Examining the Career Interests and Career Development of Incarcerated Youth with and without Disabilities

by

Curtis Gage

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Approved by

Margaret Shippen, Chair, Professor, Special Education, Rehabilitation, and Counseling
Rebecca Curtis, Associate Professor, Special Education, Rehabilitation, and Counseling
Nicholas Derzis, Associate Clinical Professor, Special Education, Rehabilitation, and Counseling, and Interim Director, Auburn Transition Leadership Institute
Caroline Dunn, Humana-Germany-Sherman Distinguished Professor and Associate Dean, Academic Affairs, Office of Student Services
Margaret Flores, Professor, Special Education, Rehabilitation, and Counseling

Abstract

Individuals with disabilities typically have many complex factors that impact their career development process. Participants in this study (n = 87) were youth with and without disabilities, ages 14–21, who were incarcerated in a youth juvenile justice facility in Alabama. This study examined the participants' results gained from the completion of Holland's Self-Directed Search Career Interests Inventory. The purpose of this study was to determine where there are significant correlations among participants' age, race, disability type, and repeat offenders in relationship to their first letter of the Holland code.

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CHAPTER 1: INTRODUCTION

Legal Mandates for Students with Disabilities

Legislation on the Provision of Special Education

In 1990, Congress passed the Individuals with Disabilities Education Act (IDEA) to govern how public institutions, including juvenile facilities, provide appropriate early intervention and special education services to individuals with disabilities until the age of 21 (Deitch, 2014). The IDEA provides a statutory entitlement to those individuals that are eligible for special education services in public education and in juvenile justice systems (Krezmien et al., 2008). IDEA specifically required that an institution (public institution and juvenile justice system) provide a free appropriate public education (FAPE) in the least restrictive environment to all students eligible for special education services (Deitch, 2014). In addition, IDEA of 1990 requires that every public institution must address transition for students with disabilities. In the context of IDEA, the term 'transition services' mean a coordinated set of activities for a student with a disability that includes the following essential elements that: (a) consider a student's needs, (b) are designed within an outcome-oriented process, (c) include a coordinated set of activities, and (d) promote movement from school to post-school life (20 U.S.C. § 1401 [30]. This legislation requires that transition services must be addressed for students ages 16 or older, or younger, if appropriate. In addition, these transition services must be addressed in the Individual Education Program (IEP) of a student with a disability (IDEA Amendments of 1990, 20 U.S.C. § 1401).

In 1997, IDEA was amended to include statements regarding the transition services and course of study support for a student in high school (IDEA Amendments of 1997, 20 U.S. C. § 1414). This legislation required that public schools develop a statement of needed transition

services for students with IEPs age 14 or older, or younger, if appropriate (IDEA Amendments of 1990, 20 U.S.C. §1401). With the passage of the 1997 Amendments to the IDEA, lawmakers also focused the attention on the transition of juvenile offenders who had been placed in juvenile justice systems throughout the United States (Griller-Clark, 2001). This amendment was to provide for the transition of juvenile offenders from juvenile justice systems to school, work, and the community (Griller-Clark, 2001).

The IDEA of 1997 was re-authorized and is known as the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2004). The IDEIA of 2004 focuses on a results-oriented process that is designed to improve the academic and functional achievement of students with disabilities. Therefore, juvenile justice system service providers are charged with accurately identifying youth with disabilities and are responsible for providing appropriate special education and related services (Krezmien et al., 2008). In addition, they also address school and post-school transition needs and services of students with disabilities. The reauthorization of IDEIA in 2004 requires that IEP teams provide transition planning; however, it no longer mandates that this process begin when students reach 14 years of age. IDEIA 2004 instead requires transition planning to begin no later than age 16 and that the plan is updated annually. From this federal legislation, regulations were established requiring state and local education agencies specifically to address the school and post-school transition service needs of students with disabilities. These needs would be met through coordinated planning among special education parents and students, general education, and community service agencies. Although the planning process can start before students turn 16, starting before then is at the discretion of the IEP Team. IDEIA 2004 further stipulates that the transition plan must include: a) appropriate, measurable postsecondary goals based upon age-appropriate transition

assessments that relate to training, education, employment, and where appropriate, independent living skills; b) transition services (including courses of study) that are necessary to assist the child in reaching those goals; c) a statement, written no later than one year before the child reaches the age of majority under state law, that the child has been informed of his or her rights, and that these rights will transfer to the child on reaching the age of majority under §300.520 [see 20 U.S.C. § 1415 (m)].

IDEA and IDEIA have defined the types of special education programs and services for all students that are eligible for special education services (Morris & Thompson, 2008). These reauthorizations changed the original focus of all individuals with a disability receiving special education services to all individuals with a disability receiving quality special education services (Morris & Thompson, 2008). In addition, litigation has further delineated that the guarantee of a FAPE include all eligible individuals despite the education setting (Morris & Thompson, 2008). This provision of IDEA and FAPE applies to state-operated institutions, including juvenile justice systems (Sheldon-Sherman, 2013). This meant that all incarcerated youth with disabilities are entitled to special education and related services. The IDEA's mandate to provide specialized education is an integral requirement of this law. The mandate to provide education and services under IDEA to youth in juvenile justice institutions is very clear (Sheldon-Sherman, 2013). Incarcerated youth with disabilities are entitled to the same rights and education as youth disabilities in the public school setting.

History of Federal Laws and Regulations in the Juvenile Justice System

Juveniles with disabilities in the juvenile justice system have a multitude of legal rights such as the right to an education, medical and healthcare, due process, safe and human living conditions, and treatment, as well as access to families, counsel, and the courts as a result from

the U.S. Constitution, federal laws, state constitutions and laws, and case law (Umpierre, 2014). In addition to rights established by the Constitution, several federal statutes and regulations have impacted the juvenile corrections system (Umpierre, 2014) In order to understand the historical background of correctional education, a person must also understand the laws and mandates governing the rights of individuals with disabilities. Prior to 1975, the education of children and adolescents with disabilities were not being met in U.S. public schools (Morris & Thompson, 2008). In addition, the education of incarcerated youth were not being met in juvenile justice systems (Morris & Thompson, 2008).

The history of juvenile justice systems and its reform affords practitioners the ability to learn from previous successes and failures and provide a better understanding of how to provide education to juveniles in the juvenile justice systems (Deitch, 2014). Throughout the late 18th century, children below the age of 7 were considered incapable of a criminal crime and intent (Department of Justice, 1999). Children over the age of 7 could stand trial as an adult in the 18th century criminal court system (Department of Justice, 1999). The U.S. educational movements in the 19th century juvenile court system had its roots in the 16th century European educational reform movements (Department of Justice, 1999). These reform movements changed the earlier perception of children from one of being a miniature adult to the perception of one individual with less than fully developed moral and cognitive capacities (Department of Justice, 1999). The historical trends of juvenile justice systems illustrate changes in policy and practice, moving between punitive policies to rehabilitative policies (Deitch, 2014). The development of juvenile confinement appears to have four major phases after the creation of the juvenile justice system in 1899 (Deitch, 2014). The first phase began when juvenile detention homes and secured juvenile justice systems were established prior to World War II (Deitch, 2014). During the second phase,

there was a shift in the role of the state and local governments (Deitch, 2014). The juvenile justice services became decentralized and the federal government became more involved in the juvenile correction systems (Deitch, 2014). The passage of the Juvenile Justice Delinquency and Prevention Act (JJDPA) and reforms stemmed from the civil rights legislation that occurred during this second phase (Deitch, 2014). During this phase, the civil rights of incarcerated youth, the urgency to operate these facilities using best practices, and the interest to keep youth in the community were recognized. This phase lasted up to the 1980s. The third phase occurred in the 1980s and 1990s. Due to the increase of juvenile crime and punitive rulings for adult offenders, the juvenile justice policies became harsher and harsher (Deitch, 2014). This phase was known as the "Tough on Crime Era". The last phase occurred at the beginning of the 21st century. This phase emphasized practices for reducing the population of incarcerated youth, developing professional standards, improving rehabilitation services, and improving the security of juvenile facilities (Deitch, 2014).

The JJDPA was established to improve state and local juvenile justice systems and to provide support to prevent juvenile crime and address the needs of incarcerated youth. The JJDPA is the landmark law through which the federal government set juvenile justice standards and provision of state funding for research, training, and evaluation (Umpierre, 2014). During the time the JJDPA was enacted by Congress, the federal courts were heavily involved in juvenile justice reform and efforts (Deitch, 2014). There were numerous class action lawsuits filed on behalf of incarcerated youth alleging poor facility conditions and violation of youth's constitutional rights (Deitch, 2014). Several of these class action lawsuits were filed in the early 1970s coinciding with the civil rights movement and suits being filed on behalf of adult prisoners (Deitch, 2014). In 1980, Congress enacted the Civil Rights of Institutionalized Persons Act

(CRIPA) (Deitch, 2014). This act allowed the U.S. Justice Department (U.S. DOJ) to investigate facility conditions and to demand corrective action (Deitch, 2014). This act also allowed the U.S. DOJ the authority to investigate and bring civil actions against state and/or local government for violating the civil rights of individuals incarcerated at publicly-operated facilities (Umpierre, 2014).

The CRIPA took legal actions against state and local governments for not providing incarcerated youth with educational, medical, transition, and mental health services (Houchins et al., 2009). The primary legal authority of these actions derives from the CRIPA (CRIPA, 1980). This act allowed the U.S. DOJ to sue local and state for denying students with civil rights under due process under the of the 14th Amendment of the U.S. Constitution (Houchins et al., 2009). Since 1980, there have been more than 30 class action lawsuits filed (Houchins et al., 2009). During the 1980–1990s, the crime rates increased coincidently with the increased media attention on youth crime (Deitch, 2014). The increased media attention on youth crime fueled the fear of "juvenile superpredators" (Deitch, 2014). The policy makers in most states responded to this fear of youth crime and advocated for tougher sentences for youth. The increase in incarcerated youth in adult facilities and increase in juvenile lockups were the result from the attitude shift towards juvenile crime. The juvenile justice systems became more correctional, and the number of juvenile facilities increased. Since the passage of the JJDPA, racial disproportionality had been a concern for reformers (Deitch, 2014). During the "Tough on Crime Era", the media portrayed minority youth as violent—young African Americans in particular (Deitch, 2014). This fueled racial stereotypes, perceptions, and patterns of racial profiling. The JJDPA was amended in 1992 to take steps to ensure that confinement practices were not racially biased which could lead to the inequality treatment of minority youth.

In addition to the JJDPA amendment in 1992, the Violent Crime Control and Law Enforcement Act of 1994 was passed (Umpierre, 2014). This law prohibits juvenile justice government officials and agents from engaging in patterns or practices that deprive individuals of their constitutional rights (Umpierre, 2014). In 2001, the No Child Left Behind Act (NCLB) brought significant changes to education (Leitch, 2013). The regulations were not specifically created for correctional settings, but its applicability to juvenile justice was evident by provisions in Title 1, Part D. Title 1, Part D provided funding to juvenile justice systems that were willing to create educational programs based on federal guidelines (Leitch, 2013). Title 1, Part D goals were to (1) improve educational services for neglected, delinquent, or at-risk children and youth; (2) provide services that will create successful transitions from the institution to school or employment; (3) prevent this population of youth from dropping out of school; and (4) provide dropouts and youth leaving institutions with the necessary support system for continued education (Leone & Weinberg, 2012). The NCLB provisions have forced correctional administrators to change the way the educational services have been provided (Leitch, 2013). In 2002, Congress reauthorized the JJDPA and changed the term ‘confinement’ to ‘contact’ (Deitch, 2014).

Legal Rights

Children and youth with disabilities are entitled to special education services as provided for by the IDEA, Section 504 of the Rehabilitation Act, the Fourteenth Amendment to the Constitution, and numerous state laws and regulations (Robinson & Rapport, 1999). There are several policies that relate to the rights and treatment of individuals with disabilities in the juvenile justice system (Development Services Group, 2017). All students with disabilities are entitled to a FAPE, including youth with disabilities that are incarcerated (Robinson & Rapport,

1999). The IDEA was enacted in 1990 and amended in 2004. This landmark legislation granted individuals with disabilities and their parents the procedural and substantive rights regarding identification, services, specialized education, and individual assessment (Sheldon, 2013). This statute requires that all states receiving federal funding must provide a free and appropriate public education to all eligible individuals that are between the ages three to twenty-one years of age. In order to qualify as an individual with a disability, an individual must have one or more of the following conditions: (1) specific learning disability, (2) other health impairment, (3) autism spectrum disorder, (4) emotional disability, (5) speech or language impairment, (6) visual impairment, (7) developmental delay, (8) orthopedic impairment, (9) intellectual disability, (10) traumatic brain injury, (11) multiple disabilities, (12) hearing impairment, or 13) deaf-blindness. This entitlement of IDEA includes juveniles that are incarcerated in juvenile justice and detention facilities (Development Services Group, 2017). The IDEA requires public and alternative school, including juvenile justice systems and correctional agencies, to locate and identify all individuals with a disability who may be eligible to receive special education services and/or related services, including transition services for incarcerated youth (Clark et al., 2011). In addition to IDEA, the federal government passed the law that prohibits discrimination that is based upon a disability, defined as a physical or mental impairment that limits major life activity (Umpierre, 2014). This federal law is called the Americans with Disabilities Act (ADA) of 1990. This law includes a wide range of areas including employment, public services, transportation, accommodations, and telecommunications (Umpierre, 2014). ADA regulations requires that individuals with disabilities are not excluded from participation in or be denied the benefits of services, programs or activities, or subjected to discrimination in juvenile justice and correctional facilities. Similar to the ADA, Section 504 of the Rehabilitation Act of 1973 prohibits disability

discrimination in facilities run by federal agencies that receive federal funding (Umpierre, 2014). Based upon these laws and regulations, the responsibility of educating incarcerated youth does not terminate due to being incarcerated.

Federal and state laws and regulations protect the educational rights of youth with disabilities in juvenile justice systems. Under IDEA, each eligible individual is entitled to a FAPE. This free education involves an IEP. The IEP is a legal document that must address the required, individualized special education services for all individuals with a disability. Each IEP is designed to provide special education and related services to individuals with disabilities. The type and number of services must address the unique individualized needs of individuals with a disability, regardless of the individual's placement or environment. IDEA also includes transition requirements for individuals with disabilities. The IEP must address the development and implementation of appropriate goals and services that addresses the individual with a disability's needs, including transition and related services, course of study, and transition programs that will support the students in achieving academic standards as well as prepare them for life after high school.

Transition from a juvenile justice system to the community requires support from the juvenile justice system staff, personnel from the school system, and other community based programs (Krezmien et al., 2008). Although all youth with disabilities are entitled to educational rights and services and IDEA ensures that incarcerated youth with disabilities are also provided with FAPE, it is still an ongoing problem for juvenile justice systems. Therefore, there is a legal obligation for special education services and juvenile justice transition services to be provided to incarcerated youth with disabilities within the juvenile justice system. (Gagnon et al., 2013). Although incarcerated youth with disabilities are entitled to legal rights and services, the

provisions of IDEA and FAPE are often challenging in the juvenile justice system. When providing FAPE to incarcerated youth with disabilities, there are six principles that concern juvenile justice system settings. There are six principles that serve as the foundation of IDEA: (1) zero reject/child find; (2) nondiscriminatory testing; (3) Individual Education Program; (4) least restrictive environment; (5) procedural due process; and (6) parent participation (Gagnon et al., 2013).

The first principle is zero reject/child find. Child Find is the identification, location, and evaluation of children and youth with disabilities. IDEA requires that all age-eligible students with a disability, including those that are incarcerated, that need special education and/or related services be identified (Gagnon et al., 2015). Appropriate and systematic procedures and policies for child find must be in place in juvenile justice systems. Congress made it clear that individuals with a disability must be located, identified, and evaluated regardless of if the youth are wards of the state. Obtaining accurate special education eligibility and evaluation status of incarcerated youth is difficult because many of the incarcerated youth were not enrolled in a school system at the time of the arrest (Krezmien et al., 2008). As a result, juvenile justice systems may not be able to retrieve school records and education related documents. Without accurate education records, juvenile justice systems may not be able to identify mental, academic, and behavioral needs of incarcerated youth (Krezmien et al., 2008). In addition, youth who may not have been identified with a disability, but who may qualify for special education services, often times are not identified while incarcerated. Failure to identify students with disabilities violates the IDEA Child Find provision. Furthermore, failure to identify and provide special education services to incarcerated youth may cause a lapse in services for those individuals that received services prior to incarceration (Krezmien et al., 2008).

The second principle is nondiscriminatory testing (Gagnon et al., 2015). IDEA mandates that appropriate nondiscriminatory evaluations be administered in determining the existence and extent of a disability (Gagnon et al., 2013). IDEA mandates that nondiscriminatory evaluations be used to determine the appropriate presence and existence of a disability and whether special education, transition services, and/or related services are needed (Gagnon et al., 2013). In addition, IDEA requires that the evaluations are not biased in culture, language, or socioeconomic factors. This principle is critical in juvenile justice systems because there are a disproportionate number of minority youth from high-poverty backgrounds (Gagnon et al., 2013). Moreover, IDEA requires that evaluations are used that will yield accurate information regarding what the individual can do academically, developmentally, and functionally (Gagnon et al., 2013). Administered inappropriate evaluations or lack of a comprehensive assessment could affect the eligibility determination of a youth identified as needing special education services (Gagnon et al., 2013). Issues regarding juvenile offenders receiving appropriate assessments may lead to inappropriate levels of services and affect the outcomes of youth on IEP goals and objectives. According to Krezmien, Mulcahy, and Leone (2008), incarcerated youth have higher rates of academic underperformance, mental health identification, and school failure than their peers in the community. It is critical to the planning, development, and implementation of services for incarcerated youth if juvenile justice systems know more about the academic, mental health, and special education needs of incarcerated youth. The absence of special education eligibility and evaluations in a juvenile justice system is problematic because the disability status under the IDEA can affect the incarcerated youths' access and entitlement to mental health services (Krezmien et al., 2008). In every state, a juvenile justice system has a process of detaining or releasing a juvenile. If a juvenile is detained, then immediate notice is

provided to the parent, guardian, or other responsible adult (Osher et al., 2002). If the juvenile has a disability, the youth is more than likely at risk of being detained (Osher et al., 2002). Usually when the youth with a disability is being processed, the youth with a disability may exhibit inappropriate behaviors, fail to provide critical information, and make impulsive decisions (Osher et al., 2002). In addition, the youth with a disability may not understand the paperwork or information that has been presented to him or her. Once the youth is in the system, inappropriate assessments and testing of the youth's disability and needs can occur due to the inadequate initial perceptions of the youth's behavior (Osher et al., 2002). Sometimes during the assessment process special needs, medication, and education information is not accessible. Many times, incarcerated youth have academic and mental health problems that were not identified during the assessment process. In addition, the disability of the youth may be irrelevant to the adjudication process and the severity of the crime committed (Osher et al., 2002). A study was conducted with 521 incarcerated participants in an all-male youth corrections facility in the mid-Atlantic region of the United States (Krezmien et al., 2008). The participants included detained male youth (N=171) and housed male youth (N=350) (Krezmien et al., 2008). The purpose of this study was to investigate the academic achievement, mental health history, and special education status of detained and incarcerated males in one mid-Atlantic juvenile youth facility. The researchers examined the educational and mental health records and information obtained through the intake screening protocol. Results from descriptive data and logistic regression analysis was reported in this study. The results indicated that there were serious academic and mental health problems among the participants (Krezmien et al., 2008). The researchers found that there were high rates of students identified with a disability, severe deficiencies in academic

achievement, and high percentages of students that self-reported mental health problems (Krezmien et al., 2008).

The third principle of IDEA is the IEP. IDEA mandates that IEPs must be developed, reviewed and/or revised, and implemented for every individual with a disability. The IEP is a legal document that must address the required, individualized special education services for all individuals with a disability. Each IEP is designed to address the unique individualized needs of individuals with disabilities. The requirements of the IEP include the IEP Team members, parent participation, and transition services. The types and amount of special education and related services must address the individualized needs of individuals with a disability, regardless of the individual's placement or environment. This also includes the development of appropriate instructional and behavioral interventions for individuals with disabilities who are in a juvenile justice system. In addition to these IDEA requirements, transition must be addressed for all transition-aged individuals with disabilities. Despite IDEA requirements, there are two related IEP issues that have been identified as compliance issues within the juvenile justice system. The two issues are access to the general education curriculum and appropriate transition planning (Gagnon et al., 2015). Violations with IEPs have been cited in the Department of Justice findings related to the adherence of IEP provisions (Gagnon et al., 2015). IEP violations include: (1) lack of individualization, (2) lack of delivery of special education services, (3) inconsistent continuum of special education services, (4) lack of IEP implementation and related services, and (5) lack of IEP Team membership and participation (Gagnon et al., 2015).

The fourth principle of IDEA is the provision of the LRE (Gagnon et al., 2015). IDEA specifically requires that "to the maximum extent appropriate", youth with disabilities in public or juvenile justice systems, are educated with youth without disabilities (Gagnon et al., 2015).

Juvenile justice systems must provide a continuum of special education and related services to all incarcerated youth with disabilities and with their nondisabled peers to the maximum extent possible (Gagnon et al., 2015). Therefore, juvenile justice systems must consider the requirements for educating youth with disabilities in the LRE (Gagnon et al., 2015). Within the juvenile justice system there should exist a continuum of special education and related services for youth with disabilities. In addition, these services must be provided to youth with disabilities alongside their nondisabled peers to the maximum extent possible. This is an issue because within a juvenile justice system, there is often limited space and staff that can provide appropriate services to meet the individual needs of youth with disabilities. Often, incarcerated youth with disabilities are provided special education services and education services in a self-contained setting or fully included setting that is inappropriate for the youth with a disability (Gagnon et al., 2013).

The fifth principle is procedural due process (Gagnon et al., 2015). Under procedural due process, there must be procedural safeguards and discipline procedures for incarcerated youth with disabilities (Gagnon et al., 2013). Developing and implementing proactive behavior improvement plans and individualized behavior intervention plans are problematic in juvenile justice systems (Gagnon et al., 2013). The inadequate behavior policies and procedures, practices, and teachers not properly trained, disproportionately affects incarcerated youth with disabilities (Oliver & Reschly, 2010). In addition, less than two thirds of juvenile justice personnel have training focused on youth with disabilities (Kvarfordt et al., 2005). In order for appropriate behavioral policies, procedures, and practices to be implemented with fidelity, juvenile justice systems must incorporate a comprehensive cross-discipline professional development for all administrators, educators, and security personnel (Jurich et al., 2001).

The sixth principle is parent participation (Gagnon et al., 2013). IDEA requires that all public institutions must attempt to involve the parent, including guardians/ surrogate parents, in the educational process of youth with disabilities (Gagnon et al., 2013). Often, parental involvement is lacking or non-existent within juvenile justice systems. Parental involvement is often complicated when the youth is considered a ward of the state and/or when the facility is located far from the parents' residence (Gagnon et al., 2013). In order to appropriately prepare an incarcerated juvenile with a disability for transition from a juvenile justice system back to school and/or the community, it is imperative that planning begin prior to the transition and that supports are in place during and after the juvenile is released (Baltodano et al., 2005).

Youth with disabilities are often not prepared for the transition from one educational setting to another and experience difficulty accessing appropriate transition programs and services in preparation for life after high school (Adkinson-Bradley et al., 2007). For many youth with disabilities, the transition from school to adult life is not one of joy and anticipation but, instead, is a journey of fear into the unknown (Bambara et al., 2007). The many academic and vocational difficulties that youth with disabilities face may be due to lack of proper transition programming, awareness, planning, and support.

Transition from a juvenile justice system to the community requires support from the juvenile justice system staff, personnel from the school system, and other community-based programs (Krezmien et al., 2008). An effective transition program involves the student with a disability, their family, school/juvenile justice system personnel, and community agencies (Kohler, 1993). Effective transition programming requires that teachers have the knowledge and skills to work with students in order to develop an IEP and program of study that is engaging and relevant to the academic experiences and curriculum (Morningstar & Mazzotti, 2014). One of the

post-school predictors for success for youth with disabilities is the development of a relevant program of study (Test et al., 2009). The program of study has been operationally defined as "an individualized set of courses, experiences, and curriculum designed to develop students' academic and functional achievement to support the attainment of students' desired post-school goal" (Rowe et al., 2013, p. 8). The IEP Team should focus on developing and implementing an appropriate IEP that addresses the individual with a disability's needs, including related services. In addition, the IEPs of incarcerated youth with disabilities must focus on the course of study and transition programs that will provide support in achieving academic standards. In addition to the academic focus of the general education curriculum, high school curricular options must also involve students with disabilities in community-based work experience, vocational education, dropout prevention and reentry programs, independent living skills programs, Tech Prep programs, service-learning opportunities, and others (Johnson et al., 2002). Career development activities and transition planning are mandated for all youth with disabilities during their transition age. These youth must be afforded the opportunity to receive services to plan for successful post-secondary opportunities and employment options (Moody et al., 2008).

In order to prepare youth with disabilities with a successful transition from a juvenile justice system to the school and/or community, these youth must be provided with the necessary services and supports to get them engaged in school, work, or other programs. According to a study, 63 percent of the new job openings in this country will require workers to have either postsecondary education or vocational training/education (Salinger, 2010). In addition to the new job requirements for workers, high school students without disabilities frequently know very little about their career interests, career options, employment skills, or what post-secondary activities are needed for them to accomplish their goals and find a job (Moody et al., 2008).

There is a need to prepare incarcerated youth with disabilities for real life work experiences. Incarcerated youth with disabilities experience more difficulty than general incarcerated youth to engage in transition activities and related state requirements intended to prepare youth to return to public school and/or prepare them to enter the workforce (Baltodano et al., 2005).

In preparation for life in the post-secondary world, incarcerated youth with disabilities often face difficulties when accessing appropriate transition services (Adkinson-Bradley et al., 2007; Johnson et al., 2002). Often, the difficulties of incarcerated youth with disabilities are similar to the difficulties of youth with disabilities in other educational settings and are overlooked in the development of transition programs and policies (Waintrup & Unruh, 2008). Juvenile justice systems recognize the serious academic challenges that face juveniles (Salinger, 2010). Educators in juvenile systems also recognize the need for students to improve their literacy skills and career interests. Incarcerated juveniles find themselves ill prepared for transitioning back to their school and community (Salinger, 2010). One of the most difficult parts of youth with disabilities leaving a juvenile correctional institution is returning home (Clark & Unruh, 2008). Some youth with disabilities find it difficult to re-enroll in school and find a job (Clark & Unruh, 2008). In addition, some youth with disabilities find it challenging to go back to unsafe and unstructured environments that may lead back to patterns of delinquency (Clark & Unruh, 2008). In addition to the many challenges incarcerated juveniles face, outside agencies have difficulty providing services to these incarcerated youth with disabilities (Clark et al., 2011). Transition services for youth with disabilities in juvenile justice systems can be extremely complex to provide due to the punitive nature of the juvenile justice system, the networking between agencies and the requirements of the IDEA (Clark et al., 2011). Many incarcerated juveniles report that they have high educational expectations and career goals, even though

evidence shows that most of the juveniles do not meet their expectations and goals (Salinger, 2010).

Statement of the Problem

Incarcerated youth with and without disabilities may continue to encounter unsuccessful attempts at transitioning back to their community and/or school. The likelihood of incarcerated youth with and without disabilities transitioning back into their community and/or school successfully with an effective transition program is very slim (Bullis et al., 2002). In addition, incarcerated youth with disabilities are disproportionally represented in the juvenile justice system and vulnerable to poor outcomes and unemployment (Waintrup & Unruh, 2008). Few studies have examined the career thinking and career interests of incarcerated youth with and without disabilities transitioning back into the community and/or school.

Purpose of Study

The purpose of the present study was to examine the relationship of demographic factors including disability, age, race, program type (general or sex offender program), and repeat offender status, on self-reported results from Holland's Self-Directed Search (SDS). This study focused on the career interest of incarcerated youth with and without disabilities and the first-letter Holland Code.

Research Questions

1. Is there a relationship between disability type and first letter code of the SDS?
2. Is there a relationship between age and first letter code of the SDS?
3. Is there a relationship between race and first letter code of the SDS?
4. Is there a relationship between program type and first letter code of the SDS?
5. Is there a relationship between repeat offenders and first letter code of the SDS?

6. Is there a statistically significant mean difference between disability and the first letter code of the SDS?

7. Is there a statistically significant mean difference between age and the first letter code of the SDS?

8. Is there a statistically significant mean difference between race and the first letter code of the SDS?

9. Is there a statistically significant mean difference between program type and the first letter code of the SDS?

10. Is there a statistically significant mean difference between repeat offenders and the first letter code of the SDS?

Definition of Terms

Adjudicated: A judicial determination or judgement that a youth is a delinquent-status offender or an adult offender

Delinquency: Violations of law by individuals legally defined as juveniles.

Evidence-Based Practices (EBP): is a method used based on significant and reliable evidence derived from experiments.

Education for All Handicapped Children Act (1975) (EHA): also known as P.L. 94-142, mandates that all children with disabilities are entitled to a free and appropriate public education.

Free and Appropriate Public Education (FAPE): is the right of every school-aged child from kindergarten until the age of 22.

Holland Code: Three letter code yielded as results through the Self-Directed Search.

Individuals with Disabilities Education Act (IDEA): is the Federal Law enacted in 1990. It revised the Education for All Handicapped Children Act (EHA) and amended in 1997.

Individual with Disabilities Improvement Act (IDEIA): is the reauthorization for the IDEA amended in 2004. This was originally the Education for All Handicapped Children Act (EHA).

Individualized Education Program (IEP): is the legal document that defines a student's special education program and services.

Juvenile: a person younger than age 18.

Juvenile Detention: the temporary and safe custody of juveniles who are accused of conduct subject to the jurisdiction of the court who requires a restricted environment for their own or the community's protection while pending legal action.

Local Education Agency (LEA): a school operated by the local Board of Education.

Section 504: This is an important section of the Rehabilitation Act of 1973 which protects the rights of individuals in programs that receive Federal funding.

Self-Directed Search: Vocational interest test published by John L. Holland originally in 1971 and updated numerous times since. The most recent version was published in 2017.

Transition Services: A coordinated set of activities for a student with a disability that is designed to be within a results-based process, that is focused on improving the academic and functional achievement of the child. It considers the child' strengths, preferences, and interests.

CHAPTER II. LITERATURE REVIEW

Introduction

Research suggests that the two most critical factors in addressing the transitional needs of youth with disabilities are school and the community (Stephens & Arnette, 2000). Successful transition from the juvenile justice system into school, employment, and the community is a multidimensional process. The collaboration and coordination between agencies and across services are necessary at multiple phases during the transition process. The movement from a juvenile justice system to a public school is one of the transitions that can often be complicated because the juvenile justice system, related agencies, and communities must plan for what needs to occur for youth with disabilities. According to Rutherford, Nelson, and Wolford (1985), the programs geared toward the transition of incarcerated youth with disabilities have often been neglected by correctional education efforts because of essential compliance issues regarding the implementation of IDEA and correctional special education. One issue is the identification of youth in the juvenile justice system. The identification of youth with disabilities in juvenile justice systems are often delayed due to the absence of previous educational records and the amount of time the youth has been out of school, the geographic location of the school, and the absence of procedures for obtaining education records (Rutherford et al., 1985). This delay creates slowed special education identification and services as well as isolated correctional education services. In one study, a survey was conducted including 33,190 incarcerated youth in state juvenile justice systems (Rutherford et al., 1985). Of the 33,190 incarcerated youth, 30,681 were in the juvenile justice education program (Rutherford et al., 1985). The estimated number of incarcerated youth receiving special education services was 7,570 (Rutherford et al., 1985).

The survey indicated that of the 399,636 adults in state corrections programs 118,158 were receiving correctional education services (Rutherford et al., 1985). It was estimated that 41,590 individuals with disabilities are in an adult correction program (Rutherford et al., 1985). Of the 41,590 individuals in an adult correction program, 4,313 of incarcerated adults receive special education services (Rutherford et al., 1985). The results of this survey indicated that there is a need for correctional special education services in the juvenile and adult correctional facilities in the United States. In addition, the provision of transition services, strategies, and service are difficult to provide due to the conflicting priorities and responsibilities of the personnel within the juvenile justice system (Rutherford et al.,1985).

Strategies and Services

Practitioners in the field of juvenile justice education often believe that in order for the educational process to be successful for incarcerated youth with disabilities transitioning from the juvenile corrections system to the community, programs must comprehensively address the academic and social needs of the youth (Whitter & Sutton, 1990). The Pollard et al. (1994) study sought to prioritize effective transition services and categorize programming aimed at the transition services of adjudicated youth with disabilities. Although this study was aimed at postsecondary transition of youth with disabilities, it also appeared to be relevant to youth transitioning from the juvenile justice system back to the community and school (Pollard et al., 1994). The researchers used a three round Delphi process using a questionnaire. There were 76 knowledgeable and experienced professionals working with adjudicated youth who agreed to participate in the study. In the first round of questions, the questions were centered around strategies and services. There were eleven areas identified as priorities which related to effective services, strategies, and programs for incarcerated youth with disabilities (Pollard et al., 1994).

The eleven areas were: Assessment/Evaluation; Basic Academic Skills; Career Exploration/Education; Community Support; Family Involvement; Formal Transition Plan; Interagency Collaboration; Job Placement; Social/Living Skills; Support Services; and Vocational/Job Search. Based on a Likert scale, round two questioning of the participants focused on their perception of effective services and strategies (Pollard et al., 1994). Based on the ratings, participants agreed that certain components are crucial to transitioning for youth with disabilities (Pollard et al., 1994).

Program services and strategies are key components when addressing the transitional needs of incarcerated youth with disabilities. One study investigated strategies and services used with the transition of incarcerated youth with disabilities (Pollard et al., 1997). Pollard et al, (1997) discovered that in studying the strategies and services of the various agencies, three areas of intervention surfaced with an emphasis on instruction. The three areas of intervention were individual assessment and evaluation, instruction in basic academic skills, and social and independent living skills training. Social skills training appeared to be the largest area in which a number of programs offered training opportunities in the areas of survival skills preparation, anger management, sex education, and conflict management (Pollard et al, 1997). Another area that was deemed important was job placement for youth with disabilities. It was noted in this study that it was difficult to maintain contact with outside agencies. Additionally, gaining community support and teaching youth about community services impacted the transition process (Pollard et al., 1997). The researchers also noted that cross-agency communication did not yield high respondents and that only about half of the institutions responded to practices aimed at encouraging family involvement. They reported that transition programs for adjudicated youth with disabilities had not been highly talked about in the juvenile justice system educational

process. The researchers suggested that transition programs for adjudicated youth require a comprehensive approach that involves interagency cooperation and collaboration. Maintaining and developing a relationship with the community, developing a system that incorporates community-based experiences, pre-release planning by various agencies, and implementing a transition plan were identified important components of effective services and strategies. Round three questions focused on prioritizing the eleven categories cited based on just the category as being the most when compared to the other categories. The participants indicated that family involvement was the strategy of greatest importance in assisting incarcerated youth with disabilities (Pollard et al., 1997). The other components were interagency collaboration, training in social skills, training in everyday living skills, and continued instruction in basic academic skills. The researchers considered strong community support, family support and involvement of the receiving schools, as well as the juvenile justice system to be critical in facilitating a successful transition. In conclusion, Pollard et al., (1997) indicated that transitioning of incarcerated youth with disabilities to the community and/school takes a united effort of many agencies.

Characteristics of Transition Programs

There is limited information available on transition programs operated by youth juvenile justice systems for adjudicated youth with and without disabilities. Effective and purposeful transition programs should include a variety of services and resources for incarcerated youth with and without disabilities. Transition programs should also focus on and address the academic and social needs of incarcerated youth with and without disabilities as well as the facilitation of their transition back into the community. Whittier and Sutton (1990) conducted a survey that focused on the extent of transition programs, characteristics of transition programs, and types of

transition programming for incarcerated youth with and without disabilities. The researchers used a questionnaire to collect data for this study. The researchers used four objectives as a basis for the questions. The questionnaire reflected the following areas: (a) goals of transition programs…, (b) … key components of transition programs ..., (c) … information on persons who operated the programs…, and (d) ... students served by the program. The purpose of collecting this data was to determine the types of services offered for incarcerated youth with and without disabilities, examine various program components, identify the quality of transition programs, and to explore whether or not programs were geared to both youth with and without disabilities (Whittier & Sutton, 1990). The researchers sent questionnaires to all chief Administrators/Directors of Youth Corrections in fifty states including the District of Columbia. The questionnaires were completed and 27 states returned participants through direct mailing (Whittier & Sutton, 1990). The final sample of states resulted in 37 responses to the questionnaire through either completing and returning it or responding to the survey via phone. The overall combined total for the number of states and the District of Columbia included in the survey was 51 and the total combined responding without programs was 37 (73%) while those responding with programs totaled 23 (78%). The data collected indicated that many youth were not benefitting from transition services. Three main areas related to the characteristics of transition programs were indicated based upon this survey. The three areas of focus were educational, social, and vocational (Whitter & Sutton, 1990). According to the researchers, the educational characteristics must reflect programs that directly involve, develop, and place youth in an educational program immediately following re-entry into the community. The social characteristics must be related to educating youth about available social services, improving life skills, self-help, and survival skills, improving self-concept, developing “crime-free” attitudes,

providing follow-up after transition, and overcoming attitudinal deficits (Whittier & Sutton, 1990). The vocational characteristics must focus on areas associated with preparing one for the world of work, job training, vocational placement, and career-vocational assessment (Whittier & Sutton, 1990). In addition, program characteristics included the following: (a) …Programs must be provided for youth with and without disabilities …, (b) All age groups must be served by transition services…, (c) Records must be maintained on types of students…, and (d) Records must be maintained on students' post-placement status. The results indicated that the characteristics of a transition program were crucial to youth transitioning from a juvenile justice system to the community and/or school.

Role of Personnel

Transition planning is often cited as a critical element in the educational achievement and school/community adjustment for adjudicated youth with and without disabilities (Hellriegel & Yates, 1997). The juvenile justice and educational system personnel must collaborate and establish common goals regarding the transitional planning and services needed to bridge the gap from public schools to juvenile justice systems and from juvenile justice systems back to public schools and home. Hellriegel and Yates (1997) conducted a three-fold case study. The overarching implication of this study focused on effective collaboration. Their case study included three components: a) to understand the relationship between two distinct groups, the educational agency and the human services agency; b) to understand the need for collaboration between two agencies; and c) to describe the process of these agencies and how they align themselves with incarcerated youth (Hellriegel & Yates, 1997). The researcher used a qualitative design to collect data for this study. The data were collected through semi-structured and unstructured interviews. The researchers wanted to determine the ways in which the two

agencies could develop collaborative efforts that would create better roles for each in the educational process of incarcerated youth in the juvenile justice system. There were seven themes identified from this study. The seven themes were: (a) interagency collaboration, (b) interagency communication, (c) transition plans, (d) parental involvement, (e) correctional facility education program development and implementation, (f) cross agency knowledge, and (g) special education and related services. There were major findings in each theme. Data from this study indicated that the juvenile justice and public school personnel perceived the need for an increased effort towards communication and collaboration in order to bring about continuity in the educational process for incarcerated youth and transition (Hellriegel & Yates, 1997). Another finding was a lack of an understanding regarding each agency's mission, goals, policies, programs, and services. In addition, juvenile justice systems and public school personnel reported confusion and frustration related to the lack of information and understanding. Findings also indicated that parental involvement was not emphasized enough at each level in the educational process (Hellriegel & Yates, 1997). Based upon this study, the researchers suggested that the many problems associated with providing appropriate education could be alleviated when parents and professionals work together. Hellriegel and Yates (1997) indicated that if current practices continued, this could bring about litigation for both juvenile justice education and public schools.

Juvenile justice education programs have been plagued by a range of programmatic concerns. According to Horvath (1982), the disagreement and uncertainty regarding goals, needs, and objectives of juvenile justice educational resulted in a lack of comprehensive planning and collaboration among agencies. In addition, problems are exacerbated by the educational needs of incarcerated youth with disabilities. Little research has been conducted to examine the practices

that facilitate the effective transition of incarcerated youth with disabilities into juvenile justice systems and reintegration back into the schools/community. Lewis et al, (1998) conducted a study using quantitative methods, examining the current practices that facilitated the effective transition of incarcerated youth with disabilities into the juvenile justice system and emphasized the reintegration of youth back into the community and schools. In addition, this survey examined the interagency collaboration between education and the correction agencies (Lewis et al., 1998). This study indicated that little research was available that focused on practices that facilitated transition of youth with disabilities. The most important finding from this study indicated that special education services were difficult to provide in the juvenile justice system due partially to poor coordination between the juvenile justice system and the school (Lewis et al., 1998). Furthermore, the study indicated that due to the philosophy of juvenile justice personnel, it was difficult to provide appropriate educational services. In this study, it was indicated that the negative and nonchalant attitudes of administrators trickled down to faculty and other staff working with the youth (Lewis et al., 1998). In addition, it was indicated that collaboration was lacking and that minimal information about the youth and the needs of the youth was not provided.

A continuum of collaborative services is a factor when implementing and addressing the transitional and educational needs of incarcerated youth. Education practitioners added to the body of knowledge in the facility to community transition of incarcerated youth with disabilities by focusing on an outcome index referred to as engagement (Bullis et al., 2004). In one study, over a 12-month period, the researchers examined the transition of 531 youth from the juvenile justice system to the community. Findings supported the concept that beginning student engagement in work and/or school immediately after leaving the facility had a positive effect on

the youth in this study. Findings also indicated that transition services and intervention programs should be focused on structured learning, school achievement, and employment skill upon the re-entry of youth with and without disabilities (Bullis et al., 2004). Thus, youth engaged in work and school immediately after leaving a juvenile justice system produced positive results (Bullis et al., 2004). In addition, the results indicated that incarcerated youth had a difficult time becoming engaged due to the lack of agency preparation and assistance for youth transitioning into the community and/or school. The incarcerated youth with disabilities in this study were less likely to be engaged in school and/or work after being released from the juvenile justice system. In addition, the participants in this study were less likely involved in any type of educational program upon returning to the community. In another study, 759 formerly incarcerated youth indicated that only 12% completed a high school degree or General Equivalency Diploma upon returning to the community (Bullis et al., 2004). Participants who received services such as mental health or other community-based agency were more likely to be engaged than those who did not receive any services (Bullis et al., 2004). These results were encouraging as they indicated the importance and impact on service provision on engagement. Therefore, it is important to implement comprehensive coordinated services for formerly incarcerated youth with and without disabilities returning to the community as early as possible.

The implementation of coordinated services for incarcerated youth with and without disabilities should also include services emphasizing school and community-based transition services as well as vocational services. Transitioning from the juvenile justice system to the community and/or school can be a difficult experience. Affording incarcerated youth with and without disabilities programs in transition during periods of incarceration and collaborating with education agencies outside the facility will better prepare youth for the transition to the

community and school. Studies indicated that in order for youth to be successful once they leave the juvenile justice system, a linkage between the public schools, juvenile justice system, and the community must exist. Working collaboratively towards a common goal for youth with and without disabilities transitioning into the community and/or school will enormously impact their chances of becoming productive citizens. It has been established that seamless transition services are necessary and requires agencies to collectively work together to assist incarcerated youth in re-enrolling in school and connecting with community-based agencies. Research indicates that school and community are the two most important variables in addressing the transitional needs of incarcerated youth. Based upon the literature review, programs focused on transition for incarcerated youth with and without disabilities must be comprehensive, address the academic needs of youth, and begin immediately upon entry into the juvenile justice system.

Significance

The goal of transition for youth with and without disabilities is to plan for the future and have a focus on the youths' individualized strengths, preferences, and career interests. For incarcerated youth with and without disabilities, the transition process can be interrupted and even shortened. In fact, incarcerated youth with and without disabilities often do not receive adequate education and services that adhere to the transition policies and regulations. Leone and Weinberg (2012) identified six principles that could improve the outcomes of incarcerated youth. The six principles are:

(a) Early education is essential.

(b) Quality education services are important for successful youth development.

(c) The outcomes for youth should be measured to determine positive outcomes.

(d) Support services are needed for some youth to succeed.

(e) Collaboration and communication with outside agencies is vital.

(f) A need for change within interagency and cross-agency leadership.

Studies have shown that having a high quality early intervention and preschool program can make major differences for children (Leone & Weinberg, 2012). This is especially true for youth at-risk for school failure and delinquent behavior (Leone & Weinberg, 2012). Quality education assists youth with achieving age-appropriate academic goals, social goals, and prepares youth for adulthood (Leone & Weinberg, 2012). In addition, the outcomes of youth should be measured by collecting data in order to determine if youth are failing. The goals of youth need to be matched with the collection of academic and performance data. The support services needed for some youth must be individually tailored to support the needs of the youth (Leone & Weinberg, 2012). Evidenced-based practices and interventions need to become best practices for these youth. Interagency collaboration is key if youth are to be successful achieving age-appropriate academic and social skills and be successful transitioning to post-secondary education, employment, and independent living. In order for agencies to collaborate, the agencies must identify the stage of collaboration in which they are operating.

In addition, Leone and Weinberg (2012) made recommendations for all involved inter-agencies. They described four stages of interagency collaboration that would best serve incarcerated youth. The four stages of interagency collaboration are: (a) Stage 1, Co-existing Stage of Collaboration; (b) Stage 2, Communication Stage of Collaboration; (c) Stage 3, Cooperation and Coordination Stage of Collaboration; and (d) Stage 4, Coalition and True Collaboration Stage. The co-existing stage is when the leadership and staff within the agency have insignificant information about one another's organization. The communication stage is when the agency administrative staff and leaders understand one another's mission (Leone &

Weinberg, 2012). During the cooperation and coordination stage, the agencies have partnered with each other, exchanged mission statements, and have developed a service plan for the students (Leone & Weinberg, 2012). Once the agencies have merged their efforts and thinking, empowered their staff to collaborate, they have attained true collaboration (Leone & Weinberg, 2012). The common goal for agency collaboration is to provide services, supports, and programs to children and youth. The agencies within the juvenile justice system and cross-agencies need to collaborate and work together to better serve youth. The juvenile justice system, education agencies, administrative and support staff need to redesign the delivery of service and develop an effective system that adequately addresses the needs of children and youth. In order to improve the education outcomes of incarcerated youth, effective transition services must be implemented to ensure that appropriate services are being implemented to meet the needs of incarcerated youth with and without disabilities.

Intervention Models to Improve Outcomes for Youth in Juvenile Justice Systems

In response to the quality-of-life gaps between the outcomes of incarcerated youth with disabilities and their nondisabled peers, secondary services must be provided for youth with disabilities. In an attempt to reduce the potential for failure, frustration, and delinquency for incarcerated youth, planning for transition back into the community and/or school should include a constellation of approaches. Leone et al. (2002) reported that a single approach addressing violence and delinquency among youth does not work. They suggested that providing services and supports throughout the community, family focus, and prevention-oriented collaboration is a better approach. There are two models to illustrate proactive intervention in reducing the number of youth with disabilities in juvenile justice systems. The two models are called (a) restorative justice and (b) wrap-around services. The use of restorative justice and wrap-around services as

part of secondary transition services could improve the outcomes of youth with and without disabilities involved in the juvenile justice system.

Restorative justice demands for a different approach to the treatment of youth (Deitch, 2014). Restorative justice is an alternative to punishment within the juvenile justice system. The purpose behind restorative justice is to understand and address the needs of the victim and community. According to Bazemore and Umbreit (1999), restorative justice is a new way to think about and respond to crime. The focus of this model is its emphasis on repairing the damage the crime has on its victim(s) and how to repair the damage. Restorative justice redefines the way the justice system addresses public safety, authorizations, and rehabilitative goals for reintegrating those affected (both victim and offender) back into the community as resilient and responsible members of society (Stenhjem, 2005). Research has been reported that restorative justice reduced fear among victims and decreased the frequency and severity of crimes (Umbreit & Fercello, 1997). The restorative justice model offers a proactive alternative for schools and communities when addressing youth with disabilities involved in the juvenile corrections system.

Restorative justice is governed by three principles. The first principle is that all people should be created with dignity and worth (Deitch, 2014). The second principle is that the primary goal of juvenile correction systems is to repair the harm and rebuild the community (Dietch, 2014). The third principle is that the results are measured in terms of repair not punishment (Deitch, 2014). According to Umbreit (2000), more than 45 states have developed and implemented restorative justice policies and programs. These programs have provided higher levels of victim and offender vindication and greater possibility of success than traditional justice programs (Umbreit, 2000). One example of a restorative justice program is the Juvenile Corrections Interagency Transition Model. The Juvenile Corrections Interagency Transition

Model is a restorative justice model that would facilitate successful transitions of youth with disabilities between juvenile justice systems to community schools (Edgar et al., 1987). This model consisted of four main areas: (a) awareness of juvenile incarceration or release; (b) timely transfer of school/mental health service records; (c) transition planning for incarceration and release; and (d) collaborative interagency communication.

The second model is wrap-around services. Youth with disabilities as well as other youth within the juvenile justice system often require a wide range of individualized support and services. These services need to be comprehensive, collaborative, and available within the distinct communities, cultures, and environments that these youth live (Stenhjem, 2005). According to Leone et al. (2002), the wrap-around service is a preferred approach to reducing juvenile delinquency and crime for youth with and without disabilities. This model provides services and support through the community, family, and a prevention-orientation collaboration among stakeholders. The services provided through the wrap-around service model include a comprehensive, individualized process of providing services to youth within the juvenile justice system. Wraparound Milwaukee is an example of a wrap-around program that relies heavily on the involvement of schools and child welfare, social services, and juvenile justice system representatives to develop and implement a plan (Mears & Aron, 2003). This program also monitors the individual and system performance to identify and solve any problems so that the program will be successful for all students (Mears & Aron, 2003). In Rhode Island, the Project Hope System of Care is a wrap-around program that is designed for youth returning from secure care. These wrap-around services provide an array of transition services and supports to the family and youth that support positive youth development outcomes (Osher et al, 2012). In Ingham, Michigan, Impact System of Care provides coordinated services and supports for

children with serious emotional disturbance (Osher et al., 2012). These wrap-around services strive to provide strength-based, family-centered services that will build and enhance home and community-based services for youth involved in the juvenile justice system (Osher et al., 2012). Effective wrap-around services are culturally centered around the youth and family and include a collaborative, unified, community-based team to meet the needs of youth within the juvenile justice system.

Complex Needs of Youth in Juvenile Justice Systems

The education and transition services for incarcerated youth with and without disabilities can often be disrupted and even reduced. Although there are intervention models, incarcerated youth often are not afforded the opportunity to receive the coordination of services across all systems and providers. Incarcerated youth have less access to education, particularly post-secondary education when compared to youth without juvenile justice system involvement (Osher et al., 2012). Incarcerated youth have a variety of interrelated academic, social, emotional, and mental needs (Foley, 2001). Youth involved in the juvenile justice system often have low education levels, serious deficiencies in academic skills, and many qualify for special education services (The Council of State Governments Justice Center, 2015). Most juveniles involved in the juvenile justice system are seriously academically deficient and may have mental health needs (Leone & Weinberg, 2012). Youth detained and incarcerated in the juvenile justice system in the United States typically perform 3 to 4 years below their peers on academic performance measures (Leone & Wruble, 2015). In addition, incarcerated juveniles often lack high school credit, are over age, and find it difficult to transition into the school system and community (The Council of State Governments Justice Center, 2015).

It is often difficult to fully implement educational services in a juvenile justice system. In some juvenile justice systems, there often is a lack of effective programming that addresses the individual needs of youth including cultural background and disabilities (Mears et al., 2003). In addition, there are few juvenile justice systems that maintain consistent records of reliable funding of programs that assist incarcerated youth with and without disabilities (Mears et al., 2003). Many juvenile justice systems in states are challenged with the implementation of the disability laws and programs and how to improve implementation (Mears et al., 2003). In fact, juvenile justice practitioners often lack the training and certification of juvenile justice personnel to work with youth with disabilities (Mears et al., 2003). Furthermore, juvenile justice systems are faced with a high rate of mobility of youth with disabilities that enter and exit facilities at any given moment and often receive inadequate special education and transition services.

Special Education Transition Services in Juvenile Justice Systems

Transition is a process that happens to all people at different times in their lives. Individuals transition from pre-school to elementary school, elementary school to middle school, middle school to high school, and high school to a career and/or post-secondary school. Youth with disabilities are often not prepared for the transition from one educational setting to another and experience difficulty when accessing necessary transition services (Johnson et al., 2002). Youth with disabilities often experience difficulty accessing appropriate transition programs and services in preparation for life after high school (Adkinson-Bradley et al., 2007). Incarcerated youth with disabilities often have more difficulty engaging in effective transition activities that prepare them for their return to school, community, and/or the workplace (Moody et al., 2008). Various studies have indicated that incarcerated youth with disabilities tend to be less successful than youth in traditional programs (Moody et al, 2008). Incarcerated youth with disabilities find

it difficult to engage in special education transition activities and related services than youth without disabilities (Baltodano, et al., 2005).

Being in a juvenile justice facility often hinders and sometimes prevents youth with disabilities from receiving appropriate special education and transition services. Incarcerated youth with disabilities are more likely to drop out of school, become unemployed, and have lower literacy rates (Platt et al., 2015). In addition, incarcerated youth with disabilities consistently experience poor post-school outcomes when compared with their peers without disabilities (Test & Cease-Cook, 2012). The National Longitudinal Transition Survey 2 (NLTS2, 2005) found that youth with disabilities lag behind their peers in all outcome areas including employment, independent living, and postsecondary education attendance (Test & Cease-Cook, 2012). Data from the NLTS2 documented the experiences of a national sample of youth ages 13–16 years in 2000 as they moved from secondary school into adult roles. According to the data, fewer youth with disabilities were enrolled in postsecondary education and employment at two years post-school than youth without disabilities. According to the NLTS2, students with disabilities also had higher dropout rates compared to students without disabilities. Youth with disabilities consistently experienced poor post-school outcomes when compared with their peers without disabilities (Test & Cease-Cook, 2012). The NLTS2 found that youth with disabilities lag behind their peers in all outcome areas including employment, independent living, and postsecondary education attendance (Test & Cease-Cook, 2012).

Juvenile justice systems often interrupt incarcerated youth with disabilities education attainment, independent living, and employment opportunities. A U.S. Department of Education study indicated that 43 percent of incarcerated youth with disabilities did not return to school after being released and another 16 percent enrolled back in school but later dropped out after

five months (Holman & Ziedenburg, 2006). In another study, researchers found that most youth with disabilities that are in the 9th grade return to school only to drop out within a year (Holman & Ziedenburg, 2006). Youth that leave the juvenile justice system and who do not return to school face collateral risks such as dropping out of school, facing higher unemployment, and living a shorter, less productive life (Holman & Ziedenburg, 2006). If the juvenile justice system interrupts the educational attainment of incarcerated youth with disabilities, it is obvious that it may impact the employment opportunities for youth as they transition into the community and/or school. Despite the development in education, disability laws and policies, federal mandates, and program funding, the post-school outcomes of youth with disabilities are poor.

Incarcerated youth with disabilities must be provided with individualized services that are compliant with disability laws and regulations. In addition to providing special education services and related services, juvenile justice systems must ensure that youth with disabilities have access to a broad continuum of services and support that will promote engagement in learning by setting high educational expectations. Meeting the requirements of IDEA in juvenile justice systems can be a discouraging task. In the juvenile justice systems, youth with disabilities are likely to be served according to the severity of their crime and length of sentence (Leone et al, 1991). The process of youth with disabilities transitioning in and out of juvenile justice systems can be highly complicated and troublesome to maneuver (Clark et al., 2011). According to Leone and Meisel (1997), youth with disabilities in the juvenile justice system often do not receive adequate academic, special education, and transition services in juvenile justice systems. The Center on Education, Disabilities and Juvenile Justice, and the National Disability Right Network Project Forum conducted a survey to determine state's approaches to providing special education services to youth with disabilities in juvenile justice systems (Muller, 2006). The

results of the survey indicated that the exchange of information and school records and IEPs between the school and juvenile justice system were not always a smooth transition. According to Bullis et al. (2004), the outcomes of formerly incarcerated youth with disabilities are very poor compared to those youth without disabilities. In addition, incarcerated youth with disabilities often receive inadequate academic and behavior interventions (Nelson et al., 2004). This lack of proper special education transition and academic services within the juvenile justice system means that the youth are not being prepared to go into the community for resources, internships/apprenticeships, job shadowing, or mentoring (Moody et al., 2008). In addition, it can be difficult to provide appropriate education and transition services for incarcerated youth with disabilities (Griller-Clark, 2001). Preparation for life in the post-secondary world for incarcerated youth with disabilities can often be difficult when accessing appropriate special education transition services (Adkinson-Bradley et al., 2007; Johnson et al., 2002). Data from a variety of sources indicate that incarcerated youth with disabilities are less likely than other youth with disabilities to complete high school or to make successful transitions back into the community and/or school. Factors such as inaccurate identification of the disability, lack of required services and educational supports, unqualified personnel, and ineffective transition planning and services are reasons why incarcerated youth with disabilities do not receive appropriate educational services (National Center on Secondary Education and Transition, 2004). In order for youth with disabilities to achieve academic knowledge and skills necessary to be successful, incarcerated youth with disabilities must have more access to programs and services to prepare them for life after high school.

Inadequate education and services in juvenile justice systems is a troublesome and prevalent problem. Developing and implementing effective transition programming for

incarcerated youth is a critical challenge (Platt et al., 2015). Youth that return to the community are more likely to drop out of school, become unemployed, have lower literacy rates, and enter adult correctional facilities (Platt et al., 2015). Transition for youth with disabilities has an established set of best practices that guide the provision of services and interventions (Platt et al., 2015). The transition practices and evidence-based knowledge for youth with disabilities in a general public school have grown extensively (Platt et al., 2015). In addition, the identified evidence-based secondary transition practices for youth with disabilities have increased in quality as well as quantity (Platt et al.). Although the quality and quantity of evidence-based practices have increased for youth with disabilities, transition practices for incarcerated youth with disabilities are less defined. According to Platt et al. (2015), numerous juvenile justice system transition guidelines and practices have been proposed, but most lack the evidence to support their efficacy. In addition, due to the lack of training and effective structures, juvenile justice evidence-based transition programs and practices are not well developed for incarcerated youth with disabilities (Platt et al., 2015). Often, the services for incarcerated youth are weak due to the lack of resources and mandates to provide comprehensive services (Leone et al., 2002). For many incarcerated youth, there is little opportunity for successful reintegration into school and/or community, and the workplace (Gagnon, 2018). Youth with disabilities present unique and individualized challenges that require supports in order to transition back to the school and/or community (House et al, 2018). Effective transition programs and services could promote growth during incarceration and increase individual resiliency as youth with disabilities transition back into school and/or the community (Baltodano et al., 2005).

Youth with Disabilities in Juvenile Justice Systems

Juveniles in the United States are confined in many state juvenile justice systems, including residential treatment centers, group homes, wilderness programs, boot camps, and county-run youth facilities (Mendel, 2011). A national count of incarcerated youth was conducted in 2007 (Mendel, 2011). It was indicated that approximately 60,500 U.S. youths were incarcerated in juvenile justice systems and approximately 40 percent of these youth were held in a locked long-term facility (Mendel, 2011). Youth in a long-term facility are usually confined from a few months to a year (Clark, 2014). Most of these long-term facilities are owned by the state or a private company under contract with the state. In addition, many of these facilities are large and can house approximately 200–300 juveniles. These facilities usually operate in a confined prison-like fashion with razor-wire, isolated locked cells (Mendel, 2011). Incarcerated youth in the United States is a serious problem and the rates of juvenile incarceration are alarmingly high (Sheldon-Sherman, 2013). In 2009, the United States Courts held 1.5 million delinquency court cases per day. In 2009, there were 315,000 juveniles housed in a juvenile justice facility. Of these 315,000 juvenile court cases, Judges ordered 133,800 juveniles to a juvenile justice facility (Sheldon-Sherman, 2013). Juvenile justice systems nationwide are charged with the responsibility of providing care, custody, and education for incarcerated youth with disabilities (Clark, 2014). It is expected that these juvenile justice systems provide safety to the youth and the public, in addition to providing a variety of other functions (Clark, 2014).

Juvenile justice systems provide a variety of helpful services that support the juvenile's physical, emotional, and social development (Clark, 2014). These services include education, communication, counseling, medical, nutrition, and recreation (Clark, 2014). Because most juveniles serve sentences in juvenile justice systems for short periods, during the course of a

year, more juveniles are admitted in local facilities than state-owned facilities (Hockenberry et al., 2011). The majority of these public facilities are detention centers, where the juveniles stay for relatively shorter periods of time (Hockenberry et al., 2011). Residential treatment centers make up 34% of all facilities and hold 36% of incarcerated juveniles. In Alabama, there are a total of 56 juvenile facilities. Of the 56, 13 are public facilities and 43 private facilities (Hockenberry et al., 2011).

Youth with disabilities comprise a disproportionate percentage of incarcerated youth in juvenile justice systems (Karger & Currie-Rubin, 2013). Compared to youth without disabilities, a disproportionate number of youth with disabilities are incarcerated (Sheldon-Sherman, 2013). In addition, a significant number of these incarcerated youth have education related disabilities and are eligible for special education services. Studies indicate that up to 85 percent of incarcerated youth in juvenile justice systems have disabilities (National Council on Disability, 2015). Youth with disabilities enter juvenile justice systems with academic, social, health, emotional, and behavioral needs (Meisel et al., 1998). Youth with disabilities involved in the juvenile justice system have less access to education and post-secondary services (The Council of State Governments Justice Center, 2015). Many youth with disabilities in juvenile justice systems do not receive adequate special education services (The Council of State Governments Justice Center, 2015). Youth with disabilities in juvenile justice systems are typically among the least academically proficient of their age group, often lagging two or more years behind their peers in basic academic skills (Leone & Cutting, 2004). Many youth with disabilities enter juvenile justice systems with a range of intense, educational, mental health, medical, and social needs (Leone & Cutting, 2004). Many incarcerated youth with disabilities are not literate and have experienced school failure and multiple retentions (Leone & Cutting, 2004).

Furthermore, many of these youth with disabilities are disproportionately male, poor, and members of a minority group (Leone & Cutting, 2004). In addition, youth with disabilities who enter juvenile justice systems often lack interest in and motivation to learn, have low self-esteem, and have discipline and attendance problems (Leone et al., 1991). Youth with disabilities who enter juvenile justice systems have a variety of risk factors that make them a challenging population of school-age students. Youth with disabilities may have risk factors characterized by: (a) deficits in the areas of moral reasoning (Ross & Fabiano, 1985) and anger management (Baca, 2001; Goldstein, 1999; Larson & Turner, 2002); (b) exhibited behaviors related to alienation and isolation (Calabrese & Adams, 1990), substance abuse (Dembro et al., 1997), low verbal abilities (Gemignani, 1992), psychiatric behaviors (Henggeler & Borduin, 1990); (c) poor physical conditions that is a result of poverty (Parks & Turnbull, 2002); and (d) unstable home environment indicated by poor parental employment, transiency, unstable parental relationships, and involvement with the justice system.

Disproportionate Number of Youth with Disabilities in Juvenile Justice Systems

The prevalence of incarcerated youth with disabilities is alarmingly high (Robinson & Rapport, 1999). The juvenile justice system is composed predominantly of youth with disabilities. A disability could be physical, developmental, emotional, and/or mental. Intellectual, developmental, learning, and emotional disabilities are the four disability categories common to youth in the juvenile justice system (Development Services Group, 2017). The percentage of youth with disabilities varies among juvenile justice systems (Hogan et al., 2010). In fact, the extent of youth offenders with disabilities among incarcerated juveniles is shockingly high (Robinson & Rapport, 1999). According to Quinn et al. (2001), it is estimated that 30–70% of youth in juvenile justice systems have a disability. The number of incarcerated youth with

disabilities are more than four times the number of youth in the general school population (Clark et al., 2011). One national survey reported that more than a third of youth in juvenile justice systems have been identified as having a learning disability and/or behavioral disability (Clark et al., 2011). Research found that two-thirds of incarcerated youth endure one or more diagnosable disabilities or mental health conditions (Mendel, 2011). Approximately one of every five incarcerated youth has a mental health condition that significantly decreases their ability to function (Mendel, 2011). In addition, incarcerated youth have higher incidence of learning disabilities. In a national study of administrators, it was reported that 40% of incarcerated youth were identified as having a learning disability (Gagnon & Barber, 2010). In a similar national survey of state department heads of juvenile justice systems, it was reported that 33% of incarcerated youth were classified with a disability (Gagnon & Barber, 2010). Incarcerated youth often have learning disabilities, inappropriate behaviors, mental health problems, substance abuse and addiction problems, and often have been exposed to abuse, violence, and neglect (Houchins & Shippen, 2012). Youth that are incarcerated often have significate cognitive, emotional, and intellectual disabilities (Mendel, 2011). The state department of juvenile justice systems in the nation participated in a survey. A national survey was conducted by the Center for Effective Collaboration and Practice and the National Center on Education, Disability, and Juvenile Justice to determine the percentage of incarcerated youth with disabilities as well as the disability category of youth served in the juvenile justice systems in the United States (Quinn et al., 2005). The study surveyed all of the state departments heads of juvenile justice systems or combined juvenile and adult corrections systems in the 50 states and District of Columbia. The survey asked participants to provide the number of incarcerated youth in the facility as well as the number of youth receiving special education. The participants reported that there were a total

of 33,831 incarcerated juveniles and 81% of those incarcerated juveniles were in an education program. Out of the 33,831 incarcerated youth, 8,613 youth were eligible for special education services (Quinn et al., 2005). In addition to the number of incarcerated youth with disabilities, participants were asked to identify the largest disability category. The participants reported that specific learning disabilities and emotional disabilities were the two largest categories of disability identified, followed by intellectual disability, multiple disabilities, and other health impairments (Quinn et al., 2005). The results of the survey indicated that the number of incarcerated youth with disabilities in juvenile justice systems was almost four times higher than in public schools (Quinn et al., 2005). It was indicated that the numbers that were actually reported in this survey might be underestimated. The numbers reported by the participants were based upon the capability of the facility to have access to prior records of those youth that transferred into the juvenile corrections systems (Quinn et al., 2005). In addition, the eligibility and service variability among the states may have also impacted the underestimated number of incarcerated youth with disabilities reported in this study (Quinn et al., 2005). The results of this study indicated that there is an overrepresentation of incarcerated youth with disabilities in the United States. The results of this survey indicated that an average of 33.4% of incarcerated youth receive special education services (Quinn et al., 2005).

The prevalence of incarcerated youth with disabilities exceeds the prevalence of general population. In 1997, the Office of Juvenile Justice and Delinquency Programs and the Office of Special Education Programs (OSEP) organized a panel of experts to examine the prevalence and relationships of juveniles with disabilities and their post-school outcomes (Quinn et al., 2005). The participants in this study consisted of 51 juvenile detention center department heads, 42 juvenile justice facilities and 9 adult correctional facilities. All state juvenile justice systems were

surveyed to include every incarcerated and committed youth under the age of 22 (Quinn et al., 2005). In order to complete the survey, each agency was asked to use the December 1, 2000 census data that was submitted to the OSEP at the United Stated Department of Education. This data provided a snapshot of the prevalence rate of youth with disabilities in the juvenile justice system on any given day (Quinn et al., 2005). The results indicated that incarcerated youth with disabilities who received special education services was nearly four times as high when compared to 8.8% of students in the United States who received special education under IDEA. This data indicated that there are a disproportionate number of youth with disabilities who are entitled to special education services in juvenile justice systems.

A disproportionate number of youth with disabilities are placed in public and private juvenile justice systems across the United States. It is estimated that 80% of incarcerated youth have disabilities (House et al., 2018). Over 30 years ago Rutherford et al. (1985) conducted a national survey of state special education and juvenile justice system education agencies, to determine the need for, and provision of, special education to incarcerated youth with disabilities. Rutherford and his colleagues (1985) found that youth with disabilities were over-represented in the juvenile justice system. In 2005, a study was conducted to survey all state juvenile justice systems in the United States (Quinn et al., 2005). This study surveyed all 50 states and the District of Columbia responsible for the confinement and education of incarcerated youth. The data indicated that the number of youth with disabilities in juvenile justice systems is almost four times higher than youth in the public programs (Quinn et al., 2005).

There is an overrepresentation of youth with disabilities in juvenile justice systems that have been identified as having prevalent academic deficits (Gagnon et al., 2013). In 2000, the Office of Special Education Programs (OSEP) reported that school-age children with disabilities

in the United States make up 9% compared to a conservative estimate of 32% within the juvenile justice system (Quinn et al., 2001). Larson and Turner (2002) reported that approximately 90% of youth in juvenile justice systems meet one or more of the diagnostic criteria for a mental health disorder. Furthermore, it has also been reported that incarcerated youth with intellectual and developmental disabilities are more likely to commit serious crimes, enter a juvenile justice facility, and are at a higher risk of recidivism, at a much younger age when compared to individuals without disabilities (Development Services Group, 2017).

Prevention of Recidivism Among Youth in Juvenile Justice Systems

Youth with disabilities are a vulnerable group for the juvenile justice systems. One of the most pressing challenges in juvenile justice systems is recidivism. Recidivism, or repeat offending, is a very common occurrence in juvenile justice systems (Zhang et al., 2011). Incarcerated youth are extremely vulnerable to delinquency and recidivism in juvenile justice systems (Zhang et al., 2011). According to Zhang et al. (2011), approximately half of incarcerated youth will return to a juvenile justice system. Many factors are associated with juvenile delinquency and incarceration as well as factors that affect juvenile justice outcomes (Baltodano et al., 2005). Researchers found that one factor of juvenile recidivism is disability. Mental health and cognitive disabilities have been related to youth offending criminal behaviors (Mallett, 2013). Studies have indicated that youth with disabilities have significant higher risks of reoffending and being involved in the juvenile justice system (Mallett, 2013). Zhang et al. (2004) found that incarcerated youth with cognitive and environmental needs were more likely to reoffend. In addition, incarcerated youth with disabilities tend to exhibit poor social skills, reduced self-impulse control, poor judgement, and inadequate coping skills (Baltodano et al., 2005). Furthermore, incarcerated youth with disabilities tend to exhibit maladaptive behaviors

that impairs the youth's ability to learn, work, live, and function successfully in society (Vanderpyl, 2015). As a result, incarcerated youth with disabilities frequently exhibit significant academic and behavioral problems that usually result with the youth dropping out of school and entering into the juvenile justice system (Baltodano et al., 2005). According to Arditti and Parkman (2011), employment for recently released youth was out of reach because of their criminal background. In fact, youth who have been incarcerated during their formative years have not developed the general life skills and relationships like their nonincarcerated peers (Arditti & Parkman, 2011). Instead, they have developed characteristics that have made finding independence and employment even more challenging (Arditti & Parkman, 2011).

Incarcerated youth typically face large disparities in their hopes to succeed in school and the workforce (Mendel, 2011). Juveniles involved in the juvenile justice system often experience challenges (Farn & Adams, 2016). These challenges are often associated with recidivism. Cottle et al. (2001) conducted a meta-analysis of twenty-three published recidivism studies conducted between 1983 and 2000. Based upon this meta-analysis, Hoeve et al. (2009) investigated the relationship between parenting practices and trajectories of antisocial behavior and found that neglectful parenting, absence of a father, and the family history of incarcerated youth were predictors to recidivism and aggressive behaviors. Studies were also conducted to determine the impact of juvenile justice systems on the criminal career path of delinquent youth, and to compare the effectiveness of juvenile justice system to a range of alternative punishment (Mendel, 2011). Many studies find that incarceration of juveniles increases recidivism (Mendel, 2011). Researchers have documented that juvenile detention increases recidivism with juveniles (Hobbs et al., 2013). One study was conducted to determine the most comprehensive analysis of the impact of court processing on juvenile recidivism (Petrosino et al., 2010). In this study, 29

juvenile justice studies were examined to determine whether processing of juvenile offenders reduced recidivism. The researchers' meta-analysis included 7,304 juvenile records over a 35-year period (Petrosino et al., 2010). The findings in this study determined that processing a juvenile in the court system appeared to be a result in subsequential acts of delinquency and negative effects (Petrosino et al., 2010). This research revealed that youth incarceration is no more effective than probation, and incarceration increases recidivism among youth (Mendel, 2011). It is clear that incarceration creates additional challenges to youths' success. Confinement in juvenile justice systems often do not work as a strategy to deter youth away from crime (Mendel, 2011). In fact some juvenile justice systems displayed constant failure to protect incarcerated youth from dangerous physical and psychological harm in the forms of violence, sexual assaults, or excessive confinement (Mendel, 2011). Lawsuits have been filed because juvenile justice systems have failed to provide required services such as education, mental health, and health care (Mendel, 2011). In the last four decades, there have been 57 lawsuits in 33 states that have resulted in court-sanctioned remedies in response to alleged abuse or unconstitutional treatment of juveniles in juvenile justice systems (Mendel, 2011). In some court cases, evidence had been provided to prove that one or more state funded youth facility displayed a systematic failure to protect incarcerated youth from physical abuse, mental abuse in the forms of violence from other incarcerated youth, staff, sexual assaults, and/or excessive confinement (Mendel, 2011). Issues in juvenile justice systems have ranged from deplorable physical conditions to inadequate programs and abuse. A number of court cases have complained about the level of violence in juvenile justice systems, including high incidence of sexual and physical assaults (Burrell & Annie E. Casey Foundation, 1999). For example, at the Plainfield Juvenile Correctional Facility in Indiana, there were four youth who were assaulted and suffered broken

jaws by other incarcerated youth (Mendel, 2011). In addition, according to this study, incarcerated youth may also have been involved in some type of traumatic experience as a result of involvement in the juvenile justice system (The Council of State Governments Justice Center, 2015). In most of these cases, incarcerated youth were not provided the necessary services to address their deficits. Because some juvenile justice systems do not have the ability to prevent abuse, maltreatment, and inhumane conditions of facilities, it is difficult for juvenile justice systems to provide services to rehabilitate delinquent youth. In addition, juvenile justice systems are inadequately positioned and equipped to provide effective services and treatment for youth with disabilities, mental health conditions, and substance abuse (Mendel, 2011). Studies have indicated that youth released from juvenile justice systems seldom succeed in school (Mendel, 2011). Many youth who are detained in juvenile justice systems fail to meet the minimum statutory and constitutional standards of care (Burrell & Annie E. Casey Foundation, 1999). As a result, many incarcerated youth suffer terrible physical, mental, and emotional abuse (Burrell et al., 1999). The physical and mental abuse exhibited in juvenile justice systems may be related to traumatic experiences, such as neglect and or exposure to violence (Gagnon & Barber, 2010). Systematic abuse, violence, and excessive use of isolation have also been reported and documented in juvenile justice systems in 39 states since 1970 (Mendel, 2011). In one comprehensive study of youth detention center conditions, it was found that there are substantial deficiencies in living space, health care, security, and control of suicidal behavior (Burrell & Annie E. Casey Foundation, 1999).

Many factors affect juvenile justice outcomes and recidivism of incarcerated youth with disabilities. A recent national longitudinal study on recidivism for youth offenders was conducted. The study found that approximately 40% of offenders were in jail or prison and 20%

were in some type of correctional facility (Clark et al., 2011). Research provides compelling evidence on the negative effects of incarcerated youth in juvenile justice systems (U. S. Departments of Education and Justice, 2014). According to research, experiencing incarceration as a youth increases the likelihood of recidivism (U.S. Departments of Education and Justice, 2014). Follow-up studies tracking youth released from juvenile justice systems have reported high rates of recidivism (Mendel, 2011). Studies of youth released from residential juvenile justice systems are 70 to 80 percent more likely to be rearrested two to three years after being released (Mendel, 2011). Available studies found that 38 to 58 percent of released youth from juvenile justice systems are found guilty of new crimes within two years after being released (Mendel, 2011). Another study examined the risk factors of recidivism related to education, demographics and offense patterns for incarcerated males and females in a juvenile justice system in Arizona (Thomas & Morris, 2013). This study sought to determine differences between incarcerated male and female offenders in regard to risk factors for recidivism (Thomas & Morris, 2013). This study included 3, 287, previously arrested, youth (2,134 males and 1,153 females) between the ages of 8 and 17 years that were enrolled in a large Arizona public school (Thomas & Morris, 2013). The extensive data for this study was obtained from the University of Arizona Juvenile Delinquency Project (UAJDP). The study consisted of 64.9% males and 35.1% females. There were 54% Hispanic, 27.9% Caucasian, 9.9% African American, 6.0% Native American, and 1.3% Asian American (Thomas & Morris, 2013). The researchers conducted a chi-square analyses to determine whether there were a difference among independents for incarcerated males and females. This analysis allowed the researchers to determine which independent variables best predicted recidivism for each gender (Thomas & Morris, 2013). The researcher also conducted a one-way analysis of variance to determine whether the number of

referrals differed significantly among the various ethnic groups (Thomas & Morris, 2013). The independent variables were the presence of an emotional disability, learning disability, speech or language impairment, ethnicity, socioeconomic status, adjudication status, severity of offense, standardized achievement test scores, involvement in the court system, and type of offense (Thomas & Morris, 2013). The study found that there were significant differences between risk factors and that male and female in this study differed in the risk factors that are predictive of recidivism (Thomas & Morris, 2013). The results indicated that females commit fewer and less severe crimes than males. The study also indicated that females outperformed the males in the area of academic achievement. Overall, this study indicated that there were significant differences between risk factors and that males and females in this study differed in respect to the factors that predicted recidivism (Thomas & Morris, 2013).

Incarcerated youth probably have the most complicated educational, mental, and behavioral needs in our society (Gagnon & Barber, 2010). Conditions that interfere with education, mental health, family relations, job security, and support programs may lead to future recidivism. Incarcerated youth can be challenged with finding employment, attending college, as well as starting a family (Osgood et al., 2010). Incarcerated youth may struggle with emotional problems, deficient family support, and insufficient capacity to acquire academic and employment skills (Osgood et. al., 2010). Although post-school success is the ultimate goal for incarcerated youth with disabilities, meeting the unique, individual transition needs of each incarcerated youth is crucial (Baltodano et al., 2005). Most incarcerated youth are far below academically and a large percentage of incarcerated youth have been diagnosed with a disability (Mendel, 2011). Many incarcerated youth lack the basic cognitive and social skills needed for self-advocacy and cooperation during incarceration (Gagnon & Barber, 2010). In addition, many

incarcerated youth have deficits in interpersonal problem solving skills that contribute to maladaptive behaviors (Gagnon & Barber, 2010). Furthermore, incarcerated youth with disabilities tend to exhibit frequent aggressive behaviors that tend to place them at greater risk of recidivism and placement in a juvenile justice system (Gagnon & Barber, 2010). For some incarcerated youth with disabilities, transition is often an uncoordinated set of activities that often leaves them unprepared for life after leaving the juvenile justice system (Baltodano et al., 2005). It is critical that incarcerated youth with disabilities receive the necessary education and support to increase the likelihood of having a successful transition back to the school and/or community. With the increase of the recidivism rate of incarcerated youth, it is important to prevent their return to the juvenile justice system.

Many juvenile justice systems allow juveniles to divert a minor law violation by sending the juvenile to a diversion program (Hobbs et al., 2013). In some juvenile justice systems, the court will allow low-risk juvenile law offenders to be screened out. This process is known as the Early Assessment Process (Hobbs et al., 2013). In one study, juveniles were screened out using the Early Assessment Process. The purpose of this study was to determine if juveniles reoffend if they were screened out using the Early Assessment Process. This study took place in Nebraska. The data on juveniles involved in the Early Assessment Process were provided by the Lancaster County Attorney's office. The data for juveniles referred to Juvenile Diversion were provided by CEDARS Youth Services (Hobbs et al., 2013). A staff member from the Lancaster County Attorney's office collected the data from both groups. A random list of 400 juveniles were drawn from each group. The staff member provided recidivism data for specific juveniles within both groups. There were 798 male participants in this study that either participated in the Early Assessment (n=399) or the Juvenile Diversion (n=399) (Hobbs et al., 2013). The findings in this

study found that formal processing of juveniles may increase delinquency. This study suggests that having a program that includes a process designed to screen out low-risk juveniles could reduce juvenile recidivism and improve behaviors while in the program (Hobbs et al., 2013).

Special Education Services in the Juvenile Justice System

All youth with disabilities have statutory rights to special education services under state and federal laws. The provision of education services for incarcerated youth with disabilities is a complex endeavor that can often be interrupted or curtailed. Often, juvenile justice system facilities are ill-equipped and poorly structured to provide appropriate special education and services to youth with disabilities (Mendel, 2011). In a 1994 case study of juvenile justice systems around the United States, Leone (1994) found that it took a significant amount of time to locate student records and begin special education services for incarcerated youth. Some youth waited over three months before any services were initiated and problems with interagency collaboration were evident. In fact, the majority of court cases filed by incarcerated youth for lack of special education services include lack of medications, counseling services, and special education services for school curriculum (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2015). Leone (1994) conducted a case study and analysis of special education services for incarcerated youth with disabilities in a juvenile justice system. This study was conducted at the request of attorneys of some of the incarcerated youth who were filing lawsuits against the facility for lack of special education services. This particular study was conducted over twelve months and consisted of eight visits to a juvenile correctional facility. The data collected in this study consisted of classroom observations, case management meeting observations, student file and record reviews, student and staff interviews, and review of state special education laws and regulations. Based upon this study, Leone found that there were serious problems in reviewing

student special education records, youth with disabilities received significantly less special education services than they had in public high schools, and there were poor intake procedures.

Although the personnel in a juvenile justice system may face difficulty providing appropriate special education and services to youth with disabilities, these youth must receive the legal mandate of special education and transition services (IDEIA, 2004). In spite of these laws and regulations, many juvenile justice systems do not provide the appropriate services to incarcerated youth with disabilities (Leone & Wruble, 2015). Class action lawsuits challenging the appropriate and adequacy of education services for incarcerated youth with disabilities has been the primary force driving education reform in the juvenile justice system (Leone & Wruble, 2004). Since 1975, more than 20 class action lawsuits were filed involving special education in juvenile justice systems to secure educational rights and related services for youth with disabilities (Puritz et al., 1998). The first landmark case for incarcerated youth with disabilities was Green v. Johnson (Green v Johnson, 1981). In this case, Green, an incarcerated youth with disabilities, filed this action in 1979 stating that the state of Massachusetts did not provide him with special education services. The courts found that all incarcerated youth with disabilities are entitled to FAPE and special education services (Green v. Johnson, 1981). The lack of provision of special education and related services involving incarcerated youth with disabilities resulted in several court cases (see *Andre H. v. Sobol*, 1984; *Johnson v. Upchurch*, 1986; *Smith v. Wheato*n, 1987). A review of three cases involving special education in juvenile corrections illustrates the serious problems associated with educational services (Puritz et al., 1998). In the case of *Andre H. v. Sobol* (1984), a lawsuit was filed on behalf of juveniles eligible for special education services at New York City's Spofford Juvenile Detention Center (Puritz et al., 1998). This lawsuit was filed by the plaintiffs' attorneys. The plaintiffs' attorneys claimed that Spofford

failed to conduct screening activities to identify individuals with disabilities, failed to have eligibility team meetings, failed to plan and develop appropriate educational services, and failed to obtain records from schools previously attended by the incarcerated youth (Puritz et al., 1998). In January 1991, seven years after the initial lawsuit, a stipulation and order of settlement was signed by the attorneys for the plaintiffs, the New York City Department of Juvenile Justice, and the New York City Board of Education (Puritz et al., 1998). The settlement required that the Spofford Juvenile Detention Center develop an eligibility team at the center and fully implement the provision of IDEA.

In another case, *Johnson v. Upchurch* (1986), unlike the *Andre v. Sobol* case, it addressed issues in juvenile justice systems. In 1986, the plaintiff filed a complaint on his own behalf concerning his mistreatment at the Catalina Mountain Juvenile Institution (Puritz et al., 1998). In the spring of 1988, there were no special education services at the facility, the plaintiff requested an injunction requiring the Arizona Department of Corrections to fill a vacant teaching position and to provide adequate services (Puritz et al., 1998). The *Johnson v. Upchurch* case was settled in May 1993 through a consent decree. The consent decree required reforms in juvenile justice systems throughout the State of Arizona (Puritz et al.), 1998. In addition, the decree required that a committee of consultants monitor and oversee the implementation of the agreement.

In the case of *Smith v. Wheaton* (1987), a complaint was filed in the U. S. District Court for the District of Connecticut (Puritz et al., 1998). The plaintiffs complained that the Long Lane School, a juvenile justice facility, failed to meet the minimum requirements for evaluation of youth and provision of special education services (Puritz et al., 1998). In addition, the plaintiffs complained that parents were not involved in the educational decision-making process for their children with disabilities, related services were not provided, and Long Lane School failed to

develop IEPs and provide transition plans for juveniles leaving the facility (Puritz et al., 1998). These three cases represented the litigation under IDEA and the barriers associated with the special educational services in juvenile justice systems. The prevalence of these and other court cases illustrates a problem with the provision of special education services and assessing the needs of incarcerated youth with disabilities in juvenile justice systems.

Quality of Life Outcomes

Youth with disabilities continue to face post-school outcomes in which they are less prepared for adulthood than their peers without disabilities (Newman et al., 2009). Currently, there are a large percentage of youth with disabilities who will graduate from high school unprepared for the new expectations and demands of adult life. This discrepancy may be due, in part, to secondary special education teachers feeling unprepared to plan for and deliver transition services (Li et al., 2009; Wolfe et al., 1998). Studies have shown that secondary special educators lack knowledge and skills that hinder their abilities to implement effective transition practices (Benitez et al., 2009; Knott & Asselin, 1999). According to Mazzotti and Plotner (2013), secondary transition specialists and teachers are not prepared and competent to implement evidence-based practices. Teachers that are not knowledgeable and prepared to implement effective transition services may have an effect on the post-school outcomes of students with disabilities (Morningstar & Mazzotti, 2014).

Transition services presents youth with disabilities and their families with opportunities for growth and development. Unfortunately, Anderson and colleagues (2003) reported from a national survey of special education personnel preparation programs that less than half of the programs offered a stand-alone course devoted to secondary transition. Given the changing roles of secondary special educators, it stands to reason that teacher education programs should be

geared toward increasing pre-service content regarding targeting transition planning and services (Morningstar & Mazzotti, 2014, p.6). Teacher education programs must include system level post-school predictors and school level evidence-based practices to improve post-school outcomes of students with disabilities (Cook, Cook, & Landrum, 2013; Mazzotti, Test, & Mustian, 2012). “In order to improve in-school and post-school outcomes for students with disabilities, teachers must be prepared with the knowledge and skills to provide secondary transition programs” (Morningstar & Mazzotti, 2014, p.6). The course of study for teacher education programs must include post-school predictors and evidence-based practices to ensure that teachers are knowledgeable and prepared to implement an effective transition program and services (Morgan et al., 2013; Morningstar & Clark, 2003).

The lack of research in effective transition programs and curricula that prepare incarcerated youth with disabilities for transition into the community and school has not been investigated thoroughly (Baltodano et al., 2005). An effective transition program for incarcerated youth with disabilities must have intensive programmatic services (Hogan et al., 2010). In fact, a lack of knowledge and awareness among juvenile justice professions about the barriers that youth with disabilities face may be one of the reasons why youth enter the juvenile justice system and usually stay longer. Kvarfordt et al. (2003) conducted a study to examine the previous training juvenile justice personnel received regarding the various disabilities and to determine if training was needed. This study examined the training needs of juvenile justice personnel regarding their work with youth who have disabilities in the state of Virginia. Findings from this study indicate that less than two-thirds (62%) of respondents had received training about persons with disabilities and less than half (47%) had received training about persons with learning disabilities (Kvarfordt et al., 2003).

The educational programs of incarcerated youth with disabilities must address academics and include a holistic transition process. It is clear that academic difficulties are a significant factor that affects the educational progress and post-school success of incarcerated youth with disabilities (Gagnon & Barber, 2010). The NLTS2 found that students with disabilities lag behind their peers in all outcome areas including employment, independent living, and postsecondary education attendance (Test & Cease-Cook, 2012, p. 1). The data from the NLTS2 documented the experiences of a national sample of students who were age 13–16 years in 2000 (Wagner et al., 2005). According to the NLTS2 data, after two years of post-school, youth with disabilities were not enrolled in postsecondary education and employment (Wagner et al., 2005). According to the NLST2, there was a smaller percentage of youth with disabilities that were enrolled in postsecondary education and employed when compared with youth without disabilities (Wagner et al., 2005). According to data from NLST2, 28% of students with disabilities did not graduate with a diploma because they dropped out of high school (National Center for Special Education Research, 2005). Therefore, obtaining access to an effective, quality education is very important to incarcerated youth with disabilities. According to Bullis et al. (2004), the outcomes of formerly incarcerated youth disabilities are very poor compared to those of youth without disabilities. In one study, 186 incarcerated youth were below the mean on standardized achievement assessments (Foley, 2001). In a review of literature, it was reported that the academic functioning of incarcerated youth was between the fifth and ninth grade levels (Foley, 2001). Furthermore, it was reported that a high percentage of incarcerated youth had failed a course in high school, been retained for a grade, and had not earned a high school diploma (Foley, 2001). One study found that four years after being released, incarcerated youth endured a five percent reduction in employment (Mendel, 2011). After 15 years of being

released, individuals who were incarcerated as a youth worked 10 percent less hours per year when compared to individuals who had never been incarcerated (Mendel, 2011). In fact, many youth who leave a juvenile justice system do not return to school or drop out before completing high school (U.S. Departments of Education and Justice, 2014).

A five-year longitudinal study of 531 incarcerated youth with disabilities was completed by the Transition Research on Adolescents Returning to Community Settings (TRACS) (Unruh & Bullis, 2005). This study examined the transition outcomes of incarcerated youth with disabilities leaving the Oregon juvenile justice system and returning to the community (Unruh & Bullis, 2005). In this study, almost 60% of incarcerated youth with disabilities returned to the juvenile justice system or were later committed to the adult correctional system (Unruh & Bullis, 2005). Only 25% of the youth with disabilities enrolled in a school after existing the facility and fewer earned a high school graduation document (Unruh, & Bullis, 2005). The youth with a disability were 3 times more likely than youth without disabilities to return to the juvenile justice system (Unruh & Bullis, 2005). In addition, youth with disabilities were 2 times less likely to become employed or return to school (Unruh & Bullis, 2005). After 6 months of being released from the juvenile justice system, formerly released youth with disabilities were 3.2 times likely to return to the facility and 2.5 times more likely to remain working and enrolled in school 12 months after exiting the system (Unruh & Bullis, 2005). In order for incarcerated youth with disabilities to perform at optimal levels, these youth need to participate and receive appropriate transition services, clear academic expectations, and relevant career interest and career development indicators to make informed career choices about careers.

Career Interest and Development

Education is key to life success. Returning to school and succeeding is not easy for some youth with disabilities transitioning from the juvenile justice system (Osher et al., 2012). There are a variety of individual, school, and systemic factors that impact the successful transition of youth with disabilities back to the school and/or community. Individual factors include poor academic and social-emotional skills, special education needs, and high school credit deficits (Osher et al., 2012). School factors include poor school conditions for learning and poor planning and preparation for youth transitioning back to the school and/or community (Osher et al., 2012). In addition, schools not likely addressing the factors that contributed to the educational deficits that these students exhibited prior to adjudication (Osher et al., 2012). Systemic factors include the failure of agencies and institutions to collaborate and plan at both ends of the transition process for youth with disabilities (Osher et al., 2012). Therefore, a quality education for incarcerated youth with disabilities is important for students to successfully transition into the community and be productive citizens in society (Foley, 2001).

Previous research has concluded that there is a lack of effective special education services and programs for successful transition back into the community and high school for incarcerated youth with disabilities. Despite the continuation of special education services and transition provision in IDEA and importance of employability skills, research indicates that incarcerated youth with disabilities continue to experience difficulty returning to school and the community, and struggle to find and sustain employment (Baltodano et al., 2005). Youth with disabilities face a number of challenging life transitions that will assist them with finding and maintaining employment (The Council of State Governments Justice Center, 2015). Incarcerated youth with disabilities often lack important vocational and job readiness skills necessary to

secure and maintain competitive employment. These youth with disabilities have very few vocational skills and little to no work experience. In fact, the employment rate for individuals with disabilities continue to drop behind those individuals without a disability. It has been reported that the unemployment rate for individuals with disabilities has ranged from 34% to 39% in the last several years (McDaniels, 2015). In the same period, the unemployment rate for individuals with intellectual disabilities ranged from 18% and 23% and has declined over the previous years (McDaniels, 2015). According to Schindler (2014), research on incarcerated youth shows that lack of employment is one of the major predictors of juvenile justice system involvement and unsuccessful re-entry. Furthermore, incarcerated youth with disabilities lack the stable housing, life skills, and positive connections to succeed in their community. In addition, youth that have been incarcerated during their developmental years have not learned the emotional, social, and life skills necessary to be successful in the community (Arditti & Parkman, 2011). Instead, these youth have developed characteristics that make employment and independence considerably difficult (Arditti & Parkman, 2011).

Incarcerated youth with disabilities development requires a coordinated series of activities and experiences that will help them become successful in society. Youth with disabilities who become engaged in a career development program at school have better outcomes than those who do not. In one study, incarcerated youth understood that not having the right employability skills and job experience are barriers to employment (Barclay, 2004). Numerous studies have reported that incarcerated youth are less likely to be successful than youth in traditional education programs (Moody et al., 2008). One study was conducted in a high school located on the campus of a juvenile justice facility in Salem, Oregon. This juvenile justice system served students between the ages of 12 and 25. The juvenile justice system had a student

body of 35% female and 65% male at the time of the study. The system provided general education, special education services, and post-high school services to the students incarcerated at the facility. The school had an enrollment of 185 youth, seventy-three of these students were enrolled in the career curriculum program. All of the participants answered a survey that was comprised of ten open-ended questions. The findings indicated that the students felt that they benefitted from participating and completing the career development program at the juvenile justice facility. The findings also indicated that career development is a key element in the educational process for youth transitioning from a juvenile justice system to school and/or the job market (Moody et al., 2008). The majority of youth in high schools in the United States participate in a career development program or curriculum that determines the students' skills and interests, admittance to the community, and preparation for college and/or the workforce (Moody et al., 2008). This career development program or curriculum often includes career research, professional portfolio development, and technology knowledge (Moody et al., 2008). Research supports that students who participate in and complete a career development program or curriculum are more likely to graduate from high school and be better prepared for the workforce (Moody et al., 2008). Studies indicate that the completion of an academic and vocational development curriculum for incarcerated juveniles that is centered around structured learning, school achievement, and job skills increases outcomes for youth returning to the community (Lipsey & Wilson, 1998). Several high schools in Arizona, Oregon, and New York have adopted the Youth Transition Program (YTP) that works in partnership with Vocational Rehabilitation Services (Benz et al., 2000). The YTP provided youth with disabilities career coaching, job shadowing, interviewing skills, work experience, and more (Benz et al., 2000). The goal of the YTP is to improve the outcomes of youth with disabilities and help them with

successful transition from school to the community, all based upon the youth's career interests (Benz et al., 2000). It was noted that employment correlated to lower rates of delinquency and greater outcomes for youth with disabilities. Heller (2014) provided Chicago youth with a summer employment program. Heller findings indicated that when youth are given a summer job and an adult mentor, youth are more likely to avoid violent crime arrests. In Heller's study, violent crime arrests in Chicago were reduced by 43% because of the summer employment program.

Employment is one important indicator of adult success (Lindstrom et al., 2011). One of the most important life functions is to be employed. Employment provides individuals with an opportunity to sustain themselves financially. Therefore, employability skills are paramount of all the factors that may impact the success or failure of youth with disabilities transitioning into the community (Vanderpyl, 2015). Although employment is extremely important for incarcerated youth with disabilities, few incarcerated youth with disabilities have the skills needed to develop and maintain post-incarceration employment (Vanderpyl, 2015). Youth with disabilities have fewer vocational skills and often lack job experience, making it difficult to secure a job. Provided their limited work experience, these youth need assistance and guidance with identifying vocational interests. Youth involved with the juvenile justice system deserve a quality education that affords them the opportunity to develop the necessary skills and competencies to become productive citizens in society (Leon & Weinberg, 2010). However, this is not the case for juveniles who leave juvenile justice systems. Several of these juveniles are not prepared for adulthood. They often leave school without a diploma and academic skills and job competencies that will prepare them for adulthood in the 21st century. Youth that are involved in the juvenile justice system often lack the critical vocational and job-readiness skills necessary to

gain competitive employment (The Council of State Governments Justice Center, 2015). In addition, many employers may be reluctant to hire youth that are involved in the juvenile justice system (The Council of State Governments Justice Center).

Many incarcerated youth are limited in their career options, skills, and interests, as well as the requirement needed to achieve their goals (Moody et al., 2008). The career development process for youth with disabilities is more complex than their typical peers (Yanchak et al., 2005). Youth with disabilities are more likely to have more dysfunctional career thoughts than individuals without disabilities. According to Yanchak et al. (2005), youth with disabilities encounter different barriers during their career development thought process. Research suggests that the career development process for youth with disabilities can be influenced by individual and environmental factors (Yanchak et al., 2005). The individual factors that may influence individuals with disabilities include, but are not limited to self-efficacy, self-esteem, gender, cultural background, socioeconomic status, and disability status. Some of the environmental factors that may influence individuals with disabilities include decision making opportunities, work experience, and family income (Yanchak et al., 2005). The research on the career development of youth with disabilities indicate that individuals with physical and cognitive disabilities experience different barriers in their career development process (Yanchak, et al.). According to Yanchak et al. (2005), Youth with cognitive disabilities have greater difficulty understanding their disability and how it affects their employment and decision making when compared to youth with physical disabilities. Youth with cognitive disabilities often have difficulty making decisions and have limited work experience due to a high dependency need and overprotective caretakers (Yanchak et al., 2005). As a result, youth with cognitive disabilities are likely to have unrealistic career expectations, training, and employment

opportunities. Often, the greatest barrier for youth with physical disabilities is the stigma from society. Youth with physical disabilities are sometimes embarrassed regarding their physical disability and sometimes impede their capacity to set realistic vocational goals and pursue career ventures (Yanchak et al., 2005). These perceptions may result in dysfunctional career thoughts that can have a negative impact on the career development decision-making process of youth career and vocational development.

Studies centered around the career curriculum development of incarcerated youth are limited (Moody et al., 2008). In addition, there is limited research on the history of career interest and career development for incarcerated youth with disabilities. There are isolated programs that exist in juvenile justice systems, but there does not appear to be a nation-wide commitment to the career interests and development of incarcerated youth with disabilities. There appears to be no evidence that a policy exists that targets the career interests and needs of this population (Vernick & Reardon, 2001). There is extensive literature regarding prison programs, but the majority of those programs target sex abuse, drug abuse, anger management, education, and medical issues (Vernick & Reardon, 2001). Programs such as vocational programs are the exception to the rule. In 1994, the role of vocational education in decreasing the recidivism rate of incarcerated youth was studied (Wilson, 1994). Wilson found that the recidivism rate of those involved in a vocational education program was slightly lower than those that did not participate. In addition, Wilson found that individuals involved in the vocational program had higher earnings and positive attitudes towards work and vocation. In the United States, juvenile justice systems focus on the vocational education development (Vernick & Reardon, 2001). Research shows that education, and especially career-related education is among the lowest priorities in the juvenile justice system. There is a need for more planned and

coordinated attention to the career development and interest of incarcerated youth. While there are an array of existing vocational education programs available, programs lack employability and career guidance (Vernick & Reardon, 2001). The juvenile justice system lags far behind other institutional settings in recognizing the importance that career development plays in the lives of all individuals (Vernick & Reardon, 2001). What appears to be missing with these programs is the need to provide opportunities for basic skills development, employability skills, and career interests of incarcerated individuals. The development of such programs would provide incarcerated youth the opportunity to develop career plans, with a focus on the basic knowledge of their interests, values, skills, and options in the workforce (Vernick & Reardon, 2001).

John Holland's Self-Directed Search

The career thoughts of incarcerated youth can have a negative impact on the career development decision-making process of youth career and vocational development (Lustig & Strausser, 2003). It is critical to ensure that the individual's strengths, interests, and needs are considered when determining a relevant career path for incarcerated youth with disabilities. Many incarcerated youth with disabilities are disconnected from developmental career pathways and agencies that often leave them unprepared for adulthood. Some of these youth are at risk of dropping out of school and being limited in the extent of being a productive adult in society. Some alternative settings may be one way youth with disabilities are disconnected from appropriate services and agencies. These settings may be used to remove youth with disabilities from being problematic in society, but these setting may also be a way for incarcerated youth with disabilities to reconnect with their education and improve their chances of successfully transitioning back to the community and/or school and adulthood. In order to prepare youth with

disabilities for their transition back to the community and/or school, it is vital to implement a process for understanding the career development and career choice of this population. This process should implement a career development theory that will focus on the career path, education, and guidance required for a certain career. This career development theory should vocational choices that include the values, strengths, weaknesses, and desired career paths of youth.

Figure 1. Holland Hexagon. Retrieved from: apps.sa.ucsb.edu

John Holland's theory of vocational choice is a remarkable tool utilized in research and in practice (Rayman & Atanasoff, 1999). Holland's theory provides an awareness of theoretical understanding of career development and career choice. Holland invented a tool called the Self-Directed Search (SDS) that provided the knowledge and comprehension directly to the individual. The SDS is Holland's version of his theory into practice. The SDS was developed using John Holland's theory of vocational choice. Holland's theory of vocational choice has five key qualities that distinguishes it from other career development theories (Rayman & Atanasoff, 1999). The five qualities are: Simplicity, Face validity, Organizational framework, Vocabulary, and Translatable to practice. Holland's theory is simple and easily understood. The Holland theory makes sense and describes real life events (Rayman & Atanasoff, 1999). It has value and credibility. The Holland hexagonal provides an organizational framework that is simple and logical. Holland's hexagonal model consists of Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C)- RIASEC (Rayman & Atanasoff). Holland's vocabulary is widely used and familiar among researchers and service providers. Lastly, Holland's theory is easily translated into practice. Holland's most direct explanation of his theory is the Self-Directed Search. Holland's five qualities of theory separates it other theories of career development (Rayman & Atanasoff, 1999).

The SDS is an accepted tool selected by career counselors that could be effective in the area of career development and transition instruction. The SDS is a self-paced, self-scoring, inventory exploring the career interests, activities, and aspirations of individuals. It combines the assessments of occupational daydreams, preferred activities, self-assessed competencies, occupations, and self-estimates (Rayman & Atanasoff, 1999). The SDS provides a direct linkage

to the Occupations Finder as well as other career resources. The SDS provides individuals the opportunity to understand how these factors may contribute to certain career choices.

The unemployment and misemployment rates for individuals with disabilities is a worldwide economic challenge. There are few studies that used Holland's Theory as a guideline to address the needs of individuals with disabilities. One study examined Holland Theme self-estimated work-related abilities, interests, and employment patterns for adults with disabilities. The participants in this study were 48 young adults that attended a transition center in a Midwestern state (Turner et al., 2011). The participants in this study were either working a full or part-time job (75%) or attended a post-secondary educational class (29.2%) in a community college, university, or trade school (Turner, et al.). The age range of the participants were 18 to 22 years. Of these participants, 61% were males and 39% were females (Turner, et al.). There were European Americans (53%), African Americans (31%), Asian (12%), and Hispanic (4%) (Turner, et al.). Of the 48 participants, 29 males and 19 females had a disability (Turner et al., 2011). Two career assessments were used in this study. The ACT Unisex Interest Inventory Revised (UNIACT_R) was used to measure the career interests of the participants. The ACT Inventory of Work-Relevant Abilities (IWRA) was used to measure the self-estimated work related abilities of the participants. The UNIACT_R is comprised of 90 items that assesses the interests of individuals in various activities represented by the Holland Theme (Turner et al., 2011). The IWRA is comprised of 15 work-related abilities that participants rate on a 5-point Likert scale. These work-related abilities correspond with each of Holland's six themes. The results from this study indicated that adults with disabilities had a scattered pattern of interests and self-estimated abilities (Turner et al., 2011). The results also indicated that 31% of the participants worked in jobs that matched their interests and abilities, when in fact, 69% did not.

In addition, only 33% of the participants worked on jobs that matched their self-estimated work abilities and 66% did not (Turner et al., 2011). When examining the results of the participants career interest and abilities results together, 42% matched with a job in which they were interested and 55% of the participants worked in jobs that matched their interests and work-related abilities (Turner, et al., 2011).

Few studies have been conducted using the SDS to describe the career interests of incarcerated individuals with disabilities and without disabilities. A study was completed that compared the learning types of individuals with and without disabilities (Cummings & Maddux, 1987). This study was designed to examine the occupational interests of high school students with and without disabilities. The Self-Directed Search was used to assess the career interests of the participants. A total of 96 out of 190 students with learning disabilities participated in the study. The 96 students with learning disabilities were matched with 96 high school students without disabilities within the same district. This matching was based on sex, ethnicity, and socio-economic status of the high school students (Cummings & Maddux, 1987). The students with disabilities group consisted of 70 males and 26 females. There were three ethnic groups that represented both groups. There were 59 Caucasians, 25 African-American, and 12 Hispanics that were identically matched with both groups. The SDS was administered to each participant and the results of each group were compared to determine similarities. The results indicated that there was no significant difference in the Holland codes of students with and without learning disabilities (Cummings & Maddux, 1987). In addition, research completed by Booker (2021) explored the career interests of male and female students with disabilities in a high school. According to this study, the disability area of students in a high school has an impact on their career interests (Booker, 2021). Another study was conducted that involved 98 high-risk students

at a public middle school located in the southeastern United States. Of the 98 students that returned permission forms to be included in the study, 91 students completed the SDS (41 boys, 50 girls). This study used the SDS: Career Explorer (CE) as part of a 14 structured career group (Osborn & Reardon, 2006). The researchers used the SDS: CE interpretative report with these high-risk middle school students to determine how it might be incorporated into a career counseling program for students at risk of dropping out of school. The participants in this study consisted mostly of African-Americans (95%). The results from this study indicated that the SDS: CE is a sound instrument for the selected group of at-risk middle school students. The most common Holland Code by gender for the selected participants were Artistic (n=13, 37%) and Realistic (n=16, 32%) for boys and Social (n=19, 73%) and Artistic (n=16, 32%) for girls (Osborn & Reardon, 2006). One-way analysis of variance (ANOVA) were conducted to determine the presence of significant mean differences. An ANOVA revealed significant difference for two types: Realistic, $F(1, 89)= 21.85$, $p < .001$; and Social, $F(1, 89) = 4.95$, $p < .05$ (Osborn & Reardon). The boys had higher means scores on the Realistic scale 9M = 22.83, SD = 13.70) compared to the girls (M = 11.78, SD = 8.56), whereas the girls had higher mean Social scores (M = 30.84, SD = 11.80) compared with boys (M = 25.38, SD = 11.30) (Osborn & Reardon, 2006). The researchers used the SDS to help guide the participants in the development of career goals and aspirations. The researchers indicated that career development programs in middle school should be based on a more career centered approach that includes a connection between school and work, interpersonal skills development, and career awareness skills needed for job entry. Although this study was limited in scope, it was noted in the results section that the students indicated they had learned about their decision-making approach, career interests, occupation interests, and postsecondary options (Osborn & Reardon, 2006). Another study was

conducted to compare a sample of college students who completed the SDS with a no-treatment control group (Behrens & Nauta, 2014). The purpose of the study was to determine if compared to participants not receiving an intervention, participants who completed the SDS would increase the number of alternatives they were considering related to career exploration and decrease the need for career counseling. An increase in career alternatives was considered because the SDS was developed to promote a consideration of career choices that are consistent with the individual's personality (Behrens & Nauta, 2014). The participants in this study consisted of 131 undergraduate students from a public university in the Midwest. Those participants in the treatment group completed the SDS and those in the control group did not complete the SDS. The participants from both conditions completed a post-intervention assessment. Out of the 131 participants, only 80 (61%) completed the postintervention assessment. Of the 80 participants that completed the post-intervention assessment, 41 (51%) were in the control condition and 39 (49%) were in the SDS treatment condition (Behrens & Nauta, 2014). There were 69 (86%) women and 11 (14%) men. The participants ranged in age from 18 to 51 years (M = 19.96, SD = 4.83). There were 78 (88%) White/Caucasian, 7 (9%) Black/African American, 2 (3%) Asian/Asian American, and 1 (1%). Results indicated that when compared with participants receiving no intervention, participants who completed the SDS reported a greater increase in the consideration of career alternatives (Behrens & Nauta, 2014).

Youth with disabilities who enter juvenile justice systems represent one of the most vulnerable populations in the United States, are overrepresented in the juvenile justice system, and have inadequate transition programs related to reintegration (Leone, Meisel et al., 2002). Transition programs aimed at reintegrating youth with disabilities back into society often lack adequate training in independence and employment-related skills that will meet the society

expectations. The expectations of society of all youth include the ability to: (a) live independently, (b) secure and maintain competitive employment and/or continuing education, (c) determine a career path, and (d) participate in societal relationships and leisure activities (Waintrup & Unruh, 2008). These societal expectations are fundamental to the way an individual view themselves. In society, fewer choices will be available to those individuals that are not prepared to meet the demands of the ever-changing workplace. Individuals that are not prepared will more likely earn less and experience a decline in their standard of living (Waintrup & Unruh, 2008). Incarcerated youth with disabilities are more vulnerable to experience poor employment and life outcomes than their non-disabled peers. In fact, incarcerated youth with disabilities are often overlooked in the development, evaluation, and implementation of transition policies and programs geared towards career interests and development (Waintrup & Unruh, 2008). Additionally, there is limited research on the effectiveness of transitional programs regarding the relationship between the career development and career interests of incarcerated youth with and without disabilities as they return to their community and/or school. Further exploration in this area of research is needed in order to examine the career interests of incarcerated youth with and without disabilities as they transition back into the community and/or school.

CHAPTER III. METHODS

The purpose of this study was to explore the impact of demographic factors including disability, age, gender, race, program type (general or sex offender program), and repeat offender status, on self-reported results from Holland's Self-Directed-Search (Holland, 2017). The Self-Directed Search (SDS) was completed by incarcerated male youth with and without disabilities. This chapter overviews (a) the research questions, (b) a description of participants, (c) study setting, (d) research design and rationale for the study, (e) data collection procedures, (f) materials and equipment used, (g) protection of human subjects, and (h) a review of the methods for data analysis is provided.

Research Questions

1. Is there a relationship between disability type and first letter code of the SDS?
2. Is there a relationship between age and first letter code of the SDS?
3. Is there a relationship between race and first letter code of the SDS?
4. Is there a relationship between program type and first letter code of the SDS?
5. Is there a relationship between repeat offenders and first letter code of the SDS?
6. Is there a statistically significant mean difference between disability and the first letter code of the SDS?
7. Is there a statistically significant mean difference between age and the first letter code of the SDS?
8. Is there a statistically significant mean difference between race and the first letter code of the SDS?
9. Is there a statistically significant mean difference between program type and the first letter code of the SDS?
10. Is there a statistically significant mean difference between repeat offenders and the first letter code of the SDS?

Participants

Participants in this study were male students with and without disabilities who were adjudicated to the Alabama Department of Youth Services (ADYS), Mt. Meigs institutional facility campus. Mt. Meigs is a juvenile justice system for adjudicated male youth ages 12 to 21. There were a total of 91 male youth that consented to participate in the study. Due to student transiency, four students were transferred back to their school and community before the study began. The remaining participants (n = 87) voluntarily completed Holland's Self -Directed Search 5th Edition (Holland, 2017). Participants in this study (n = 87) consisted of male students. Participants in this study consisted of students (n = 14) who received special education services under varying disability categories, and students without disabilities (n = 73) at the Mt. Meigs campus. Of the 13 disability categories identified by IDEIA, participants in this study were representative of five disability categories. The five disability areas represented included: Other Health Impairment (OHI) (n = 4), Specific Learning Disability (SLD) (n = 6), Emotional Disturbance (ED) (n = 2), Speech Language Impairment (SLI) (n = 1), and Intellectual Disability (ID) (n = 1). Participants in this study ranged in age from 14 to 20 with the following frequency: 14 (n = 5), 15 (n = 9), 16 (n = 18), 17 (n = 31), 18 (n = 16), 19 (n = 4), and 20 (n = 4). Races represented in the participant group are African American/Black (n = 44), Caucasian/White (n = 33), Hispanic (n = 3), and Multiracial (n = 7). Participants in this study were in the General Adolescent Population (n = 42) and the Accountability Based Sex Offense Prevention Program (ABSOPP) (n = 45). Finally, of the 87 participants, 47 (n = 47) were repeat offenders.

Study Setting

The participants of this study were incarcerated males at the ADYS on the campus of Mt. Meigs. The location and setting for this study was in a juvenile justice system for adjudicated males youth ages 12 to 21, with most of the males being the ages of 16 and 19. Mt. Meigs serves the General Adolescent Population (GAP) as well as three other specialized programs. These specialized programs include the Accountability Program Based Sex Offense Prevention Program (ABSOPP), the Chemical Addiction Program (CAP), and the Intensive Treatment Unit (ITU). Due to the lack of access to the CAP and ITU

programs, only the students from the GAP and ABSOPP programs participated. All students attending ADYS schools receive educational services and vocational training in a variety of trade areas. In addition, students receive services that include individual and group counseling, psychological assessment, recreational therapy, case management, educational and technical services, and other youth development services. At the time of this study, Mt. Meigs had an overall enrollment of approximately 119 students.

ADYS staff monitored, supervised, and assisted the participants in the computer labs during the data collection. The data were gathered in the two computer labs on the campus of Mt. Meigs. The volunteer participants were spaced apart in two computer labs. The computer labs were areas away from peers where education-related planning and activities occurred. Each participant had access to a computer. The on-line version of the SDS was administered using the on-line assessment platform, Pari-Connect. Most of the participants completed the instrument during an assigned resource period without a time restraint.

Research Design and Rationale

The SDS is an effective instrument that assesses and determines adolescents' occupational interests, personalities, and job success (Rayman & Atanasoff, 1999). The study used data from the SDS and was descriptive in nature. The data extracted from the surveys were analyzed to determine any trends apparent in the career interests of the student participants. The data were also analyzed to determine the correlation among and mean differences related to various demographic factors and the types of careers students with and without disabilities envisioned themselves participating in after high school. These demographic factors included disability type, race, age, gender, program type (GAP or ABSOPP), and repeat offenders.

Holland's SDS codes provide insight into the understanding of career development and career choice in an easy-to-understand, comprehensive, classification system. It expands the vocational options and enhances the career exploration of individuals, which allows for more successful transition directed post-secondary planning and better postschool outcomes. There are limited research studies concerning the use of the SDS and Holland's codes specifically with incarcerated youth with and without disabilities.

Due to the similarities between career development services and transition education, the SDS is likely a tool that could be successful when used in transition directed post-secondary planning.

Data Collection

Previously existing demographic data were transferred to the researcher from Mt. Meigs staff in order to align with the students who completed the on-line version of the SDS. After the demographic data were aligned with the SDS results for each participant, the data were analyzed to determine a relationship among disability area, age, race, program type, and repeat offenders. The Independent Variables (IV) for the study is demographic area of the individual student participants and the relationships and mean differences between first letter code and demographic factors of the participants. The Dependent Variable (DV) for the study was the first letter code of each participant from Holland's Self-Directed Search, which was administered to all students that volunteered in the target setting.

Materials and Equipment

All participants completed a demographic form. This demographic form (see Appendix A) measured the demographics of the population participating in this study. These demographics included age, gender identity, disability type, race, employment status, and repeat offender status.

The SDS is a well-known vocational interest inventory. The Self -Directed Search was used to assess participants' occupational interests and personalities (see Appendix B). Previously existing de-identified data from the SDS (Holland, 2017) was used in the study. Holland's SDS was originally developed by John Holland (1973) and has been completed by more than 22 million individuals and is widely recognized and accepted as a valid measure of an individuals' career interests (Rayman & Atanasoff, 1999). The new SDS 5th Edition was developed using John Holland's theory of vocational choice. The on-line version of the SDS consisted of automatic scoring and immediate feedback, three-letter occupational code, configuration of Holland's six vocational personality types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional), and O*Net database integration. The on-line assessment had users respond to questions regarding their occupational dreams, preferences for activities and occupations, perceived competencies, and self-estimates. The responses were then used to

create scores that reflect their resemblance to each of Holland's six occupational types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) (Behrens, & Nauta, 2014). According to Holland, individuals can identify into one or more of six different occupational types (Holland, 2017). Holland's personality types include descriptions of the personality and behavioral style of individuals based on the results of the assessment in a particular area. The three-letter codes reflect an individual's likes and dislikes and illustrates how these factors relate to work environments (Rayman & Atanasoff, 1999). The three-letter codes identified for each individual based on the responses to the SDS provided identification of recommended career path that is associated with each code. These codes were analyzed to determine the relationships between the three-letter codes and the previously described factors. Holland's theory and the Self-directed Search measures the career interests as reflected by the personality types of individuals (Barak & Cohen, 2002). Holland's hexagon is a comprehensive model that values the occupational interests and personalities of the individual and utilizes them in an effort to determine vocational interests and predict job success. The main objective of Holland's theory is to assist the individual in the vocational and occupational classification decision-making process through the determination of personal interests. Holland's codes are centered around the idea that every individual has personality and behavioral characteristics that are directly related to their vocational choice. The identification of relationships between the individual personality and environment could lead to a better understanding of career choice and future employment decisions.

Data Analysis and Procedures

The researcher met with potential participants to explain the purpose of the study, data collection, and present job interests and career options for the participating incarcerated youth. Auburn University's Institutional Review Board completed a full board review prior to this data collection. A letter from the IRB is in appendices (see Appendix C) at the end of this document. Participants then consented and were given the option to complete the demographic form and SDS. The signed consent forms were separated from the assessment to de-identify the participant (see Appendix D). All participants completed the on-line version of the Self-Directed Search in the computer lab and were monitored by the ADYS staff. The

first letter of the three-letter code resulting from the completion of Holland's Self-Directed Search was compiled, resulting in the data used for this study. Data were analyzed utilizing Statistical Package for Social Sciences (SPSS) for Windows, Version 26.0. Data were analyzed using descriptive statistics and inferential statistics. Descriptive statistics were used to highlight the frequency of specific first letter codes in relation to participant's demographic factors (disability area, age, race, program type, repeat offenders). Inferential statistics were used to determine the relationships between demographic factors (disability area, age, race, program type, repeat offenders) and the first letter of the three-letter code resulting from the SDS. The first letter indicates the strongest area of career interest for the respondent. All data were hand entered into SPSS, with a second individual also entering data to ensure all data entry were completed correctly. After data were verified as being entered correctly (cleaned and screen), they were analyzed through a variety of correlations and a series of Analyses of Variances (ANOVAs).

Correlational analysis and ANOVA's were conducted to analyze data from participant's first letter Holland code. Analysis was conducted to determine potential relationships and correlations between career interests and demographic factors (disability area, age, race, program type, and the repeat offenders) of participants.

Protection of Human Subjects

The Auburn University Instructional Review Board approved this study. Human subjects were placed in no danger due to the nature of the study and data collection. A staff member at the facility provided all data with the researcher. Demographic data were needed in order to analyze the variables by the categorical grouping variables (race, age, etc.). While the demographic data were collected, there were no direct connection of student by name. Participants were provided with an identifying code number. The data collected in this study had identifiers and data were maintained in a way to protect the anonymity of the participants. The identifying code number replaced the name and other identifying information of the selected participants. De-identified data were collected from the completed student SDS results and provided no identifiable demographic data. All names, birthdates, and other identifiers

were redacted prior to data being transferred to the researcher. All of these safeguards were put in place to ensure that the researcher would not identify student participants.

CHAPTER IV. RESULTS

Results from the data analysis are presented in this chapter. Participants' demographic information is discussed and illustrated in a chart. Next, first letter Holland code results from the Self-Directed Search were examined to evaluate the relationships and mean differences with five independent variables, including disability type, age, race, program type, and repeat offenders. Finally, descriptive data are discussed and illustrated in tables. A series of Correlations and ANOVAs were conducted to assess whether or not relationships exist between the variables and whether the means of the dependent variables are significantly different. Using information from the Correlations, research questions 1 through 5 are presented and followed by an explanation of the results. Correlational analysis in the form of Pearson Coefficient was utilized in an effort to determine if there is a correlation between demographic factors and first letter Holland code in Research Questions 1 through 5. These demographic factors included disability type, age, gender, race, and repeat offenders. Using information from the ANOVA, research questions 6 through 10 are presented and followed by an explanation of the results.

Participants in this study (n = 87) consisted of all males. Participants in this study consisted of students who received special education services under varying disability categories (n = 14) and students without disabilities (n = 73). Participants ranged in age from 14 to 20 with the following frequency: 14 (n = 5), 15 (n = 9), 16 (n = 18), 17 (n = 31), 18 (n = 16), 19 (n = 4) and 20 (n = 4). Race represented in the participant group are African American/Black (n = 44), Caucasian/White (n = 33), Hispanic (n = 3), and Multiracial/Mixed (n = 7). Of the 13 disability categories identified by IDEIA, participants in this study were representative of five disability categories. The five disability areas represented include: Other Health Impairment (OHI) (n = 4), Specific Learning Disability (SLD) (n = 6), Emotional Disturbance (ED) (n = 2), Speech Language Impairment (n = 1), and Intellectual Disability (ID) (n = 1). Finally, of the 87 participants, 47 were repeat offenders. Table 1 shows participants' demographic findings.

Table 1

Overview of Participant Demographics

Characteristics	N (%)
Age	
14	5 (5.7%)
15	9 (10.3%)
16	18 (20.7%)
17	31 (35.6%)
18	16 (18.4%)
19	4 (4.6%)
20	4 (4.6%)
Program Type	
General Population	42 (48.3%)
ABSOPP	45 (51.7%)
Race/Cultural Background	
African American/Black	44 (50.6%)
Caucasian/White	33 (37.9%)
Hispanic/Latino	3 (3.4%)
Multiracial/Mixed	7 (8.0%)
Repeat Offenders	
Yes	47 (54.0%)
No	40 (46.0%)

(table continues)

Table 1 (continued)

Characteristics	N (%)
Special Education Status	
Yes	14 (16.1%)
No	73 (83.9%)
Special Education Category	
Other Health Impairment	4 (4.6%)
Specific Learning Disability	6 (6.9%)
Emotional Disability	2 (2.3%)
Intellectual Disability	1 (1.1%)
Speech-Language Impairment	1 (1.1%)
None	73 (83.9%)

The following section describes the results of data analysis for each research question proposed by the current study.

Data Analysis Results

Correlational analysis in the form of Pearson Correlation Coefficient was utilized to determine if there is a correlation between demographic factors and first letter Holland code in Research Questions 1 to 5. These included disability type, age, race, program type, and repeat offenders.

Table 2

Correlations Among Study Variables

Correlations

	General or ABSOPP	RIASEC Code	Age	Race	Gender	Disability Area	Repeat Offender	Disability Yes or No
General or ABSOPP	1	-.188	-.473**	.341**	.b	-.276**	.384**	-.298**
RIASEC Code	-.188	1	.122	-.170	.b	.186	-.156	.236*
Age	-.473**	.122	1	-.140	.b	.096	-.253*	.127
Race	.341**	-.170	-.140	1	.b	-.174	.248*	-.227*
Gender	.b	.b	.b	.b	.b	.b	.b	.b
Disability Area	-.276**	.186	.096	-.174	.b	1	-.215*	.950**
Repeat Offender	.384**	-.156	-253*	.248*	.b	-.215*	1	-.224*
Disability Yes or No	-.298**	.236*	.127	-.227*	.b	.950**	-.224*	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

b Cannot be computed because at least one of the variables is constant.

Research Question 1

The first research question was stated as follows: Is there a relationship between disability type and first letter code of the Self-Directed Search? Correlation coefficient was calculated using the Pearson Coefficient to determine whether or not a statistically significant relationship exists between disability type and first letter code provided by the SDS results. The results indicated that there is not a statistically significant correlation between disability type and first letter SDS code, r (85) = .186, p = .084. Data

analysis indicates that there is no significant relationship between disability type and first letter code chosen by participants.

Research Question 2

The second research question was stated as follows: Is there a relationship between age and first letter code of the Self-Directed Search? Correlation coefficient was calculated using the Pearson Coefficient to determine whether or not a statistically significant relationship exists between age and first letter code provided by the SDS results. The results indicated that there is not a statistically significant correlation between age and first letter SDS code, r (85) = .122, p = .258. Data analysis indicates that there is no significant relationship between age and first letter code chosen by participants.

Research Question 3

The third research question was stated as follows: Is there a relationship between race and first letter code of the Self-Directed Search? Correlation coefficient was calculated using the Pearson Coefficient to determine whether or not a statistically significant relationship exists between race and first letter code provided by the SDS results. The results indicated that there is not a statistically significant correlation between race and first letter SDS code, r (85) = -.170, p = .116. Data analysis indicates that there is no significant relationship between race and first letter code chosen by participants.

Research Question 4

The fourth research question was stated as follows: Is there a relationship between program type and first letter code of the Self-Directed Search? Correlation coefficient was calculated using the Pearson Coefficient to determine whether or not a statistically significant relationship exists between program type and first letter code provided by the SDS results. The results indicated that there is not a statistically significant correlation between program type and first letter SDS code, r (85) = -.188, p =.081. Data analysis indicates that there is no significant relationship between program type and first letter code chosen by participants.

Research Question 5

The fifth research question was stated as follows: Is there a relationship between repeat offenders and first letter code of the Self-Directed Search? Correlation coefficient was calculated using the Pearson Coefficient to determine whether or not a statistically significant relationship exists between repeat offenders and first letter code provided by the SDS results. The results indicated that there is not a statistically significant correlation between repeat offenders and first letter SDS code r (85) = -.156, p =.148. Data analysis indicates that there is no significant relationship between repeat offenders and first letter code chosen by participants.

Research Question 6

The sixth research question was stated as follows: Is there a statistically significant mean difference between disability and the first letter code of the Self-Directed Search? A within-subjects ANOVA was used to compare disability and the first letter code of the SDS for each participant. Results of the ANOVA indicate that the mean difference between disability and the first letter code was significant, (F(1,85) = 5.02, p = .028). Data analysis indicates that there is a significant mean difference between disability and first letter code chosen by participants.

Table 3

ANOVA for Disability

RIASEC Code

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.007	1	16.007	5.016	.028
Within Groups	271.257	85	3.191		
Total	287.264	86			

Research Question 7

The seventh question was stated as follows: Is there a statistically significant mean difference between age and the first letter code of the Self-Directed Search? A within-subjects ANOVA was used to compare age and the first letter code of the SDS for each participant. Results of the ANOVA indicate that the mean difference between age and the first letter code was not significant, ($F(6,80) = .927$, $p = .480$). Data analysis indicates that there is not a significant mean difference between age and first letter code chosen by participants.

Table 4

ANOVA for Age

RIASEC Code

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.670	6	3.112	.927	.480
Within Groups	268.594	80	3.357		
Total	287.264	86			

Research Question 8

The eighth research question was stated as follows: Is there a statistically significant mean difference between race and the first letter code of the Self-Directed Search? A within-subjects ANOVA was used to compare race and the first letter code of the SDS for each participant. Results of the ANOVA indicate that the mean difference between race and the first letter code was significant ($F(3,83) = 2.06$, $p = .003$). Data analysis indicates that there is a significant mean difference between race and first letter code chosen by participants.

Table 5

ANOVA for Race

RIASEC Code

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	44.438	3	14.813	2.063	.003
Within Groups	242.827	83	2.926		
Total	287.264	86			

Research Question 9

The ninth research question was stated as follows: Is there a statistically significant mean difference between program type and the first letter code of the Self-Directed Search? A within-subjects ANOVA was used to compare program type and the first letter code of the SDS for each participant. Results of the ANOVA indicate that the mean difference between program type and the first letter code was not significant, ($F(1,85) = 3.11$, $p = .081$), but neared significance. Data analysis indicates that there is not a significant mean difference between program type and first letter code chosen by participants.

Table 6

ANOVA for Program Type

RIASEC Code

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.168	1	10.168	3.119	.081
Within Groups	277.097	85	3.260		
Total	287.264	86			

Research Question 10

The tenth research question was stated as follows: Is there a statistically significant mean difference between repeat offenders and the first letter code of the Self-Directed Search? A within-subjects ANOVA was used to compare repeat offenders and the first letter code of the SDS for each participant. Results of the ANOVA indicate that the mean difference between repeat offenders and the first letter code was not significant, ($F(1,85) = 2.13$, $p = .148$). Data analysis indicates that there is not a significant mean difference between repeat offenders and first letter code chosen by participants.

Table 7

ANOVA for Repeat Offender Status

RIASEC Code

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.026	1	7.026	2.131	.148
Within Groups	280.238	85	3.297		
Total	287.264	86			

CHAPTER V. DISCUSSION

The purpose of this study was to explore the career interests of incarcerated youth with and without disabilities. The researcher sought to examine the relationship between the dependent variable, first letter code of the Holland code, and independent variables, disability type, age, race, type of program, and repeat offender status. The students in this study were incarcerated youth at a juvenile justice system in the Deep South. This study was designed to increase an understanding of the career interests of incarcerated youth with and without disabilities who are being prepared for re-entry. Correlational analysis in the form of Pearson Coefficient was used in an effort to determine if there is a relationship between demographic factors and the first letter code of the Holland's SDS in research questions one to five. These factors included disability type, age, race, program type, and repeat offender status. A sequence of ANOVAs were used to determine statistical differences, if any, between the variables. This study is important because the analysis of the participants' responses in connection with the listed demographic factors may determine a relationship with the career interests of youth with and without disabilities who are incarcerated. This study aims to gain a better understanding of the needs incarcerated youth with and without disabilities have concerning career development, reentry, and whether these factors have a relationship with their career interests.

Incarcerated individuals are likely to have a disability (Bronson et al., 2015). The disability type of the participants was the first factor to be analyzed. The demographic information indicated that most of the participants that were identified with a disability were mild disabilities, Specific Learning Disability, Other Health Impairment, Emotional Disability, Intellectual Disability, and Speech Language Impairment. Research questions one and six analyzed the impact of the disability type on the career interests of the participants based on the first letter Holland code. Analysis of correlational data for research question 1 indicated that there was no significant relationship between disability type and the first letter code. Analysis of ANOVA data for research question number 6 found that there was a significant correlation between disability type and the first letter Holland code. A previous study indicated

that there was no significant difference in the Holland codes with high school students with and without disabilities.

The age of the participants was the second factor to be analyzed. The demographic information indicated that the age of participants ranged from 14 years to 20 years. Research questions two and seven analyzed the impact of the age on the career interests of participants based on the first letter Holland code. Analysis of correlational data for research question 2 indicated that there was no significant relationship between age and the first letter code. Analysis of ANOVA data for research question number seven found that there was no significant correlation between age and the first letter Holland code. The finding indicates that there is not a statistically significant relationship or correlation between the age of the participants and the first letter Holland code. The data in this study determined that the participants' age did not impact the results in any way that determined an identified trend. There is limited research related to the impact of age of incarcerated youth with and without disabilities on potential career interests. This paucity of research indicates potential future research into the impact of the age of participants as they transition back into the school and/or community and receive career development services or participate in a career development program.

The race of the participants was the third factor to be analyzed. The demographic information indicated that 50.6% of the participants were Black, 37.9% of the participants were White, 8% of the participants were Multiracial, and 3.4% of the participants were Hispanic. Research questions three and eight analyzed the impact of the race on the career interests of participants based on the first letter Holland code. Analysis of correlational data for research question 3 indicated that there was no significant relationship between race and the first letter code. Analysis of ANOVA data for research question number eight found that there was a significant correlation between race and the first letter Holland code. The data analysis indicated that race plays a statistically significant factor on the career interests of the participants. The data indicated that more Blacks participated in this study than any other race. According to the data, Blacks choose more responses on the SDS that resulted in a first letter code of Enterprising while Whites scored in Realistic. The results of this study were consistent with prior research. Research

completed by Booker (2021) explored the career interests of male and female students with disabilities in a high school. According to this study, the race of the high school students in this study has an impact on their career interests.

The program type was the fourth factor to be analyzed. The demographic information indicated that 48.3% of the participants were in the General Adolescent Population program and 51.7% were in the Accountability Based Sex Offense Prevention Program. Research questions four and nine analyzed the impact of the program type on the career interests of participants based on the first letter Holland code. Analysis of correlational data for research question four indicated that there no statistically significant correlation between program type and first letter code. Analysis of ANOVA data for research question nine found no significant difference, but neared significance between program type and first letter code chosen by the participants.

The repeat offender status was the fifth and final factor to be analyzed. The demographic information indicated that 54% of the participants were repeat offenders and 46% were first offenders. Research questions five and ten analyzed the impact of the repeat offender status and on the career interests of participants based on the first letter Holland code. Analysis of correlational data for research question five indicated that there is no statistically significant correlation between repeat offender status and first letter code. Analysis of ANOVA data for research question ten found no significant difference between repeat offender status and first letter code chosen by participants.

Limitations

Most youth in juvenile justice systems are incarcerated for short period of times. Facilities typically tailor instruction, services, and health programs for a transient highly variable population of youth. There were several limitations in this study. The limitations included sample make-up, limited variance of demographics of participants, and the study design. This study only provided insight into the career interests of incarcerated youth with and without disabilities. The career interests of incarcerated youth with and without disabilities were examined using the Self-Directed Search. The results of this

career interest survey were examined, analyzed, and compared to different identifies including disability type, age, race, type of program, and repeat offender status.

The generalization of this study may have been affected by the design and sample size. The sample size of this study could limit the generalization of the results when compared to the larger incarcerated juvenile population. The larger the sample size, the more generalization of the results. In addition, the sample size in this study is homogenous and may affect the generalizability of the results of a larger incarcerated youth population. This study's population consisted of incarcerated youth with and without disabilities in an institutional facility and therefore limits the generalizability of the results to incarcerated youth with and without disabilities in other state juvenile justice systems.

Another limitation in this study was not knowing if the participants had received career development or transition-related instruction on campus or in schools. Incarcerated youth with and without disabilities find it more difficult than their peers to engage in activities that are intended to prepare them for the return to school and/or the workforce.

Conclusions and Implications

Participants in this study were youth with and without disabilities who were involved in the juvenile justice system. All participants (n = 87) completed the Holland's SDS 5th Edition (Holland, 2017) as part of their educational and curricular planning process. All participants in this study were male students that were in the General Adolescent Population or Accountability Program Based Sex Offense Prevention Program at the juvenile justice system.

Deidentified previously existing data was transferred to the researcher with permission from the juvenile justice system to match the students who completed the on-line version of the Self-Directed Search. Data were analyzed to determine the relationship among disability type, age, race, program type, and repeat offender status have on the Self-Directed Search. The Independent Variables (IV) for this study was the demographic area of individual student participants and the relationships and mean difference between the first letter Holland code and demographic factors (disability type, age, race, type of program, and repeat offender status) of the participants. Correlational analysis in the form of Pearson

Coefficient was used in an effort to determine if there was a relationship between demographic factors and the first letter code of the Holland's Self-Directed Search. A series of ANOVA's and correlations were conducted to assess whether or not relationships exist between the variables and whether the means of the dependent variables are significantly different. Results from this study showed that the mean difference between disability and the first letter code was significant. The study also showed that the mean difference between race and the first letter code was significant. In addition, the study showed that the mean difference between program type and the first letter code was not significant but neared significance.

Juvenile crime in the United States has been a steady concern for decades (Zhang et al., 2010). In the United States, on any day, it is estimated that 93,000 youth are incarcerated (Houchins & Shippen, 2012). In 2006, United States law enforcement agencies arrested an estimated 2.2 million juveniles (Snyder, 2008). It is estimated that over 54,000 juvenile offenders are involved in the juvenile justice system, and approximately one-third of these incarcerated juveniles have been identified as individuals with disabilities (Farn & Adams, 2016). Research has demonstrated the correlation between the juvenile justice system involvement and education of incarcerated juveniles (Farn & Adams, 2016). Research has consistently indicated that incarcerated youth must have access to a high-quality education (Gagnon et al., 2015). Oftentimes, incarcerated youth with disabilities do not have access to appropriate education, special education, transition services, and related services in juvenile justice systems (Gagnon et al., 2015). Education plays a significant role in a juvenile offender's life, well-being, employment, income, and health (Farn & Adams, 2016). Incarcerated juveniles must receive a high quality education in order to make effective transitions from juvenile justice systems to school and the community. The need for this study is the seeming lack of information and understanding of career interests and career selection among incarcerated youth with and without disabilities as they prepare for transition back into the community and school. The results of this study showed that it would be useful in providing guidance to policy makers, juvenile justice system administrators, district administrators, teachers, and parents of incarcerated juveniles with the development of educational programs and services for incarcerated youth

with and without disabilities. The results from this study also showed that a career interest inventory could assist incarcerated juveniles in exploring more about themselves and their career interests and options. In this study, none of the participants had participated in any career interest survey. This means that this population should be afforded the opportunity to participate in and have access to a career interests survey. These opportunities should be afforded to this population not only within the juvenile justice system but prior to being involved with the juvenile justice system. Having access to such career interest surveys could lead to reduced criminal behavior.

There have been studies conducted using the SDS. These studies have included the use of the SDS. Some of the studies have examined the different participant populations, such as adjudicated male adolescents (Glaser et al., 2003); learning disabled and non-learning disabled high school students (Cummings & Madduck, 1987); undecided freshman college students (Miller & Woycheck, 2003), and at-risk youth (Osborn & Reardon, 2006). Further research is needed to further develop the literature on the career interests of incarcerated youth with and without disabilities. The results of this study indicated that there is a significant means difference between Holland's first letter code and disability and Holland's first letter code and race of the participants. Further research should include the difference between incarcerated youth with and without disabilities and their general education counterparts. In addition, the study should be replicated with juveniles from other state juvenile correctional systems to compare/contrast the results to the current study and to enhance the generalizability of the study.

Future Research

Future research is needed to develop more literature on the career interests of incarcerated youth with and without disabilities. The following are suggestions for future research:

a. A follow-up study with the participants from this study to determine the participants' employment statuses upon release and rate of recidivism.
b. Replicate this study using other juvenile offenders from Alabama's juvenile justice system to compare/contrast results to this study.
c. Explore the differences between program types of general versus sex offenders.

d. Replicate this study with incarcerated juveniles from other states to compare/contrast the results to this study and to increase the generalizability of this study.

e. Explore the career interest pre-release compared to post-release of participants.

The purpose of this study was to use a career interests survey to explore the career interests of incarcerated youth with and without disabilities and to increase the juvenile offenders' awareness of their career interests, options, and development. This career awareness could ultimately increase the participants' employment options and reduce recidivism. This study does not imply that by using a career interest survey to assist incarcerated juveniles evaluate and identify their career interests and options is the only way to increase employment options. This study does not guarantee reduced recidivism or increased employment; however, it shows that it may be a step in the right direction. The results from this study support the utilization of a career interest survey for juvenile offender reentry in the attempt to improve the post-outcomes of youth with and without disabilities.

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Appendix A

Career Demographic Form

Career Interest Research Study

Demographic Form

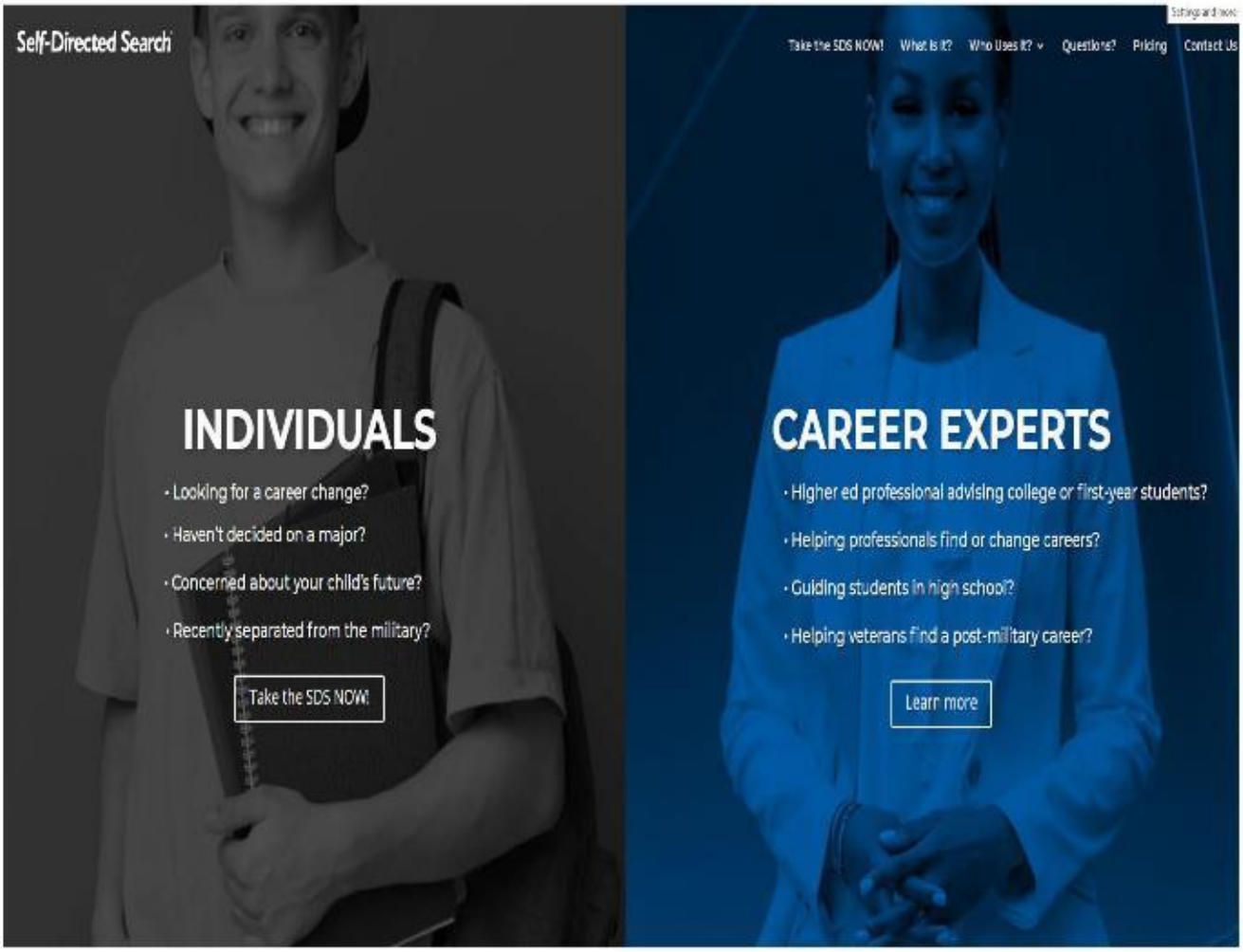
Please respond to the following questions:

	Question	Circle or write your response
1	Age: _____(in years)	
2	Is this your first time in custody?	Yes or No
3	Gender Identity	Female Male Transgender Other
4	Race/ethnicity (choose the primary one):	African American/Black Caucasian/White Asian Hispanic/Latino Mixed race Other:_____
5	Do you have a diagnosed disability? (IEP or 504 Plan)	Yes or No
6.	Have you ever had a job?	Yes or No
7.	What was the last job you held before you were incarceration if you answered Yes in #6?	

Thank you for participating in our research study about Career Interests!

Appendix B

Self -Directed Search Inventory



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Student Self-Directed Search® [Student SDS®]

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A-Z

Self-Directed Search®, 5th Edition

John L. Holland, PhD, and Melissa A. Messer, MHS

Purpose:	Assesses career interests
Format:	Paper and pencil, Online administration and scoring via PARiConnect
Age range:	11 years to 70 years
Time:	25-35 minutes
Qualification level:	A

DETAILS | RESOURCES | PRICING

The fifth edition of the SDS is designed to help clients learn about themselves and their career options. In 2017, the SDS Form R, 5th Edition was renamed the StandardSDS and given a new look and feel. The Occupations Finder (OF) and Educational Opportunities Finder (EOF) were updated, and workbooks were revised. However, **no items were changed or added, so the two versions can be used equally and interchangeably.**

Available in Spanish

The SDS Form R, 5th Edition Spanish version was designed specifically for Spanish-speaking individuals living in the U.S. A Spanish kit, which includes an English-language manual, and English-language Spanish version manual supplement, 25 Spanish Assessment Booklets, 25 Spanish Occupations Finders, and 25 You and Your Career Booklets. Spanish forms are also available. These products use English norms only.

A revised online version of the SDS is also available. Users receive one of three types of interactive, customized reports (StandardSDS, StudentSDS, or VeteranSDS) based on their demographic information and job history. Visit the SDS Web site for more information.

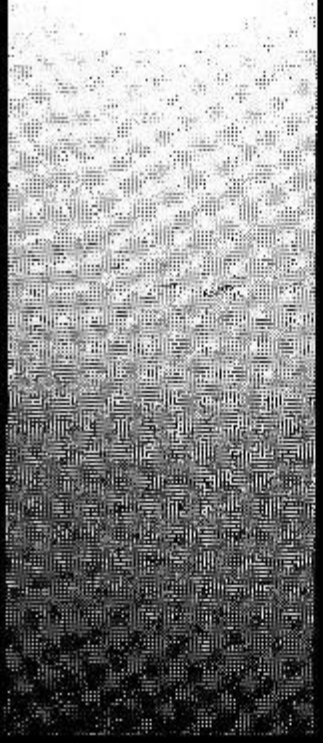
The following SDS Form R, 5th Edition, formats and materials are still available:

- PARiConnect
- Veterans and Military Occupations Finder (see "Pricing")

SDS

SELF-DIRECTED SEARCH®

FORM R
4th Edition



PAR

Name _____ **AB**

ASSESSMENT BOOKLET

A Guide to Educational and Career Planning

By John L. Holland, PhD

This booklet may help you explore what occupation to follow. If you have already made up your mind about an occupation, it may support your idea or suggest other possibilities. If you are uncertain about what occupation to follow, the booklet may help you to locate a small group of occupations for further consideration. Most people find that filling out this booklet is helpful and fun. If you follow the directions carefully, page by page, you should enjoy the experience. Do not rush; you will gain more by approaching the task thoughtfully. Use a lead pencil, so you can erase easily.

Name ______________________________

Age ________ Sex ____________ Date ______________________

Years of education completed ______________________________

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Occupational Daydreams

1. List below the occupations you have considered in thinking about your future. List the careers you have daydreamed about as well as those you have discussed with others. Try to give a history of your daydreams. Put your most recent choice on Line 1 and work backwards to the earlier jobs you have considered.

Occupation	Code		
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

2. Now use The Occupations Finder. Locate the three-letter code for each of the occupations you just wrote down. This search for occupational codes will help you learn about the many occupations in the world. This task usually takes from 5 to 15 minutes. The Alphabetized Occupations Finder, which is available separately, may make your search easier.

   If you can't find the exact occupation in The Occupations Finder, use the occupation that seems most like your occupational aspiration.

   If you're in a hurry, do the coding after you complete this booklet.

Activities

Blacken under **L** for those activities you would like to do. Blacken under **D** for those things you would dislike doing or would be indifferent to.

R

	L	D
Fix electrical things		
Repair cars		
Fix mechanical things		
Build things with wood		
Take a Technology Education (e.g., Industrial Arts, Shop) course		
Take a Mechanical Drawing course		
Take a Woodworking course		
Take an Auto Mechanics course		
Work with an outstanding mechanic or technician		
Work outdoors		
Operate motorized machines or equipment		
Total No. of Ls		

I

	L	D
Read scientific books or magazines		
Work in a research office or laboratory		
Work on a scientific project		
Study a scientific theory		
Work with chemicals		
Apply mathematics to practical problems		
Take a Physics course		
Take a Chemistry course		
Take a Mathematics course		
Take a Biology course		
Study scholarly or technical problems		
Total No. of Ls		

A

	L	D
Sketch, draw, or paint		
Design furniture, clothing, or posters		
Play in a band, group, or orchestra		
Practice a musical instrument		
Create portraits or photographs		
Write novels or plays		
Take an Art course		
Arrange or compose music of any kind		
Work with a gifted artist, writer, or sculptor		
Perform for others (dance, sing, act, etc.)		
Read artistic, literary, or musical articles		
Total No. of Ls		

S

	L	D
Meet important educators or therapists	☐	☐
Read sociology articles or books	☐	☐
Work for a charity	☐	☐
Help others with their personal problems	☐	☐
Study juvenile delinquency	☐	☐
Read psychology articles or books	☐	☐
Take a Human Relations course	☐	☐
Teach in a high school	☐	☐
Supervise activities for mentally ill patients	☐	☐
Teach adults	☐	☐
Work as a volunteer	☐	☐
Total No. of Ls	☐	

E

	L	D
Learn strategies for business success	☐	☐
Operate my own service or business	☐	☐
Attend sales conferences	☐	☐
Take a short course on administration or leadership	☐	☐
Serve as an officer of any group	☐	☐
Supervise the work of others	☐	☐
Meet important executives and leaders	☐	☐
Lead a group in accomplishing some goal	☐	☐
Participate in a political campaign	☐	☐
Act as an organizational or business consultant	☐	☐
Read business magazines or articles	☐	☐
Total No. of Ls	☐	

C

	L	D
Fill out income tax forms	☐	☐
Add, subtract, multiply, and divide numbers in business or bookkeeping	☐	☐
Operate office machines	☐	☐
Keep detailed records of expenses	☐	☐
Set up a record-keeping system	☐	☐
Take an Accounting course	☐	☐
Take a Commercial Math course	☐	☐
Take an inventory of supplies or products	☐	☐
Check paperwork or products for errors or flaws	☐	☐
Update records or files	☐	☐
Work in an office	☐	☐
Total No. of Ls	☐	

5

Competencies

Blacken under **Y** for "Yes" for those activities you can do well or competently. Blacken under **N** for "No" for those activities you have never performed or perform poorly.

R

	Y	N
I have used wood shop power tools such as a power saw, lathe, or sander		
I can make a scale drawing		
I can change a car's oil or tire		
I have operated power tools such as a drill press, grinder, or sewing machine		
I can refinish furniture or woodwork		
I can make simple electrical repairs		
I can repair furniture		
I can use many carpentry tools		
I can make simple plumbing repairs		
I can build simple articles of wood		
I can paint rooms of a house or an apartment		
Total No. of Ys		

I

	Y	N
I can use algebra to solve mathematical problems		
I can perform a scientific experiment or survey		
I understand the "half-life" of a radioactive element		
I can use logarithmic tables		
I can use a computer to study a scientific problem		
I can describe the function of the white blood cells		
I can interpret simple chemical formulae		
I understand why man-made satellites do not fall to earth		
I can write a scientific report		
I understand the "Big Bang" theory of the universe		
I understand the role of DNA in genetics		
Total No. of Ys		

A

	Y	N
I can play a musical instrument		
I can participate in two- or four-part choral singing		
I can perform as a musical soloist		
I can act in a play		
I can do interpretive reading		
I can do a painting, watercolor, or sculpture		
I can arrange or compose music		
I can design clothing, posters, or furniture		
I write stories or poetry well		
I can write a speech		
I can take attractive photographs		
Total No. of Ys		

6

S

	Y	N
I find it easy to talk with all kinds of people	☐	☐
I am good at explaining things to others	☐	☐
I could work as a neighborhood organizer	☐	☐
People seek me out to tell me their troubles	☐	☐
I can teach children easily	☐	☐
I can teach adults easily	☐	☐
I am good at helping people who are upset or troubled	☐	☐
I have a good understanding of social relationships	☐	☐
I am good at teaching others	☐	☐
I am good at making people feel at ease	☐	☐
I am much better at working with people than with things or ideas	☐	☐
Total No. of Ys	☐	

E

	Y	N
I know how to be a successful leader	☐	☐
I am a good public speaker	☐	☐
I can manage a sales campaign	☐	☐
I can organize the work of others	☐	☐
I am an ambitious and assertive person	☐	☐
I am good at getting people to do things my way	☐	☐
I am a good salesperson	☐	☐
I am a good debater	☐	☐
I can be very persuasive	☐	☐
I have good planning skills	☐	☐
I have some leadership skills	☐	☐
Total No. of Ys	☐	

C

	Y	N
I can file correspondence and other papers	☐	☐
I have held an office job	☐	☐
I can use an automated posting machine	☐	☐
I can do a lot of paperwork in a short time	☐	☐
I can use simple data processing equipment	☐	☐
I can post credits and debits	☐	☐
I can keep accurate records of payment or sales	☐	☐
I can enter information at a computer terminal	☐	☐
I can write business letters	☐	☐
I can perform some routine office activities	☐	☐
I am a careful and orderly person	☐	☐
Total No. of Ys	☐	

7

Occupations

This is an inventory of your feelings and attitudes about many kinds of work. Show the occupations that *interest* or *appeal* to you by blackening under **Y** for "Yes." Show the occupations that you *dislike* or find *uninteresting* by blackening under **N** for "No."

	Y	N
Airplane Mechanic		
Auto Mechanic		
Carpenter		
Truck Driver		
Surveyor		
Construction Inspector		
Radio Mechanic		
Locomotive Engineer		
Machinist		
Electrician		
Farmer		
Helicopter Pilot		
Electronic Technician		
Welder		
Total R Yes		

	Y	N
Career Counselor		
Sociologist		
High School Teacher		
Substance Abuse Counselor		
Juvenile Delinquency Expert		
Speech Therapist		
Marriage Counselor		
Clinical Psychologist		
Social Science Teacher		
Personal Counselor		
Youth Camp Director		
Social Worker		
Rehabilitation Counselor		
Playground Director		
Total S Yes		

	Y	N
Meteorologist		
Biologist		
Astronomer		
Medical Laboratory Technician		
Anthropologist		
Chemist		
Independent Research Scientist		
Writer of Scientific Articles		
Geologist		
Botanist		
Scientific Research Worker		
Physicist		
Social Science Researcher		
Environmental Analyst		
Total I Yes		

	Y	N
Buyer		
Advertising Executive		
Manufacturer's Representative		
Business Executive		
Master of Ceremonies		
Salesperson		
Real Estate Salesperson		
Department Store Manager		
Sales Manager		
Public Relations Executive		
TV Station Manager		
Small Business Owner		
Legislator		
Airport Manager		
Total E Yes		

	Y	N
Poet		
Musician		
Novelist		
Actor/Actress		
Free Lance Writer		
Musical Arranger		
Journalist		
Artist		
Singer		
Composer		
Sculptor/Sculptress		
Playwright		
Cartoonist		
Entertainer		
Total A Yes		

	Y	N
Bookkeeper		
Budget Reviewer		
Certified Public Accountant		
Credit Investigator		
Bank Teller		
Tax Expert		
Inventory Controller		
Computer Operator		
Financial Analyst		
Cost Estimator		
Payroll Clerk		
Bank Examiner		
Accounting Clerk		
Audit Clerk		
Total C Yes		

Self-Estimates

1. Rate yourself on each of the following traits *as you really think you are when compared with other persons your own age*. Give the most accurate estimate of how you see yourself. Circle the appropriate number and *avoid rating yourself the same in each ability*.

	Mechanical Ability	Scientific Ability	Artistic Ability	Teaching Ability	Sales Ability	Clerical Ability
High	7	7	7	7	7	7
	6	6	6	6	6	6
	5	5	5	5	5	5
Average	4	4	4	4	4	4
	3	3	3	3	3	3
	2	2	2	2	2	2
Low	1	1	1	1	1	1
	R	**I**	**A**	**S**	**E**	**C**

	Manual Skills	Math Ability	Musical Ability	Under-standing of others	Managerial Skills	Office Skills
High	7	7	7	7	7	7
	6	6	6	6	6	6
	5	5	5	5	5	5
Average	4	4	4	4	4	4
	3	3	3	3	3	3
	2	2	2	2	2	2
Low	1	1	1	1	1	1
	R	1	**A**	**S**	**E**	**C**

How To Organize Your Answers

Start on page 4. Count how many times you said **L** for "Like." Record the number of **L**s or **Y**s for each group of Activities, Competencies, or Occupations on the lines below.

	R	I	A	S	E	C
Activities (pp. 4-5)	___	___	___	___	___	___
Competencies (pp. 6-7)	___	___	___	___	___	___
Occupations (p. 8)	___	___	___	___	___	___
Self-Estimates (p. 9) (What number did you circle?)	R	I	A	S	E	C
	___	___	___	___	___	___
Total Scores (Add the five R scores, the five I scores, the five A scores, etc.)	___	___	___	___	___	___

The letters with the three highest numbers indicate your Summary Code. Write your Summary Code below. (If two scores are the same or tied, put both letters in the same box.)

Summary Code

Highest	2nd	3rd
☐	☐	☐

What Your Summary Code Means

Your Summary Code is a simple way of organizing information about people and jobs. It can be used to discover how your special pattern of interests, self-estimates, and competencies resembles the patterns of interests and competencies that many occupations demand. In this way, your Summary Code locates suitable groups of occupations for you to consider.

It is vital that you search The Occupations Finder for every possible ordering of your three-letter code. For example, if you are an **ESC**, search for all the **ESC**, **ECS**, **SEC**, **SCE**, **CES**, and **CSE** occupations by completing Steps 1 and 2.

Step 1. Find the occupations whose codes are *identical* with yours and list those occupations that are of interest to you. If your code is **SEI**, occupations with codes **SEI** are identical. Go to Step 2, whether or not you find an occupation with a code identical to yours.

Summary Code _____

Occupation	Education	Occupation	Education

Step 2. Make a list of occupations whose Summary Codes *resemble* yours. Search The Occupations Finder for the five arrangements of your code. For example, if your code is **IRE**, search for occupations with codes of **IER**, **RIE**, **REI**, **EIR**, and **ERI**. Start by writing down the five possible letter arrangements of your Summary Code. (If your Summary Code includes a tie such as **RIEA**, you must look up more letter combinations and their arrangements.)

Similar Codes _____ _____ _____ _____

Occupation	Education	Occupation	Education

Go to the Next Page

Some Next Steps

1. The SDS is most useful when it reassures you about your vocational choice or reveals new possibilities worthy of consideration. If it fails to support a choice or an anticipated job change, don't automatically change your plans. Instead, do some investigation to make sure you understand the career you have chosen and the occupations suggested by the SDS.

2. Compare your *Summary Code* with the codes for your Occupational Daydreams on page 3. They should be similar, but it is not necessary that your SDS code matches your aspirational or job code—letter for letter. Occupations tolerate a variety of types. It is important that your three letter code at least resembles the three-letter code of your favorite occupational choice. For example, your SDS code is **IOE**, and the occupation you aspire to is coded **IRC**. Other examples of strong to moderate resemblance would include occupational codes of **RIA, EIR, RSA**. If you can see no relation between your SDS code and your aspiration, you should examine your potential satisfaction for that occupation with a counselor or a friend.

3. Investigate the educational requirements for the occupations that interest you. Go back to The Occupations Finder and find out how much education or training is required for each occupation you listed earlier. Where could you obtain the required training? Is it financially possible? Is it reasonable in terms of your learning ability, age, family situation?

4. Consider any health or physical limitations that might affect your choice and how you can or would cope with them.

5. Seek more information about occupations from local counseling centers, school counselors, libraries, labor unions, employment services, and occupational information files (usually found in counseling offices). Talk to people employed in the occupations in which you are especially interested. Most people enjoy talking about their work. Remember, however, that they may have personal biases, so talk to several people in the same occupation. Try to obtain part-time work experience that is similar to the activities in the occupations you are considering. Read articles and books that describe occupations or attempt to explain current scientific knowledge about the choice of an occupation. Some suggestions are listed on page 13.

6. Remember that your results on the SDS are affected by many factors in your background—your sex, your age, your parents' occupations, and ethnic or racial influences. For example, because society often encourages men and women to aspire to different vocations, women receive more **S**, **A**, and **C** codes than men, while men obtain more **I**, **R**, and **E** codes. Yet we know that almost all jobs can be successfully performed by members of either sex. If your codes differ from your Occupational Daydreams, keep these influences in mind; they may account for the differences, and you may decide to stick with your Daydreams.

7. Remember: no one but you can make your vocational decision. Our knowledge of careers is too limited to provide you with a single, exact choice, but we can help you focus on some of the more likely possibilities.

Some Useful Books

Anthony, R. J., & Rea, C. (1991). *Over 40 and looking for work?: A guide for the unemployed, underemployed, and unhappily employed*. Holbrook, MA: B. Adams.

Bolles, R. N. (1994). *What color is your parachute? A practical manual for job hunters and career changers*. Berkeley, CA: Ten Speed Press.

Carney, C., & Wells, C. (1991). *Discover the career within you* (3rd ed.). Pacific Grove, CA: Brooks/Cole.

Farr, J. M. (1993). *The complete guide for occupational exploration*. Indianapolis, IN: JIST Works.

Field, S. (1992). *100 best careers for the year 2000*. New York: Prentice Hall.

Figler, H. (1988). *The complete job-search handbook*. New York: Henry Holt and Company.

Gottfredson, G. D., & Holland, J. L. (1989). *Dictionary of Holland occupational codes* (2nd ed.). Odessa, FL: Psychological Assessment Resources.

Harkavy, M. D. (1990). *101 careers: A guide to the fastest-growing opportunities*. New York: Wiley.

Holland, J. L. (1992). *Making vocational choices: A theory of vocational personalities and work environments*. Odessa, FL: Psychological Assessment Resources.

Hopke, W. E. (1993). *The encyclopedia of careers and vocational guidance* (9th ed.). Chicago: J. G. Ferguson Pub.

Krannich, R. L. (1993). *Careering and re-careering for the 1990s* (3rd ed.). Manassas Park, VA: Impact Publications.

Medley, H. A. (1992). *Sweaty palms: The neglected art of being interviewed*. Berkeley, CA: Ten Speed Press.

Moore, D. J., with VanderWey, S. (1994). *Take charge of your own career: A guide to federal employment*. Odessa, FL: Psychological Assessment Resources.

Need a lift? Educational opportunities, careers, loans, scholarships, employment. (1993). Indianapolis: The American Legion. (These inexpensive booklets are published every year and may be ordered from The American Legion, National Emblem Sales, P.O. Box 1050, Indianapolis, IN, 46206.

Petras, K. (1993). *Jobs '94*. New York: Simon & Schuster.

Savage, K. M., & Novallo, A. (Eds.). (1992). *Professional careers sourcebook* (2nd ed.). Detroit, MI: Gale Research.

Shahnasarian, M. (1993). *Decision time*. Odessa, FL: Psychological Assessment Resources.

Shey, B., & Gottlieb, A. (1979). *Wishcraft: How to get what you really want*. New York: Viking Press.

U.S. Department of Labor, Bureau of Labor Statistics. (1992-1993). *Occupational outlook handbook*. Washington, DC: U.S. Government Printing Office. (This handbook is published every two years and is the best single source for information about occupations. See your counselor or library, or order from Superintendent of Documents, U.S. Government Printing Office, Washington, DC, 20402.)

Will, M. A. (1992). *Job strategies for people with disabilities: Enable yourself for today's job market*. Princeton, NJ: Peterson's Guides.

Appendix C

Letter from Department of Youth Services

STATE OF ALABAMA
DEPARTMENT OF YOUTH SERVICES

KAY IVEY
GOVERNOR

POST OFFICE BOX 66
MT. MEIGS, ALABAMA 36057

STEVEN LAFRENIERE
EXECUTIVE DIRECTOR

November 25, 2020

Auburn University Institutional Review Board
c/o Office of Research Compliance
115 Ramsay Hall
Auburn, AL 36849

Please note that I, Steven Lafreniere, Alabama Department of Youth Services (ADYS) Executive Director for Juvenile Services, grant permission to Mr. Curtis Gage and Dr. Peggy Shippen to conduct research at our Mt. Meigs, Alabama facility for his study, "The Examination of Career Interests and Career Development of Incarcerated Youth with and without Disabilities."

I understand that the purpose of this study is to examine the career interests of incarcerated youth with and without disabilities as measured by the Self-Directed Search (SDS) assessment for youth ranging from age 14-21. The primary activity will be collecting and analyzing scores from the SDS summary report. I understand that Mr. Gage is requesting anonymous data with no identifiable information about the youth. In order to ensure the safety and minimize the risks of COVID-19 of staff, selected participants, and researchers, this research study will be conducted remotely. Mr. Gage and Dr. Shippen will change from a face-to-face, paper and pencil assessment, to an online version of the SDS. The purpose of this study, SDS presentation, and method of collecting and interpreting data, will be live streamed via Zoom. The selected participants in this study will be supervised by staff during a designated day and time.

Mr. Gage and Dr. Shippen have agreed to provide me with a copy of all Auburn University Institutional Review Board approved, stamped consent documents before he begins collecting data. Mr. Gage has also agreed to provide us a copy of the aggregate results from his study, as well as any data that ADYS requests regarding his dissertation.

If you have any questions regarding this matter, please do not hesitate to e-mail me at Steven.P.Lafreniere@dys.alabama.gov or 334-215-3800.

Sincerely,

Steven Lafreniere
Executive Director for Juvenile Services
Alabama Department of Youth Services

Appendix D

Consent Forms

AUBURN
UNIVERSITY
DEPARTMENT OF
SPECIAL EDUCATION,
REHABILITATION, AND COUNSELING

For a Research Study entitled:

The Examination of Career Interests and Career Development of Incarcerated Youth with and without Disabilities

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS AN APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)

Guardian Consent and Minor Assent Form

Student Name: _____

You are being invited to take part in a research study about how males like you make decisions.

This study is being conducted by Mr. Curtis Gage, Ph. D. student at Auburn University under the guidance of Dr. Margaret Shippen from the Auburn University, Department of Special Education, Rehabilitation, and Counseling. You are being asked to join the study because you are staying at an Alabama Department of Youth Services (ADYS) facility and are between the ages of 14 to 21. Mr. Gage will get permission from you and ADYS before including you in the study. The form I am reading to you now will give you all the information you need to decide whether you want to be in the study or not.

What will you be asked to do? You have an opportunity to take part in this research study as a student at Mt. Meigs. You will be asked to complete an interest survey related to your job interests. The name of this interest survey is called the Self-Directed Search (SDS). The SDS helps individuals learn about themselves and their job options. This interest survey helps individuals find jobs that match their interests and abilities. For example, the report may ask you questions about your favorite activities and interests. The choices provided in the interest survey will help you decide on your personal goals, skills, enjoyment, and dreams. The interest survey will take approximately 1 hour to complete.

Parent/Guardian Initials_____ Student Initials_____

After completing the interest survey, you will be given a report. This report will provide a list of possible job options for you to consider as you think about your future and employment search. In addition, you will be given a Summary Code which provides a list of jobs, fields of study, and enjoyable activities that match your Summary Code. Reviewing the report may take an additional 45 minutes. The entire process will take approximately 2 hours to complete. We will provide scheduled breaks but if you need to take an additional break at any time, just let me know. Here is a detailed outline of what you will be asked to do:

1. Using a computer, you will answer a series of questions about decisions related to possible job options for you to think about which will take about 1 hour.
2. After the completion of the job survey, you will be provided with a report that includes includes your Job Daydreams, Summary Code, and a list of next steps and resources. We will review the report with you which will take approximately 45 minutes.

Voluntary Participation : Your help in this study is completely your choice. If you choose to be in the study now, you are free to change your mind at any time and for any reason. If you choose not to be in the study now or at any time, it will not be held against you in any way. Participation in this study will not affect you in a negative way or change your release from this facility in any way.

Confidentiality: The information you provide will be kept strictly private. This means we will not share your information with anyone outside of this facility without your permission. There are some exceptions to this. If you tell us that you want to harm yourself or someone else or if you tell that us that someone has harmed you or someone else we are required to report this information. This is to keep you and others safe while you are here. All the information you provide will be coded in a manner that will minimize connections back to you. This means we will not write your name on any of the forms. We will use a number instead so that no one will know the information is about you.

Parent/Guardian Initials Student Initials

Benefits, Risks, and Discomforts: The SDS may support your job choice or give new job possibilities worthy of consideration. However, it is possible that you may not receive any direct gain from this study. The SDS may fail to support your choice or likely job choice. If SDS does not support your job choice, instead of possibly changing your job plans, do some research to make sure you understand the job you have chosen, and the jobs suggested by the SDS. The information you provide in the study will help us better understand how males like you make job decisions. We take very special care when collecting and using the information you provide to the research team, so there is very little risk that it is ever linked back to you.

It is also possible that you may be exposed to COVID-19 by participating in face to face research activities. However, we are taking special care to minimize this risk. This research study will use computers for this study. The research team will also use the Internet to see, hear, and talk with you during the survey.

Use of Current, Existing, and Future Data: If you choose to be in the study, the information you are providing today and throughout your time here will be used to help us understand how to meet your goals and needs. It will also be used to improve the education services program at Mt. Meigs. Your name and identifying information will never be used or displayed in any scientific publications or presentations.

If you have any questions, please ask them now. If you are not comfortable with anything we have said above, please do not sign the form. Remember, if you agree to be in the study by signing this form, you can still stop participating in the study at any time. If you have questions later, you may request to speak with either myself, Curtis Gage, or Dr. Shippen by asking your ADYS legal guardian, dorm manager, or instructor. You will be offered a copy of this form to keep if you choose. For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or email hsubject@auburn.edu or IRBChair@auburn.edu. An ADYS Advocate is available if you have any questions about this project. The Advocate may be contacted through the Office of Research Compliance at the phone number or email listed above.

Parent/Guardian Initials _____ Student Initials _____

STUDENT ASSENT: HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY.

____ I ACCEPT and wish to participate in the study.

I DO NOT ACCEPT and wish to decline.

Student Signature Date Student Printed Name Date

*Having met with this student, your signature indicates the student has the mental capacity to proceed with the consenting process.

Assenting Examiner Signature Date Assenting Examiner Printed Name Date

LEGAL GUARDIAN CONSENT: HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH FOR THIS ADOLESCENT TO PARTICIPATE. AS THE LEGAL GUARDIAN AT THE TIME THE STUDENT WAS APPROACHED FOR PARTICIPATION, YOUR SIGNATURE BELOW INDICATES YOUR WILLINGNESS FOR THIS STUDENT TO PARTICIPATE IN THE STUDY.

ADYS Legal Guardian Signature Date ADYS Legal Guardian Printed Name Date

Parent/Guardian Initials Student Initials

Appendix E

Auburn University Institutional Review Board (IRB) Form

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS

RESEARCH PROTOCOL REVIEW FORM

FULL BOARD or EXPEDITED

For information or help contact **THE OFFICE OF RESEARCH COMPLIANCE (ORC)**
Phone: 334-844-5966 e-mail: IRBAdmin@auburn.edu Web Address: http://www.auburn.edu/research/vpr/ohs/index.htm

Revised 04.01.2021 **Submit completed form to IRBsubmit@auburn.edu**

Complete this form using Adobe Acrobat Writer (versions 5.0 and greater). Hand written copies not accepted.

1. PROPOSED START DATE of STUDY: July 2021 Today's Date: June 11, 202'

PROPOSED REVIEW CATEGORY (Check one): ☒ FULL BOARD ☐ EXPEDITED

SUBMISSION STATUS (Check one): ☒ NEW ☐ REVISIONS (to address IRB Review Comments)

2. PROJECT TITLE: The examination of career interests and career development of incarcerated youth wi

3. Curtis Gage	Doctoral Candidate	SERC	cag0047@auburn.edu
PRINCIPAL INVESTIGATOR	TITLE	DEPT	AU E-MAIL
2084 Haley Center		334-844-7677	
MAILING ADDRESS		PHONE	ALTERNATE E-MAIL

4. FUNDING SUPPORT: ☒ N/A ☐ Internal ☐ External Agency: _____ ☐ Pending ☐ Received

For federal funding, list agency and grant number (if available).

5a. List any contractors, sub-contractors, other entities associated with this project:

N/A

b. List any other IRBs associated with this project (including Reviewed, Deferred, Determination, etc.):

N/A

PROTOCOL PACKET CHECKLIST

All protocols must include the following items:

- ☐ **Research Protocol Review Form** (All signatures included and all sections completed)
  (Examples of appended documents are found on the OHSR website: http://www.auburn.edu/research/vpr/ohs/sample.htm)
- ☐ **CITI Training Certificates** for all Key Personnel
- ☐ **Consent Form or Information Letter** and any Releases (audio, video or photo) that the participant will sign.
- ☐ **Appendix A, "Reference List"**
- ☐ **Appendix B** if e-mails, flyers, advertisements, generalized announcements or scripts, etc., are used to recruit participants.
- ☐ **Appendix C** if data collection sheets, surveys, tests, other recording instruments, interview scripts, etc. will be used for data collection. Be sure to attach them in the order in which they are listed in # 13c.
- ☐ **Appendix D** if you will be using a debriefing form or include emergency plans/procedures and medical referral lists
  (A referral list may be attached to the consent document).
- ☐ **Appendix E** if research is being conducted at sites other than Auburn University or in cooperation with other entities. A **permission letter** from the site / program director must be included indicating their cooperation or involvement in the project. NOTE: If the proposed research is a multi-site project, involving investigators or participants at other academic institutions, hospitals or private research organizations, a letter of **IRB approval** from each entity is required prior to initiating the project.
- ☐ **Appendix F** - Written evidence of acceptance by the host country if research is conducted outside the United States.

The Auburn University Institutional Review Board has approved this Document for use from 05/19/2021 to 05/18/2022 Protocol # 21-225 MR 2105

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6. GENERAL RESEARCH PROJECT CHARACTERISTICS

6A. Research Methodology

Please check all descriptors that best apply to the research methodology.

Data Source(s): ☒ New Data ☐ Existing Data

Will recorded data directly or indirectly identify participants? ☐ Yes ☐ No

Data collection will involve the use of:

- ☐ Educational Tests (cognitive, diagnostic, aptitude, etc.)
- ☐ Interview
- ☐ Observation
- ☐ Location or Tracking Measures
- ☐ Physical / Physiological Measures or Specimens (see Section 6E)
- ☑ Surveys / Questionnaires
- ☐ Other: _____
- ☑ Internet / Electronic
- ☑ Audio
- ☑ Video
- ☐ Photos
- ☐ Digital Images
- ☐ Private records or files

6B. Participant Information

Please check all descriptors that apply to the target population.

☒ Males ☐ Females ☐ AU students

Vulnerable Populations

☐ Pregnant Women/Fetuses ☒ Prisoners ☐ Institutionalized

☒ Children and/or Adolescents (under age 18 in AL)

Persons with:

☒ Economic Disadvantages ☒ Physical Disabilities

☐ Educational Disadvantages ☒ Intellectual Disabilities

Do you plan to compensate your participants? ☐ Yes ☐ No

6C. Risks to Participants

Please identify all risks that participants might encounter in this research.

- ☒ Breach of Confidentiality*
- ☐ Deception
- ☐ Psychological
- ☐ None
- ☐ Other:
- ☒ Coercion
- ☐ Physical
- ☐ Social

*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.

6D. Corresponding Approval/Oversight

- Do you need IBC Approval for this study?
  ☐ Yes ☑ No

  If yes, BUA #_____ Expiration date _____

- Do you need IACUC Approval for this study?
  ☐ Yes ☑ No

  If yes, PRN #_____ Expiration date _____

- Does this study involve the Auburn University MRI Center?
  ☐ Yes ☑ No

  Which MRI(s) will be used for this project? (Check all that apply)
  ☐ 3T ☐ 7T

  Does any portion of this project require review by the MRI Safety Advisory Council?
  ☐ Yes ☑ No

  Signature of MRI Center Representative: _____
  Required for all projects involving the AU MRI Center

  Appropriate MRI Center Representatives:
  Dr. Thomas S. Denney, Director AU MRI Center
  Dr. Ron Beyers, MR Safety Officer

7. PROJECT ASSURANCES

A. PRINCIPAL INVESTIGATOR'S ASSSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
    a. Conducting the project by qualified personnel according to the approved protocol
    b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Research Compliance
    c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
    d. Promptly reporting significant adverse events and/or effects to the Office of Research Compliance in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise ORC, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Research Compliance before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

Curtis Gage	Curtis Gage (Digitally signed by Curtis Gage)	6-11-2021
Printed name of Principal Investigator	**Principal Investigator's Signature**	**Date**

B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

1. I have read the protocol submitted for this project for content, clarity, and methodology.
2. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
3. I agree to meet with the investigator on a regular basis to monitor study progress. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
4. I assure that the investigator will promptly report significant incidents and/or adverse events and/or effects to the ORC in writing within 5 working days of the occurrence.
5. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the ORC by letter of such arrangements. <u>If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.</u>

Margaret E. Shippen	Margaret Shippen (Digitally signed by Margaret Shippen)	6-14-2021
Printed name of Faculty Advisor / Sponsor	**Faculty Advisor's Signature**	**Date**

C. DEPARTMENT HEAD'S ASSSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Jeff Reese	Jeff Reese (Digitally signed by Jeff Reese)	06-14-2021
Printed name of Department Head	**Department Head's Signature**	**Date**

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8. **PROJECT OVERVIEW: Prepare an abstract that includes:**
(**350** word maximum, in language understandable to someone who is not familiar with your area of study):

a) **A summary of relevant research findings leading to this research proposal:**
(Cite sources; include a "Reference List" as ***Appendix A.****)*
b) **A brief description of the methodology, including design, population, and variables of interest**

A) In the United States, on any day, it is estimated that 93,000 youth are incarcerated (Houchins, & Shippen, 2012). It is estimated that over 54,000 youth offenders are held in correctional institutions, and approximately one-third of these incarcerated youth have been identified as individuals with disabilities (Farn & Adams, 2016). Research has consistently indicated that incarcerated youth must have access to a high-quality education (Gagnon, et al., 2015). In addition, incarcerated youth must receive high quality education in order to make effective transitions from youth correction systems to high school and the community. Researchers have documented that effective transition programs and services for incarcerated youth increase the chances of individuals successfully returning to their community and school (Clark, Mathur, & Helding, 2011). Although successful post-school and adult accomplishments are goals for incarcerated youth with disabilities, the immediate transition needs of these juveniles are critical (Baltodano, Mathur, & Rutherford, 2005). Transition services and supports should be at the forefront of programming when a youth with a disability enters the juvenile corrections system (Baltondano, et al., 2005). Thus, effective transition programs and services from the juvenile correctional system to the community are essential and imperative. One way of gathering data to inform the transition of youth who are incarcerated is to survey them about their career interests and career thinking.
B) The study design is a group descriptive design. No treatment will be implemented, only one vocational interest inventory. Based on the instrument (Letter Occupational Codes) a sample of 100 participants would be needed. The independent variables would be categorical (age, race, disability, length of incarceration, and repeat offender status. The dependent variables would be the results yielded from the Self-Directed Search which is the three letter Holland Code (Holland, 1994).

Participants: Incarcerated youth males with and without disabilities at the long-term facility

9. **PURPOSE.**
a. **Clearly state the purpose of this project and all research questions, or aims.**

The goal of transition for youth with disabilities is to plan for the future and have a focus on the youths' individualized strengths, preferences, and career interests. Therefore, the purpose of this study is to examine the career interests and career thinking of incarcerated youth with and without disabilities.
Research Questions
1. Is there a difference between the age and the first letter code yielded from the Self-Directed Search?
2. Is there a difference between the race and the first letter code yielded from the Self-Directed Search?
3. Is there a difference between the disability and the first letter code yielded from the Self-Directed Search?

b. **How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)**

The results will be used to complete the requirements of a dissertation study, to publish a manuscript in a scholarly journal, and may be used for presentations at professional conferences.

10. **KEY PERSONNEL.** Describe responsibilities. Include information on research training or certifications related to this project. **CITI is required. Be as specific as possible.** (Include additional personnel in an attachment.) *All key personnel must attach CITI certificates of completion.*

Principal Investigator Curtis Gage Title: Doctoral Candidate E-mail address cag0047@auburn.edu

Dept / Affiliation: SERC

Roles / Responsibilities:

Curtis Gage will collect, input, and analyze the data. Mr Gage has worked as a special education teacher for 10 years and is currently working as an Education Specialist, Special Education

Individual: Margaret Shippen Title: Professor E-mail address shippme@auburn.edu

Dept / Affiliation: SERC

Roles / Responsibilities:

Support the data analysis and results. Dr. Shippen has had a long standing relationship (over a decade) with the Alabama Department of Youth Services at the campus of Mt. Meigs. She had

Individual: _____ Title: _____ E-mail address _____

Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____

Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____

Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____

Dept / Affiliation: _____

Roles / Responsibilities:

11. **LOCATION OF RESEARCH.** List all locations where data collection will take place. (School systems, organizations, businesses, buildings and room numbers, servers for web surveys, etc.) **Be as specific as possible. Attach permission letters in** Appendix E.
(See sample letters at http://www.auburn.edu/research/vpr/ohs/sample.htm)

The collection and interpretation of the data will be live streamed via Zoom. ADYS facility staff will monitor, supervise and assist participants in the classroom during this data collection period. This data collection will be conducted remotely in a classroom on the campus of Mt. Meigs campus in

12. PARTICIPANTS.

a. Describe the participant population you have chosen for this project including inclusion or exclusion criteria for participant selection.

☐ Check here if using existing data, describe the population from whom data was collected, & include the # of data files.

Male youth incarcerated at the long-term facility will be selected by facility staff to participate in the study and their participation will be voluntary. Participants with disabilities are included in this population (not segregated) and will be recruited and consented with all potential participants. The youth range in age from 10-21 at this facility. The youth that agree to volunteer will be in the age range of 4-21 because this will be the target sample as they fit within the age range of transition services. Youth with and without disabilities will volunteer to participate in this study. Facility staff will identify the volunteered youth age 14-21 enrolled in Wallace School. Once the staff identifies this age group, Principal Investigator will meet with the youth to explain the study and consent those who volunteer. Wallace School serves adjudicated male youth 12 to 21, with most between the ages of 16 and 19. Due to the transient nature of this population, age, race, and disability status varies.

b. Describe, step-by-step, in layman's terms, all procedures you will use to recruit participants. *Include in Appendix B a copy of all e-mails, flyers, advertisements, recruiting scripts, invitations, etc., that will be used to invite people to participate.*
(See sample documents at http://www.auburn.edu/research/vpr/ohs/sample.htm.)

The nation's special education law is called the Individuals with Disabilities Education Act (IDEA). IDEA provides special education and related services to individuals that qualify for special education services. Part B of IDEA defines disability and has requirements that must be met in order for an individual to qualify for services. IDEA provides definitions to 13 disability categories. The research team will use IDEA's definition of disability to determine potential participants. Public agencies have developed and implemented procedures to evaluate individuals suspected of having a disability that adversely affects their educational performance and who may need special education and related services. ADYS has developed and implemented procedures to identify and evaluate individuals suspected of having a disability that adversely affects their educational performance. According to the

c. What is the minimum number of participants you need to validate the study? 100

How many participants do you expect to recruit? 150

Is there a limit on the number of participants you will include in the study? ☒ No ☐ Yes – the # is

d. Describe the type, amount and method of compensation and/or incentives for participants.

(If no compensation will be given, check here: ☒)

Select the type of compensation: ☐ Monetary ☐ Incentives
☐ Raffle or Drawing Incentive (include the chances of winning.)
☐ Extra Credit (State the value)
☐ Other

Description:

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13. PROJECT DESIGN & METHODS. *Continued*

c. **List all data collection instruments used in this project, in the order they appear in Appendix C.**
(e.g., surveys and questionnaires in the format that will be presented to participants, educational tests, data collection sheets, interview questions, audio/video taping methods etc.)

The recruitment materials will be the consent form and explanation of the study.

The participants will also complete a demographics data form.

Instrumentation: The Self-Directed Search (SDS) is a well-known vocational interest inventory (SDS; Holland, 1994). Specifically, the three-letter occupational Code reflects an individual's likes and dislikes and demonstrates how these factors relate to various work environments. The SDS on-line version will be administered using an on-line assessment platform, PariConnect. There are six occupational code types: Realistic (R), Investigative (I), Conventional(C), Artistic (A), Enterprising (E) and Social (S).

d. **Data analysis: Explain how the data will be analyzed.**

The data will be analyzed descriptively (means, frequency, and percentages) and inferentially using an analysis of variance (ANOVA). ANOVA is a statistical procedure that evaluates whether the group means on the outcome variables (dependent variables) differ significantly from each other.

14. RISKS & DISCOMFORTS: **List and describe all of the risks that participants might encounter in this research.** ***If you are using deception in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use in Appendix D.*** *(Examples of possible risks are in section #6D on page 2)*

The participants may encounter coercion or breach of confidentiality. To lessen the likelihood of coercion, participation will be voluntary.

The PI will follow all guidelines of the Alabama Department of Youth Services as it relates to COVID-19 in order to prevent introducing the virus in this setting.

15. PRECAUTIONS. Identify and describe all precautions you have taken to eliminate or reduce risks as listed in #14. If the participants can be classified as a "vulnerable" population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals. *Provide a copy of any emergency plans/procedures and medical referral lists in Appendix D.* ***(Samples can be found online at http://www.auburn.edu/research/vpr/ohs/sample.htm#precautions)***

The participants may encounter coercion or breach of confidentiality. To lessen the likelihood of coercion, participation will be voluntary and collected by the researcher not facility staff. All participation will be voluntary in order to reduce the risk of coercion. Participants with disabilities are included in the overall population (not segregated) and will be recruited and consented along with all potential participants. Every effort will be made to ensure confidentiality is protected. Data will be stored on a password protected computer and hard copies will be kept in a locked file cabinet in a locked office.

The participants will not use their names in this study but use an identifying number. The identifying number will replace the name and other identifying information of the selected participants. The identifying number will be provided to each participant. The data will be analyzed in order to de-identify participants and the identifying numbers will not be presented in the results of the analyses. The researcher will review and remove direct identifiers as the data are entered into SPSS software.

If using the Internet or other electronic means to collect data, what confidentiality or security precautions are in place to protect (or not collect) identifiable data? Include protections used during both the collection and transfer of data.

The ADYS staff and researcher will know the indirect identifying information of the participants. The ADYS staff and researcher will not reveal the identities of the participants to those outside of the study. The data collected in this research have identifiers and that data will be maintained in a way to protect the privacy of the participants. The participants will not use their names in this study but use an identifying number. The identifying number will replace the name and other identifying information of the selected participants. The identifying number will be provided to each participant. The data will be analyzed in order to de-identify participants and the identifying numbers will not be presented in the results of the analyses. The researcher will review and remove direct identifiers as the data are entered into SPSS software.
The data that is housed on the Pari-Connect on-line platform will be downloaded to an encrypted flash drive and kept in a locked file box, in a locked office on the campus of Auburn University.

16. BENEFITS.

a. **List all realistic direct benefits participants can expect by participating in this specific study.**
(Do not include "compensation" listed in #12d.) Check here if there are no direct benefits to participants ☐

The participants would gain an understanding of their career interests that may impact their future career choices and options.

b. **List all realistic benefits for the general population that may be generated from this study.**

The general population will benefit from increased knowledge of the the career interests of youth with and without disabilities who are incarcerated. The literature in this specific area is limited and this study will serve to further develop this line of research.

17. PROTECTION OF DATA

a. Data are collected:

☐ Anonymously with no direct or indirect coding, link, or awareness of who participated in the study (Skip to e)

☐ Confidentially, but without a link of participant's data to any identifying information (collected as "confidential" but recorded and analyzed as "anonymous") (Skip to e)

☒ Confidentially with collection and protection of linkages to identifiable information

b. If data are collected with identifiers or as coded or linked to identifying information, describe the identifiers collected and how they are linked to the participant's data.

Demographic data are needed in order to analyze the dependent variable by the categorical grouping variables (race, age, etc.). While the demographic data will be collected, there will be no direct connection of student by name. Participants will be provided an identifying number. The ADYS staff and researcher will know the indirect identifying information of the participants. The ADYS staff and researcher will not reveal the identities of the participants

c. Justify your need to code participants' data or link the data with identifying information.

The data needs to be linked demographical in order to analyze outcomes.

d. Describe how and where identifying data and/or code lists will be stored. (Building room number?) Describe how the location where data is stored will be secured in your absence. For electronic data, describe security. If applicable, state specifically where any IRB-approved and participant-signed consent documents will be kept on campus for 3 years after the study ends.

Hard copy data will be stored in a locked file box in a locked office in the 1224 Haley Center. The electronic data will be stored in an AU Box. The IRB-approved and participant-signed consent documents will be kept in a locked file box in a locked office in the 1224 Haley Center on the campus of Auburn University.

e. Describe how and where the data will be stored (e.g., hard copy, audio cassette, electronic data, etc.), and how the location where data is stored is separated from identifying data and will be secured in your absence. For electronic data, describe security

The Self Direct Search will be administered using an online assessment platform. The online assessment platform is called PariConnect. PariConnect provides remote on-screen test administration. The subject identification data are protected with Transport Layer Security 1.2 encryption, and all internal PariConnect communications are performed behind a firewall. The data that is housed on the Pari-Connect on-line platform will be downloaded to an

f. Who will have access to participants' data?
(The faculty advisor should have full access and be able to produce the data in the case of a federal or institutional audit.)

Key personnel will have access to participants' data.

g. When is the latest date that identifying information or links will be retained and how will that information or links be destroyed?
(Check here if only anonymous data will be retained ☐)

Data will be kept for no more than 5 years and after that time electronic files will be deleted and hard copies will be shredded.