes identified through analysis. The predetermined categories were self-determination as related to self-efficacy, perceived barriers and supports (including career knowledge, college knowledge, IEP knowledge, and family and school support), and consideration of career and college interests and goals. For each of the concept-driven themes, the authors tried to consider participant strengths and limitations related to each construct. Data-driven themes are also described below.

Self-Determination and Self-Efficacy

Most participants demonstrated some strengths related to self-determination. Similar to the self-efficacy described in SCCT, self-determination focuses on individual confidence in personal attributes and capacities (Ryan & Deci, 2000) and individuals' sense of control over their own lives. The authors identified self-determination based on how students' responses indicated the belief that they could act on personal beliefs, values, interests, and abilities. Further, self-determination also included the students' ability to problem solve, set goals, express knowledge about themselves (including their strengths and limitations) and their environment, (including their family and schoolwork).

Six students displayed strong levels of perceived control over life issues, somewhat accurate self-understanding, and actions based on own interests and values (Wehmeyer & Palmer, 2003), suggesting they had strong levels of self-determination. For example, Katie expressed a wide range of interests and clearly discussed her enjoyment of playing musical instruments and the tasks she completes at her job. She also mentioned, "I do fun, hang out with my friends, and I like to talk to teachers." Betsy also described her interests, but she understood her skills, stating, "I'm a hard worker," and mentioned that she appreciated school because "it's constantly things always happening." Four participants were able to acknowledge some interests or perceive some level of personal control over their lives, but not as clearly as other participants. For example, Marcus identified his dislike of "everything else except dance and football" at school, but was unable to expand on his other personal preferences. Two participants (John and Brian) demonstrated minimal self-determination. For example, John answered, "I don't know," to most questions regarding his personal likes and dislikes.

Perceived Barriers and Supports

The researchers asked about and identified various perceived barriers and supports during the interviews. These included participants' understanding of their IEP, general knowledge of career and college, and additional barriers and supports that emerged from the open-ended questions. Each is described below.

IEP knowledge. IEP knowledge varied for participants, but most participants revealed limited understanding of the how the IEP related to career and postsecondary planning. Even though all participants had IEPs and had attended at least two IEP meetings, most were unable to answer the question, indicating their lack of understanding related to the connection of the IEP to future career plans. Even after it was explained by the interviewer, student responses were limited. For example, Tonya noted, "It's not good," and Tevin stated that no one at school helped him with career planning. Five participants had a bit more understanding. Sam said the IEP was "about me coming back to school" but could not explain how it related to career planning. Melissa had a stronger level of understanding, stating "it gives me a chance to look at what I want to go forward to and what goals I need to achieve and what things I need to work on."

Career and college knowledge. Level of career knowledge was reflected by responses to questions about their job plans after high school, although this information occasionally presented during other parts of the interview. Participants varied greatly in their career knowledge. Three participants demonstrated minimal understanding of career, indicating limited knowledge about jobs in general. For example, Brian responded, "I don't know anything," when asked about career plans. These three participants were unable to articulate meaningful information about career. Four other students demonstrated a bit more knowledge about career and were able to discuss careers in broad generalities. April stated, "I love to babysit," but described that she liked it because "I like to get paid" and the skills required were "play with it." April seemed to understand the basics of a career, but not the details. The three students with the strongest career knowledge were able to give details about their career of choice. For example, Betsy described her love of acting, stating "I really want to be part of Broadway, do things around a stage…If I can't act I just want to…learn other things like history of drama."

Unlike career knowledge, most of the participants consistently demonstrated limited college knowledge. These participants ranged from being unable to describe college at all (three participants) to being able to describe it only in very general terms (eight participants). John explained that college was "something you do after, when you finish high school" but could not name any colleges or describe what occurred in college. Max described his desire to work for his church, but when asked about college, he explained only that students "drank a lot [and watched] football." No connection between college and career existed for Max. Only Betsy demonstrated a nuanced understanding of college. She explained that her entire family had attended college, and that in college, students "go to classes, do their homework and then they eat…if they have time, they do other things with friends. You have to put your mind into the whole thing." Generally, the participants lacked specific knowledge about college and its connection to career planning.

Additional barriers and supports. The interviewers asked about perceived supports and barriers in relation to family influence, IEP understanding, and career and college understanding; participants also described supports and barriers throughout the interviews. All participants were able to identify at least one career-related support. Nine participants mentioned their teachers as being helpful with career planning, and 10 participants noted a family member as being helpful. Other sources of support included church friends and extended family. For example, Katie identified multiple supports, saying her friends, teacher, and bandmates talked with her about life after high school. All but two participants were also able to identify perceived barriers to career and college planning. Marcus noted that "being in trouble" might get in the way of his career plans, and that "if I don't get no scholarship or nothing, I'll just get a job" when asked about attending college. Melissa also expressed multiple perceived barriers, explaining "I'll say some of the problems are just, you know, stress sometimes" and that she "…had a very, very, very bad childhood." Although responses varied, most students identified supports and barriers in their life. Very few, however, noted their disability as a career or college barrier of any kind.

> THE AUTHORS FOUND PARTICIPANTS' LACK OF UNDERSTANDING ABOUT THE TRANSITION COMPONENT OF THE IEP SOMEWHAT DISCONCERTING.

Data-Driven Themes

In addition to the concept-driven themes based on SCCT, two data-driven themes also revealed themselves during the analysis. First, all but two of the participants *discussed money*, including making money, how to use money, and being motivated by money. When asked why he might go to college, Trevor stated "making money." He later stated, "I do have to make money. Yeah, find me a job." John noted that he wanted to "make lots of money" while Sam wanted a job where he could count money and "not cheat people out of money." Even though none of the interview questions or follow-ups related to salary or be-

ing paid, money matters were clearly important to the participants, or at least they were very aware of them.

The other data-driven theme that presented itself was the participants *varied levels of self-knowledge*. Related to self-determination, most of the participants were able to identify some things they enjoyed; only Brian was unable to identify what he liked to do for fun. For example, April, Katie, and Melissa mentioned that they enjoyed "hanging with friends" and April, Marcus, Max, Melissa, Tevin, Tonya, and Trevor all noted a sport that they enjoyed playing. All but three participants were able to describe what they enjoyed about school; seven participants also identified what they disliked about school. Math was mentioned as disliked by three participants but liked by two others. Being able to describe their likes and dislikes is an important component of self-knowledge and it was apparent that the students were able to state their preferences during the interview.

DISCUSSION

In this study, the authors explored the career and college knowledge of high school students with intellectual disabilities. Certainly, the participants demonstrated variation in the classification of their ID, yet all students were diagnosed based on their IQ scores and functional adaptability. To determine the level of knowledge each student possessed, the authors utilized the SCCT framework and inquired about levels of self-determination as related to self-efficacy and career-related supports and barriers. The results of each aspect of the study are discussed below.

This study seems to indicate more self-determination than would be expected from previous research. Overall, most of the students in this study demonstrated an understanding of their likes, dislikes, abilities, and limitations, all of which are indicators of self-determination. This result differs from previous research, which posited that those with disabilities have limited opportunities to express their preferences and make decisions (Stancliffe & Abery, 1997) and overall low self-determination (Stancliffe, Abery, & Smith, 2000). There is growing recognition regarding the importance of self-determination in the successful education of students with disabilities (Wehmeyer & Palmer, 2003). Suggesting that self-determination represents a core component of self-efficacy within the SCCT model is reasonable because a sense of autonomy and choice is directly related to goal intentions and direction. As previously noted, research supports the connection between self-efficacy beliefs and career and postsecondary outcomes (Nauta & Epperson, 2003). Having the ability to express preferences and make decisions is essential for all students in their developmental process. For students with ID, however, autonomy is often limited due to restraints they have experienced throughout their lives. Strong self-determination is a major contributor to student success, and previous research demonstrated that it could lead to positive outcomes including financial independence, job placement, and obtaining job benefits (Wehmeyer & Palmer, 2003).

The authors found participants' lack of understanding about the transition component of the IEP somewhat disconcerting, particularly in light of the fact that students will be far more independent after high school and the IEP is a central component in their postsecondary planning. For students with less obvious self-determination, having an active voice in their education plan will be difficult. IEPs require annual meetings for students with disabilities and provide opportunities for educators, parents, and students to collaborate regarding progress, goals, and student transition (Test et al., 2004). Although participants' knowledge regarding their IEP varied, the majority demonstrated low to moderate levels of understanding. This study's results are consistent with previous findings that students are often not fully involved in their IEP meetings and generally unfamiliar with their IEP (Lovitt & Cushing, 1994; Thoma, Rogan, & Baker, 2001). Given that IEP meetings are a core component of the overall transition planning process, students with ID who lack an understanding of this process miss out on crucial planning for postsecondary education and employment.

> NONE OF THE PARTICIPANTS MENTIONED THE SCHOOL COUNSELOR AS A PERCEIVED SUPPORT REGARDING THEIR KNOWLEDGE ABOUT CAREER AND COLLEGE.

These students had some knowledge of some careers and their connection to money, but lack of connection to college and knowledge about college limits possibilities for these students. High school experiences are critical in equipping adolescents for their future, particularly in helping them develop skills to enter the world of work. Unfortunately, researchers note that, despite the wide availability of career-related programming offered by high schools, students with disabilities are not likely to participate (Carter et al., 2010). This likely contributes to a lack of understanding among these students about their options and the larger career development process. Some participants discussed their previous and current experience with work and their knowledge regarding careers in general. Of all the questions in the study, the one with the most variability in participants' responses was their levels of career-related knowledge. For five of the participants in the study who demonstrated weaker career knowledge, their understanding primarily related to money. These students talked about work as a means of obtaining money, and getting

paid appeared to be one of the most important factors for many of the participants.

Although college preparation is a strong focus for many high school students, only one student in the sample demonstrated a strong understanding of college, with the remaining students indicating limited understanding. The lack of understanding about college among the participants could be due to a variety of factors, including limited discussions about college in the students' home and school life. These students may not be aware of all the post-high school options available to them; thus, as SCCT would suggest, their disability status may have indirectly or directly limited learning experiences and impeded the development of self-efficacy.

tioning teachers and parents. Other sources of support included other family members and friends. According to SCCT, being able to perceive support helps increase self-efficacy and reduces perceived barriers (Lent et al., 1994), so it is valuable that these students could name multiple people to whom they could turn to for career support. Of concern, none of the participants mentioned the school counselor as a perceived support regarding their knowledge about career and college. Milsom (2002) found that 32% of high school counselors were not active in transition planning. Furthermore, of all school counseling activities, participants in Milsom's (2002) study reported feeling least prepared to provide career and college counseling to students with disabilities.

reported by their teachers or parents. The interview process, while structured, gave participants a chance to voice their own beliefs, which is lacking in the current literature.

The other limitations relate to the study's methodology. Using a structured interview naturally limits the narrative heard from participants. The study's findings may lack the depth of typical qualitative research, or the analysis process may have over- or under-interpreted the provided information. Furthermore, given that people with ID may have mild to moderate communication or social skill difficulties (APA, 2013), it is possible that this study's participants were unable to fully describe their college and career understanding. However, Lloyd and colleagues (2006) suggest modifying one's expectations in order to gain the possibility of articulating the voices of people with ID, suggesting that these possible limitations, within an otherwise rigorous study, may need to be accepted as a reality of this type of research.

SCHOOL COUNSELORS CAN VISIT RESOURCE CLASSROOMS AND OFFER STUDENTS INFORMATION ON POSTSECONDARY AND CAREER OPTIONS.

Perceived barriers and supports greatly influence overall knowledge about career and educational pursuits and being able to identify barriers is essential to a successful career journey (Lent et al., 2000). The study participants asserted their preferences and demonstrated knowledge about their lives; however, very few identified their disability as a barrier to future success. The interviews did not comprise direct disability-related questions, but just three students vaguely mentioned their struggles with hearing, speaking, and mobility as potential barriers. Although one could expect the presence of ID to play a critical role in career and college planning (Ochs & Roessler, 2001), the majority of participants did not identify their disability as a barrier; perhaps some do not possess the awareness or language to talk about their ID. Another possibility may be that these students lacked insight into how their disability might influence their careers.

The participants were able to identify sources of support, regularly men-

Limitations

As with all qualitative research, the purpose of this study is not to suggest that this sample of students with ID are representative of the larger population of students with ID, but rather to offer richer description on career and college beliefs than may be found through quantitative research. The participants came from a convenience sampling of a single school district; therefore, these students may not represent views of students with ID from other regions. However, the participants did come from three different, diverse schools in the district, so they do represent a somewhat diverse population. Furthermore, qualitative research represents the views of the researchers, even when they attempt to increase trustworthiness. It is possible that another researcher might review the transcripts and identify different themes. Nevertheless, this methodology provided a unique way to learn about the views of young adults with ID in their own voices, rather than

IMPLICATIONS AND CONCLUSIONS

In most schools, school counselors are the experts in postsecondary planning, but for students with IEPs, this task often falls instead to the special education teacher. Although fully trained in working with students with disabilities, these teachers typically feel less than prepared to provide transition services, and report only occasionally providing these services to their students (Benitez, Morningstar, & Fray, 2009). It is vital that school counselors provide these services to all students, as recommended by the ASCA National Model (2012). The preceding discussion highlights issues that school counselors may address to support students to participate in learning experiences, recognize barriers and supports, and promote self-efficacy and self-determination. By promoting these tenets of SCCT, school counselors

can help advance future career and/or college outcomes for students with ID. Specific ideas are included below.

Increasing self-determination, reducing barriers, and increasing supports all link to stronger career self-efficacy. By conceptualizing individuals with ID through an SCCT model, school counselors can create opportunities for students with ID to solidify their self-efficacy. Recognition of the critical importance of self-determination has been growing, particularly with regard to career and college outcomes, and the authors hope that practitioners and educators will help empower students with ID to direct their lives to the best of their abilities. Research posits that self-advocacy is essential to the successful transition of individuals with disabilities (Hitchings et al., 2001). School counselors can help their students understand their disabilities and the impact the disabilities may have on their lives, and identify helpful accommodations. School counselors can assist with this process in several ways. First, they can visit resource classrooms and offer students information on postsecondary and career options, increasing their concrete understanding of career and college and thereby reducing a hindering barrier. Second, school counselors can bring this information to yearly IEP meetings so parents can also access it. Parents directly influence their children's career decisions, so providing concrete information to parents increases this support system. Third, school counselors can encourage interaction between students with and without ID to increase opportunities for socialization. Increased socialization is another skill needed for career success, so offering peer models provides yet another support system while also reducing a career barrier. These activities will ultimately build on current self-determination levels.

School counselors also can help increase student understanding of and involvement in IEP meetings. Recent research demonstrates that educators can teach students with disabilities to be more involved in their IEP meetings (Test et al., 2004). Small changes such as using clear and simple language understandable to the student, speaking directly to the student, and preparing the student prior to the meeting can help enhance student performance and increase self-determination (Test et al., 2004). Further, as mentioned previously, it is expected that transition planning be included in the IEP (IDEA, 2004). Given that the students in the present study displayed little understanding of the transition component of the IEP, they also likely lack knowledge about the process of exiting the public school system. School counselors can lead the way by using their counseling skills to facilitate conversations between teachers, students, and parents at IEP meetings.

According to SCCT, learning experiences determine knowledge of the world of work and ultimately affect career outcome beliefs. For students with ID to gain comprehensive career information and successfully achieve post-high school outcomes in the world of work, it will be important for school counselors to intentionally assist students to not only obtain work experience, but to learn about different types of jobs, job requirements, and purposes of specific jobs. Websites such as www.projectsearch.us provides information for young adults with ID about career training and aims to prepare them for competitive employment. Students will likely lead more enjoyable lives if they are able to make career-related decisions based on their knowledge and preferences, rather than just as a means to a paycheck.

SCHOOL COUNSELORS ALSO CAN HELP INCREASE STUDENT UNDERSTANDING OF AND INVOLVEMENT IN IEP MEETINGS.

Increasing knowledge about postsecondary options for students with ID is another realm for school counselors. There has been a recent rise in postsecondary programs for students with ID (ThinkCollege, 2009). As a result, many individuals with ID are now able to enjoy the benefits of a higher education and gain practical skill development for entering a variety of careers. These programs, tailored to fit the needs of students based on their preferences, skills, and disability type, can help those with ID enhance their self-determination and give them the opportunity to play an active role in their future. School counselors can be a valuable resource in enhancing the college knowledge of individuals with ID. They can introduce students and families to www.ThinkCollege.net, a website devoted to postsecondary programs for young adults with ID that is a perfect place to begin learning about these opportunities. The website offers information and ready-made materials for educators, school counselors, students, and parents.

The authors hope that school counselors and counselor educators can benefit from the results and recommendations of the present study. High school students with ID clearly have great variety regarding their academic and career knowledge and their personal aspirations for the future. As noted earlier, the authors believe that understanding baseline career and college knowledge is key to helping school counselors provide appropriate transition planning services. College- and career-related knowledge can help high school students with ID feel confident in their future options, increase their ability to self-advocate and thus be more self-determined, and successfully transition into valued adult outcomes like employment. This study's interviews with students with ID can serve as a springboard for researchers, practitioners, educators, and administrators to acknowledge and understand the career development process of students with ID. The

increased relevancy of this topic for students with ID, their parents, and their school counselors has never been so evident. ■

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