EXAMINING THE USEFULNESS OF INTERPROFESSIONAL EDUCATION (IPE) FOR LEGAL, SOCIAL WORK, & SCHOOL PSYCHOLOGY STUDENT TRAINING TO SUPPORT JUSTICE INVOLVED YOUTH

Mary Comis
_Duquesne University_

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EXAMINING THE USEFULNESS OF INTERPROFESSIONAL EDUCATION (IPE)
FOR LEGAL, SOCIAL WORK, & SCHOOL PSYCHOLOGY STUDENT TRAINING
TO SUPPORT JUSTICE INVOLVED YOUTH

A Dissertation
Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for the degree of
Doctor of Philosophy

By
Mary P. Comis

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EXAMINING THE USEFULNESS OF INTERPROFESSIONAL EDUCATION (IPE) FOR LEGAL, SOCIAL WORK, & SCHOOL PSYCHOLOGY STUDENT TRAINING TO SUPPORT JUSTICE INVOLVED YOUTH

By

Mary P. Comis

Approved June 7, 2023

Tammy L. Hughes, Ph.D., ABPP
Professor of School Psychology
(Committee Chair)

Susan M. Rattan, Ph.D.
Assistant Professor
Senior Research Scientist
Acadience Learning, Inc.
(Committee Member)

Gibbs Y. Kanyongo, Ph.D.
Professor of Educational Statistics
Department Chair of
Educational Foundations and Leadership
(Committee Member)

Jeffrey Shook, Ph.D., J.D.
Professor and Doctoral Program Director of Social Work
(Committee Member)
ABSTRACT

EXAMINING THE USEFULNESS OF INTERPROFESSIONAL EDUCATION (IPE) FOR LEGAL, SOCIAL WORK, & SCHOOL PSYCHOLOGY STUDENT TRAINING TO SUPPORT JUSTICE INVOLVED YOUTH

By
Mary P. Comis
August 2023

Dissertation supervised by Tammy Hughes, PhD, ABPP

The school-to-prison pipeline is defined as a set of policies that contribute to the removal of students from the school environment and into the justice system (Justice Policy Institute, 2011). These students have unique and complex needs that include educational needs, legal needs, and community needs; however, these students often lack the support necessary to assist them when navigating the complexities of the educational and legal system. As a result, the complexity of the challenges these students face can be provided through a holistic legal representation team, where a school psychologist, social worker, and lawyer, can coordinate their efforts to solve the issues that children face when confronted with the justice system. However, there is a lack of evidence that supports one single training model to train these professions to provide holistic legal representation. Therefore, Interprofessional education (IPE) is a training model that has been supported by the American Psychological Association (APA) to be
incorporated into the curriculum of graduate psychology programs to promote the practice of an integrated care model. To train graduate students to function on a holistic legal representation team, which is a type of integrated care, interprofessional education may be utilized. The purpose of this research study is to investigate the effectiveness of using Interprofessional Education (IPE) as a training model for the professional development of school psychology, law, and social worker graduate students to provide holistic team representation for at-risk youth.
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Chapter I

A first grader was suspended from school due to pointing a breaded chicken finger at a teacher and saying “pow” (Education World, 2016). A sixteen-year-old honor student was sentenced to a year in a juvenile justice education program due to accidentally having a kitchen knife in their car that dropped out of their grandmother’s belongings (Education World, 2016). The examples listed above are only two of many scenarios in which students are negatively impacted by school zero tolerance policies and are subsequently at risk for entering the school-to-prison pipeline.

Zero tolerance policies have been shown to increase the presence of police officers in schools, as well as punitive actions to be implemented as disciplinary measures (APA, 2008). Of particular concern, these disciplinary measures serve to remove students, disproportionality minority students, from the classroom, which excludes them from a setting that fosters the academic and behavioral growth. Students’ classroom removal as a result of these policies, occur without the consideration of the student’s age and disability status. Further, it is important to understand the context of critical race theory (CRT) in relation to zero tolerance policies. CRT beliefs are fundamentally rooted in that certain policies and laws perpetuate racism within larger structures, such as the educational system and zero-tolerance policies. Therefore, through the understanding of CRT, it can be understood how zero tolerance policies contribute to the school-to-prison pipeline, which is defined as a set of policies that contribute to the removal of students from the school environment and into the justice system, disproportionately impacting minoritized students (Justice Policy Institute, 2011).

The school-to-prison pipeline is defined as a set of policies that contribute to the removal of students from the school environment and into the justice system, in which a disproportionate
number of children of color and disability status are represented (Justice Policy Institute, 2011). Schools remove students from the educational system by using suspension and expulsion as a disciplinary measure, which increases dropout rates; drop out is associated with justice contact and one just contact increases subsequent contacts with juvenile and criminal justice systems (Ewing, 2000).

These students experience poorer educational environments when they are placed in treatment facilities due to various reasons including limited resources for teachers and an environment that does not encourage concentration and motivation (Management & Training Corporation Institute, 2003). Furthermore, when students exit the juvenile justice system or jail and attempt to reenter into the public-school system, there are many barriers that hinder successful reintegration. This is especially true for students with disabilities (Kim et al., 2021).

Due to the inadequate support of students who are at-risk or involved with the legal system, there is an urgent need for comprehensive academic, behavior, and community support. The complexity of the challenges these students face can be provided through a holistic legal representation team, where a school psychologist (educational specialist), social worker (community support specialist), and lawyer (legal specialist) who are together dedicated to solving the issues that bring children in contact with the justice system can coordinate their efforts. All these individuals bring different expertise to a holistic representation team. The unique needs of at-risk youth include things such as, special education services, being adversely impacted by school’s zero tolerance policies resulting in a higher rate of entering the school to prison pipeline, and access to resources such as community mental health and daily needs. Due to these needs, the collaboration and expertise of a school psychologist, lawyer, and social worker would allow these needs to be addressed in a more efficient manner. Therefore,
interprofessional education (IPE) could be an effective way to train these three professions on how to function on a holistic representation team. However, to date, there is limited guidance on how to approach this type of training to properly prepare these professions, within their graduate program experiences, to best serve the needs of these youth.

Interprofessional education (IPE) is a training model that has been supported by the American Psychological Association (APA) to be incorporated into the curriculum of graduate psychology programs to promote the practice of an integrated care model. To train graduate students to function on a holistic legal representation team, which is a type of integrated care, interprofessional education may be utilized. Owing to the evidence base of positive health outcomes stemming from the use of this model in the training of healthcare professionals, it may be advisable to use this model to train lawyers, school psychologists, and social workers to provide holistic legal representation for at-risk youth.

**Significance of the Problem**

Working collaboratively to understand the basic principles of other professions is beneficial for the work of school psychologists with at-risk youth. For example, school psychologists’ promotion of the academic and social/emotional success of students in the school setting may be enhanced through the use of such teaming (NASP, 2017). A particular challenge that school psychologists face, as previously mentioned, is how to address the educational policies and practices used in the school context that contribute to the school-to-prison pipeline (e.g., zero tolerance policies). As social justice advocates, the profession of school psychology should be working to dismantle any programmatic or policy decisions that increase the likelihood of students being introduced into the justice system. As school psychologists, in order to promote all students’ healthy development and educational attainment, it is recommended that
we both offer the supports necessary for children to succeed, and, when incarcerated, assist youth in reintegration successfully in school.

However, school psychologists do not often specialize in the disciplinary actions of schools, how those policies and procedures result in justice contact, nor how the community can support these at-risk youth. As such, the disciplines of law and social work, from which may come information and services to support students’ successful reintegration into school is a missing component to supporting all children in the school system. Therefore, interprofessional educational collaboration among individuals from law, social work, and school psychology may allow for the promotion of positive youth outcomes, both behaviorally and academically.

**Theoretical Framework**

Through the conceptualization of the Critical Race Theory (CRT), arguing that racism is present in peoples’ everyday actions and through governmental systems, the perception of how systematic racism perpetuates oppression in the educational system can be understood. Critical Race Theory (CRT) allows for the understanding of how policies, specifically zero-tolerance policies used in schools, are inherently bias towards minoritized children. According to the American Bar Association (2021), CRT is a practice that “critiques how the social construction of race and institutionalized racism perpetuates a racial caste system that relegates people of color to the bottom tiers” (p. 1). This theory has basic foundational beliefs, one of which is that racism is a normal part of our society (Lynn & Parker, 2006). The practice of Critical Race Theory was developed from the National Critical Legal Studies conferences hosted by the Harvard and UC-Berkeley Law Schools in the 1980’s (Lawrence, 2002). During these conferences, the systematic oppression in U.S. courts against poor individuals was criticized.
However, these conferences were later denounced by scholars for not yet sufficiently acknowledging the systematic racism in the U.S. courts.

Beginning in the 17th and 18th centuries with overt acts of slavery, and continuing today with unconscious covert racial bias, critical race theorists argue that racism is present in peoples’ everyday actions and through governmental systems (Lynn & Parker, 2006). Although slavery is illegal and the 1960’s civil rights movement, in theory, provided equal rights for Black Americans, subtle acts of racism such as microaggressions have become a part of everyday American culture experienced by persons of color.

Critical race theorists have discussed six underlying themes of the theory that identifies and allows for the critique of institutionalized racism in the U.S. (Matsuda et al., 1993). First, those using CRT engage in interdisciplinary work toward racial oppression, and espouse the idea that racism is native to American life, we should be skeptical of laws and individuals claiming color blindness and neutral beliefs, we should engage in historical analysis of laws taking into consideration group advantage and disadvantage, and we should recognize people of color when analyzing society and laws.

In the 1990’s when CRT began to gain more attention, scholars started to use the theory to conceptualize the inequalities that occur in the educational system (Tate, 1997). Before CRT was applied to understanding educational disparities, discrimination was believed to be based upon socioeconomic status and gender (Bowles & Gintis, 1976; Weiler, 1988). Educational scholars, however, recognized this theory as being important to analyzing its links to education theory (Lynn & Parker, 2006). CRT allowed for the understanding and conceptualization of racial inequalities present in U.S. schools, presenting racism as a contributing factor to disproportionate dropout rates and suspension rates for Black and Latino students.
Upon further investigation, the perpetration of the racist structure in educational system was seen as a partial result of the connection between property values and the quality of schools. Minoritized individuals are systematically oppressed through low social status, which relegates them to owning properties of low value, which then translates to schools in those areas being inadequately funded and having fewer resources (Ladson-Billings & Tate, 1995). Over the years, this framework has been adapted to help understand how systematic racism plays a role in the educational success of minority students. Through CRT, harsh school disciplinary procedures being implemented in schools, such as zero tolerance practices, are critiqued due to the evidence that this type of punishment increases the dropout rate of students resulting in juveniles entering the school-to-prison pipeline. CRT allows for the critique of harsh school disciplinary procedures such as suspension and expulsions, being implemented in school systems. Such punishment serves to increase the dropout rate and the funneling of students into the school-to-prison pipeline.

**Relevant Literature**

The use of zero-tolerance policies is supposed to ensure that students understand that certain behaviors will not be tolerated at school. While some have argued that such policies are ultimately beneficial to the learning environment through deterring students from engaging in disruptive behavior, it is indisputable that they have contributed to the push of students into the juvenile justice system and the school-to-prison pipeline (Ewing, 2000), specifically impacting Black and Latinx children at disproportionate rates (Maxime, 2018; Sizemore et al., 2020).

As a developing model, holistic legal representation may be used to provide services for youth from traditionally-marginalized and overpoliced communities encouraging them to remain
in school and challenge the inevitability of placement in the school-to-prison pipeline, effectively reintegrating and supporting their return to the education system.

Interprofessional education (IPE) is an education model designed to train teams in how they can contribute to positive outcomes in client care (Buring et al., 2009). It is a model that is supported by the American Psychological Association (APA) and is recommended for adoption by university training programs (APA, 2017). In using this model, school psychology, lawyer, and social worker students are trained together and within their disciplinary supervisors to provide holistic representation to juveniles involved in the legal system. This training model allows for all students (i.e., school psychology, law, and social worker) to comprehensively learn each the others’ professional priorities, ethics and how to use these insights to further their own professional practice to support juveniles in reintegrating them into school / life / society to promote their future success.
Chapter II

School Disciplinary Procedures

School systems are responsible for educating and protecting students by providing a safe, structured learning environment (including the use of thoughtful disciplinary strategies) in which all children can grow and develop (APA, 2008). Although the term, discipline, has a range of meanings, it can be referred to as a set of rules that are put in place to manage student behavior and teach self-discipline, as teachers cannot instruct effectively and students cannot learn in an unsafe environment (National Center on Safe Supportive Learning Environments, 2021). There have been various trends within school disciplinary practices beginning with corporal punishment, until when in 1977, the US Supreme Court ruled that such punishment was constitutional (Gershoff & Font, 2016), and morphing to zero-tolerance policies, which emerged in the 1990s and early 2000s.

Today, the use of school police and resources officers is an increasing trend in the service of zero-tolerance policies. Unfortunately, such practices have been also associated with the school-to-prison pipeline (Justice Policy Institute, 2011). The school-to-prison pipeline is defined as a set of policies in which students are removed from their school environment and placed into the justice system, in which a disproportionate number of children of color and disability status are represented. The use of school policies such as zero-tolerance provisions, by which children are funneled into the juvenile and criminal justice system, has led to an increased number of legal cases aimed at keeping children in school and out of jail (Justice Policy Institute, 2011). Moreover, a burgeoning interprofessional practice that includes schools, community, and the protection of the right to attend school has been developed to address this need.
Zero-tolerance Policies

Zero-tolerance policies include harsh punishment, which commonly entails removal from the classroom, suspension, and expulsion, when students violate school rules. Such policies were developed with the primary purpose of communicating those certain behaviors will not be tolerated in the educational setting. Unfortunately, these policies are known to disproportionately impact Black and Latinx children, moving them into the juvenile justice system at higher rates than their White peers (Sizemore et al., 2020). Beginning in the 1970’s with the use of these policies being implemented by the United States Customs Agency to combat drug smuggling at the borders (Losinski et al., 2014), these policies were adopted into schools due to the noticeable increase of juvenile crime. Additionally, in the 1980’s, these policies were then used to fight the increase of drugs and violence in the schools (Stahl, 2016). As a result, after these policies were implemented, juvenile arrests decreased from 26% in 1975 to 15% in 1990, providing evidence that these policies are effective in decreasing undesirable behavior (National Center for Education Statistics, 1998).

In the early 1990’s, US customs discontinued the use of zero-tolerance policies at the border; however, these policies only expanded in the public education system. In 1993, President Bill Clinton wrote the Gun Free Schools Act of 1994, which required schools to implement a rule stating if a student brings a weapon to school, they are to be expelled for at least a year, which can be modified on a case-by-case basis by the local educational agency (LEA) in order to adhere to the Individuals with Disabilities Education Act (IDEA). In order to receive federal funding, public schools were required to implement these policies. With the act providing a grant that allowed for the purchasing of security equipment and training of security personnel, the presence of law enforcement and use of intimidation as a discipline measure in schools increased
(Gun-Free Schools Act, 1994). In 1997, the Columbine shooting in Littleton, Colorado, in which bombs and guns were brought to school by two students and resulted in the death of thirteen students, resulted in an increase of zero-tolerance policies in the school system.

With the increase of these policies grew harsher discipline, increased security, new school crisis plans, metal detectors, and increased law enforcement in the school setting (Muschert et al., 2014). Eventually, these policies became stricter, including harsher discipline for behaviors such as swearing, truancy, insubordination, disrespect, and dress code violations (Martinez, 2010). Due to the increase in federal funding for zero-tolerance policies encouraging a higher use of security, the presence of law enforcement also increased in the educational setting. However, the presence of police and zero-tolerance policies in the school environment has been found to negatively affect children’s education (American Civil Liberties Union, 2017).

Zero-tolerance discipline allows for predetermined consequences, no matter the context of the action, and was initially believed to have beneficial side effects that encourage positive learning environments. According to Ewing (2000), zero-tolerance policies allow for other students to be deterred from participating in disruptive behavior. Additionally, these policies were believed to create an enhanced learning environment for students who do not engage in disruption. Yet, these policies have contributed to the funneling of students, disproportionately from diverse populations, into the school-to-prison pipeline.

Despite any potential benefits of zero-tolerance policies, the American Psychological Association (APA) created a task force that was charged with examining the implementation of these policies and illuminating the considerations of implementing this type of discipline (APA, 2008). Specifically, this task force investigated six questions: 1) Have zero-tolerance policies made schools safer and more effective in handling disciplinary issues? 2) What has been the
impact of zero-tolerance on students of color and students with disabilities? 3) To what extent are zero-tolerance policies developmentally appropriate for psychological intervention, considering children's and youth's developmental level? 4) How has zero-tolerance affected the relationship between education and the juvenile justice system? 5) What has been the impact – both negative and positive – of zero-tolerance policies on students, families, and communities? and 6) Are there other disciplinary alternatives that could make a more substantial contribution toward maintaining school safety or the learning environment's integrity while keeping a more significant number of students in school? (APA, 2008). Overall, their findings showed that zero-tolerance policies do not improve the school climate and have disproportionately increased representation of racially-diverse students in school punishments. Therefore, the task force called for reform to zero-tolerance policies allowing either more flexibility in the policies or the implementation of alternative disciplinary procedures, such as using evidence-based practices and school-wide prevention strategies.

Not only have zero-tolerance policies been shown to negatively impact student academic and social outcomes, but also, they decrease the positivity of school environments for all children by increasing police and security presence through the use of metal detectors, security cameras, locker and person searches, and other forms of legal control (Heitzeg, 2009). As a result, students may be suspended, expelled, and arrested for routine child misbehavior, ignoring the developmental stages of the students’ age and the severity of the behavioral infraction (Mitchell, 2014).

Unfortunately, zero-tolerance suspensions, expulsions, and arrests tend not to consider the age of the student. The following examples below support this notion. For example, two second graders had reportedly threatened to “kill” someone and were subsequently arrested and
charged with a breach of peace (Education World, 2016). In another example, a fifth grader was repeatedly asking a classmate if she liked him and was arrested after being charged with sexual assault (Education World, 2016). Another fifth grader was suspended and was called “threatening” due to drawing the burning World Trade Center and smiling as he displayed it to classmates (Education World, 2016). At an even younger age, a kindergarten student was suspended due to dressing up as a firefighter for Halloween and bringing a toy ax to school as part of his costume (Education World, 2016). The increase of zero-tolerance policies in response to historical drug use and school shootings has resulted in the overuse of suspensions and expulsions with students, funneling them into the juvenile justice system. Furthermore, these policies do not only impact children of all ages but also do not consider a student’s disability status (ABA, 2001).

The Justice Policy Institute (2008) has reported various individuals' cases impacted by zero-tolerance policies for minor behavioral infractions that are due to various behaviors associated with disabilities. For example, a 12-year-old student who was diagnosed with hyperactivity had warned other children in the lunch line that he was going to get them if they ate all of the potatoes. As a result, he was suspended for two days, was referred to the police, and charged for making a terroristic threat that resulted in him being incarcerated for two weeks (Justice Policy Institute, 2008). Due to his diagnosis of a hyperactive disorder, the student more than likely did not think through his actions of “warning” the other children; therefore, it was perceived as a threatening statement. Students with hyperactive and impulsive behavior, among various other disabilities, require social/emotional and behavioral education that teaches them appropriate skills for daily functioning, such as self-control, versus the use of harsh disciplinary infractions. Therefore, researchers argue that zero-tolerance policies should be eliminated and
replaced with a more effective and efficient student discipline system that promotes child
learning and development, instead of punishment (Tobacman, 2011).

**Zero-tolerance and the School-to-prison Pipeline (STPP)**

Zero-tolerance studies have played a critical role in fueling the school-to-prison pipeline,
which functions both directly and indirectly (Maxime, 2018). In terms of the direct contribution
to the school-to-prison pipeline, schools are implementing zero-tolerance policies that frequently
result in students being funneled into the juvenile and criminal justice system. Furthermore,
indirectly, schools contribute to the pipeline by removing students from the learning environment
and by doing so, decrease their chance of school success and increase the likelihood of school
dropout (NYCLU, 2007).

Not only do zero-tolerance policies push students into the pipeline, but also target
culturally- and racially-diverse youth disproportionately, a pattern that has been established since
1975 (NYCLU, 2007). According to The Advancement Project (2005), Black students account
for 34% of school suspensions even though they comprise only 17% of public-school enrollment.
Further, Black students are also overrepresented in school office referrals, corporal punishment,
and school expulsion (Skiba, 2010), which are a direct result of zero-tolerance policy
implementation.

While students from racially-diverse backgrounds are hindered most by these policies,
students with disabilities are also negatively impacted. Only 8.6% of public-school students are
found eligible for special education; however, 32% of students in the juvenile justice system
qualify with a disability impacting their learning needs (Cregor & Hewitt, 2011). Furthermore,
Black students diagnosed with a disability are three times more likely to face an out-of-school
suspension or expulsion when compared to their white counterparts (Cortiella & Horowitz,
2014). Although at a lesser impact, zero-tolerance policies have also hurt Caucasian students, with the rate of suspensions among these students increasing from 3.1% to 5.09% (Wald & Losen, 2003).

Suspensions are the most common predictor of students entering the juvenile justice system (Fabelo, 2011). Subsequently, zero-tolerance policies typically involve students getting suspended and removed from the classroom, resulting in the school's contribution to the prison pipeline (Chappell, 2014). Not only do suspensions and expulsions add to students entering the juvenile justice system, but also, once students enter the system, recidivism is a risk.

Wilson (2014) outlined four steps to cutting off the school-to-prison pipeline, stating, "It is important that the entire community, both professionals and students, share a common vision for their school" (p. 51), including the elimination of zero-tolerance policies. By eliminating zero-tolerance policies, which have evidence of ineffectiveness (APA, 2008), there may be a decrease in the removal of students from the classroom and the justice system.

**Recidivism**

The National Institute of Justice (2020) webpage defines recidivism as "criminal acts that resulted in rearrests, reconviction, or return to prison with or without a new sentence for three years following the prisoner's release" (para.1). There are high rates of recidivism for youth involved in the juvenile justice system, with half of juveniles reoffending within three years of exiting (Kubek et al., 2020). Due to many risk factors, such as race, age, and special education status, there is a high rate of juveniles reoffending and reentering the system (Hong et al., 2013). However, there are protective factors in the school environment, such as positive relations with peers and teachers, a positive connection to school, academic success, and consistent attendance that decrease the chances of juvenile recidivism. Furthermore, returning to school after exiting
the justice system can increase the opportunity for long-term education and positive social outcomes and decrease the risk of re-offense (Blomberg et al., 2011).

**School Climate and Fairness**

Developing a school environment that fosters the protective factors already mentioned can reduce the likelihood of students from entering the school-to-prison pipeline and promote successful school reentry. More specifically, cultivating a positive school climate includes preventing school dropout and helping children to return to school after exiting the justice system. Furthermore, a positive school climate has been found to decrease student’s tardiness, absences, and office discipline referrals (Caldarella et al., 2011).

The National Center on Safe Supportive Learning Environments (2021) describe school climate as a broad, multifaceted concept that includes all components of a student’s educational experience. More specifically, they portray a positive school climate as one that fosters safety and promotes a supportive academic, disciplinary, and physical environment that encourages and maintains respect among individuals by building trusting and caring relationships. Administrators who believe their schools foster a positive school climate have been found to have lower rates of student dropouts versus schools where administrators believe they have a negative school climate (Christle et al., 2007).

For example, it has been argued that zero-tolerance policies do not foster a positive school climate, which in turn has resulted in an increase of legal cases being brought against schools. For example, in the court case of Seal v. Morgan, it was argued that adhering to zero-tolerance policies without considering a student’s mental state violates due process. Furthermore, in the case of Vantress v. Oak Grove School District, an African American student was accused of sexually assaulting a female student; however, he claimed that he only gave her a hug. The
school’s decision to expel the student was taken to court challenging that the zero-tolerance policy was being used as discrimination against his race. As a result, the student was given a second chance and was transferred to another school (Kansas Bar Association, 2014). Due to the increase of these cases, many schools are searching for other disciplinary options (Kansas Bar Association, 2014). Restorative Justice practices are promising, but not yet an adopted or proven-effective, method to help schools mask the negative impact that zero tolerance policies are having on children’s educational status and outcomes.

**School Dropout**

States have varying definitions of what a school dropout entails, but in general, a school dropout is an individual aged 16 to 24 who is not currently enrolled in school or has not completed high school or a GED (National Center for Education Statistics, 2020). Entering the justice system as a juvenile often results in many negative side effects, including school dropout (Lambie & Randell, 2013). Overall, the school dropout rate has declined significantly from 15% in 1970 to 6% in 2016. However, the risk of dropping out of high school continues to impact minority students disproportionately. Hispanic youth are more likely to drop out of high school than individuals of other races and ethnicities. In 1972, the dropout rate was 21% among non-Hispanic Black youth, 12% among non-Hispanic White youth, and 3% among Hispanic youth. Dropout rates for Hispanic youth peaked in the late 1980s and early 1990s, at 36%. In 2016, the dropout rate for Black youth reached a historic low of 6%, and the rate among Hispanic youth reached a historic low of 9%. Overall, 25% of youth involved in the juvenile justice system drop out of school within six months of being released and only 15% of ninth grade students who reenter the school system graduate high school within four years (U.S. Department of Education, 2016).
Although dropout rates appear to have declined substantially for each racial group, these estimates do not include individuals involved in the justice system. Particularly worrisome, young adults are incarcerated at higher rates if they had not graduated from high school than if they had. Additionally, Black and Hispanic youth are more likely than non-Hispanic White or Asian youth to drop out of high school, thus increasing their chances of incarceration.

**School Reentry**

Due to high rates of suspension and expulsion in result of zero-tolerance policies, school dropout rates increase, making juvenile reentry into the public school system a difficult transition for youth from both detention centers and jails, with about 1 in 10 youth being confined in an adult jail or prison (PRISON Policy Initiative, 2019). Currently, there is minimal evidence for the best school reentry approach for juvenile delinquents entering back into the school system. Barriers such as school resistance, stigma and stereotyping from teachers and peers, and the lack of support provided to youth for transitioning back into the school make it difficult for juveniles to successfully reintegrate into the education system. More importantly, the lack of awareness of the help available from or collaboration with various community-based agencies may negatively impact successful transition into the school system. However, effective practices have been identified, including systems of care and various school-based behavior and mental health practices, which have been shown to be effective in promoting school reentry (Kubek et al., 2020).

**Systems of Care**

Systems of care is a person-centered approach that utilizes multiple types of services to assist with the reintegration into the school system, including physical and mental health services, social emotional functioning services, educational services, and vocational needs
(Briscoe & Doyle, 1996). This type of integrated care may allow for a holistic representation of the youths’ needs to successfully incorporate them back into their general education setting. Further, effective schoolwide practices also benefit the juvenile as they reenter. These practices can include teaching behavioral and social skills versus the use of disciplinary procedures, teaching behavior management and parenting skills, and mental health assessment (Goldkind, 2011; Unruh et al., 2009). In order to allow for a smoother transition for youth reentering the school system, but also as an effective school wide behavioral practice, restorative practices can be used as a replacement to disciplinary procedures in order to promote developmentally-appropriate behavior and social skills.

**Restorative Justice Practices**

Restorative practices include various tactics, such as restorative justice, community conferencing, community service, peer juries, circle processes, preventative and post-conflict resolution programs, peer mediation, and social-emotional learning (The Advancement Project, 2014). Originating within the criminal system, these various types of restorative practices have been adopted into the school system and have shown multiple benefits. The Youth Restoration Project (2016) listed various benefits of implementing restorative practices in school environments, such as the promotion of self-regulation, teaching social skills, developing work- and career-ready attitudes, minimization of disruption, distraction, interpersonal friction, and bullying, improvement of relationships between and among students, teachers, staff, and administrators, holding wrongdoers accountable for the effects of their actions on others, and helping kids succeed academically. As a result, these benefits help build a healthy community, and healthy communities raise resilient, curious, adventurous, and healthy children, which allows
them to become more self-sufficient, resolve internal conflicts in healing ways, and use the
process of conflict resolution to clarify behavior expectations.

Most recently, a transition from zero-tolerance to Restorative Practices, an approach that
better considers the psychological developmental pathway of a child, has been advocated for by
special educators and psychologists. There have been various current reviews of Restorative
Practices published. Anfara and colleagues (2013) completed a literature review on Restorative
Practices in the educational system, focusing mainly on middle grades and future practitioners'
recommendations. Byer (2016) conducted a systematic review of Restorative Practices in five
school districts, four primary schools, and fourteen secondary schools, stating that there is a need
to continue research examining the use and implementation of Restorative Practices in the school
setting. Furthermore, Fronius et al. (2016) examined factors associated with schools' readiness to
implement restorative practices as well as their effectiveness and integration with positive
behavioral support (PBIS) and response to intervention (RTI). Finally, Gonzalez et al. (2019)
completed a case study involving restorative practices in the schools. However, none of the
current reviews investigated restorative justice implementation nationwide. In order to further
support the necessity of restorative practice implementation, APA (2008) took a stance on zero-
tolerance policies, stating that the research supports the use of alternative discipline procedures
in place of zero-tolerance policies that allow for prevention implementation in the school versus
punishment.

Wilson (2014) outlined four alternative strategies to eliminate the school-to-prison
pipeline, including; a focus on personal efficacy and systematic change, elimination of zero
tolerance policies, youth engagement, and community support. These strategies are designed to
ultimately boost the morale and engagement between students and teachers. Despite the many
approaches to eliminating zero-tolerance policies and reducing the school-to-prison pipeline, restorative practices are a method that replaces these policies and utilizes personal efficacy and systematic change acting as a preventative measure that encourages healthy relationships within the community and address conflict (The Advancement Project, 2014).

Although restorative practices have demonstrated various positive benefits, they are not currently being implemented as the primary disciplinary procedure in schools. Therefore, students are continuing to be channeled into the school-to-prison pipeline using harsher disciplinary practices, such as zero-tolerance policies.

**Holistic Representation and Law**

Currently, zero-tolerance policies are the leading disciplinary measure implemented by schools, resulting in students being funneled into the school-to-prison pipeline. Often, such students need to search for legal representation as a result of such disciplinary tactics. However, most of the students experiencing the consequences of the school-to-prison pipeline are from lower income families (Sizemore et al., 2020). Traditionally, lawyers are hired to represent individuals’ court cases; however, many students and their families are not able to hire a legal team. Therefore, in these cases, an attorney is provided for those unable to afford one. Indigent defense, providing defendants who cannot afford a lawyer with legal representation, has limited evidence of positive outcomes and lacks discussion in relation to mass incarceration in the U.S. As such, lawyers have often enlisted the aid of social workers in an effort to better address the needs of their clients. However, social workers’ expertise is not in the educational system; instead, school psychologists may be better able to assess the educational programing and supports that are offered in the school setting (Sizemore et al., 2020). Without proper
representation of juveniles in their cases, youths’ needs may not be met, which can result in the failure of their reintegration back into the school system.

Although with limited evidence, holistic legal representation is an approach whereby a team seeks to understand the issues that brought the defendant to court in order to support their development beyond simply winning a case. In contrast to the traditional approach of lawyers, arguing a case that is supplemented by expert consultation, the holistic representation team views its members as equal partners. Holistic teams conceptualize cases by learning the practices of each other’s professions so as to widen their professional approaches as well as effect better outcomes (Steinberg, 2006). For example, the client is perceived to be better supported through all aspects of system involvement via comprehensive intervention to prevent job loss, public housing discrimination, disruptions in child custody, immigration support, as well as to promote access to mental health services.

This type of representation is reported to improve case outcomes and reduce future crime (Anderson et al., 2019). After receiving holistic legal representation, children have also reported a greater sense that the system has treated them fairly, also known as procedural justice, which is associated with increases in compliance and decreases in recidivism (Anderson et al., 2019). In 2019, the organization R and University of Pennsylvania Law’s research team conducted a study evaluating two organizations that provide indigent defense in the Bronx of New York City. One organization represented clients using holistic representation and the other, using the traditional law model. Results indicated that the firm utilizing holistic representation saw a reduction in sentence length by 24%, a higher pre-trial release rate, and overall, a stronger indigent defense (Anderson et al., 2019). Through the holistic model, there is advocacy of the youth’s perspective,
and resources are identified to best support the child and their families’ needs (Sizemore et al., 2020).

As discussed above, system of care is an integrated patient-centered approach that can allow for a holistic representation of juveniles reentering the school system. As a new and upcoming model, holistic representation can be used to effectively provide services for youth from traditionally marginalized and overpoliced communities. Such representation may better encourage them to remain in school and avoid the school-to-prison pipeline, effectively reintegrating and supporting their return to the education system. Given that most students who receive the holistic representation attend school, a school psychologist may be able to provide beneficial services for the traditional lawyer-social worker holistic team.

Through the reallocation of funding, schools can focus on hiring more mental health professionals, such as school psychologists, instead of school police and law enforcement (Sizemore et al., 2020). School psychologists are critical to the process of school success involving juveniles by providing the holistic team with an understanding of how to access academic, behavioral, and mental health support in schools. According to the NASP (2020), school psychologists are responsible for providing support and intervention to students, consulting with teachers, interacting with families, enhancing school support strategies and practices, and collaborating with community providers for extra support services needed. Working collaboratively with community providers, school psychologists can work in partnership with social workers to provide outside resources to students and families.

According to the Equal Justice Initiative (2021), 4,500 children reside in adult jails daily. These adult systems are legally required to support juveniles academically while they are in placement. Unfortunately, the system often fails to provide adequate and explicit academic
instruction as well as to identify students in need of special education, which could otherwise be helpful in addressing their problematic behaviors (Sizemore et al., 2020). Students should not only show academic progress but also should experience academic success, which tends to increase the sense of positive connectedness with the school environment.

Alexander et al. (2001) found that students who encounter negative academic experiences, such as low achievement, grade retention, and enrollment in low-level courses, are more likely to drop out of school. As discussed above, dropping out is a predictor of entering the school-to-prison pipeline. Due to a school psychologist’s extensive training in special education eligibility identification and their dedication to social justice through their work (NASP, 2017), both of which are associated with academic success, these individuals may be able to make a critical and necessary contribution to the holistic representation of juveniles involved in the system.

Further, social work, a helping profession, involves bettering the wellbeing of an individual by helping them meet their daily basic needs (National Association of Social Workers, 2021). Social workers meet these individual needs by promoting social justice in individuals’ lives and communities. Therefore, the collaboration of school psychologists and social workers with lawyers to provide holistic representation may decrease the likelihood of harsh disciplinary practices, such as being unfairly removed from school, and increase the likelihood of being able to access a full complement of school and community supports.

**Procedural and Distributive Justice**

Procedural justice, the sense of how an individual feels they were treated specifically in relation to the court procedures, has five essential components including. These components include; voice or the client’s belief their side of the story has been listened to, respect or the
client’s perspective they are being treated fairly by the system, neutrality or the client’s perception that all decisions are unbiased and fair, understanding or the client’s comprehension of how decisions are made, and helpfulness or the client’s belief that the system is concerned about their personal situation within the extent possible by law (Tyler, 1990). Further, distributive justice is the fairness in case outcomes. Both viewpoints being critical in decision making, research shows that opinions by individuals involved in a case, or litigants, are more likely formed based on procedural justice (Sunshine & Tyler, 2003). In support of this notion, Mueller and Landsman (2004) found that employees are more likely to be open minded toward organization decisions when they are treated fairly, even if it results in a negative outcome for the employee. The idea presented above supports the view that individuals involved in the justice system are more likely to comply with law due to their perception of being treated fairly by the court, even if the litigant is negatively affected (Frazer, 2006). Therefore, it is important to ensure procedural justice in the court system with clients but also the belief that procedural justice is instilled with the holistic legal team assure the client is willing to work with the team to provide client-centered care (Shook, Goodkind, Kolvioski, & Ballentine, 2021).

The concept of procedural justice is an important aspect of holistic legal representation. Many of the individuals whom are involved in the justice system do not view the system as fair and just. Procedural justice, the idea that an individual feels they were treated fairly, is a critical aspect to how a client responds to the court system and their holistic legal team. Not only does the individual need to feel that they were treated non-bias by the court system to be more compliant with court outcomes and orders, but they also need to feel as if their holistic legal team is treating them in a way that is fair. By assuring that the client has a sense of comfortableness.
with their legal team, they will in result, be more complaint with the recommendations made by their legal team that will assist with more positive outcomes for themselves.

**Procedural Justice & School Environment**

According to the National Initiative for Building Community Trust & Justice (n.d.), procedural justice “focuses on the way police and other legal authorities interact with the public, and how characteristics of those interactions shape the public’s views of police, their willingness to obey the law, and actual crime rates”. Further, viewing the police force as legitimate and that these individuals have the “right” to enforce “proper behavior” has a major influence on individuals’ willingness to obey laws. This social interaction reflects the idea that not only do individuals have to feel they are being treated fairly to be more willing to follow laws, but they also must view the individual enforcing the laws as legitimate and fair. This interaction between policy and the people carrying out the policies is an important aspect of increasing the feeling of procedural justice among individuals; specifically, those involved in the justice system.

However, this concept can and should be reflected in the educational system as well.

Within schools, there are bias and unfair policies that are implemented such as zero tolerance policies, which do not foster a positive school climate. As a result, when students do not have a sense of school safety or student’s do not view school staff as having “the right to dictate proper behavior”, then they will be less likely to obey these policies (National Initiative for Building Community Trust & Justice, n.d.), a similar concept that is reflected in the community. Therefore, the school staff who are carrying out policies, such as principals, teachers, and school resource officers, should work towards forming a trusting relationship with students by demonstrating their ability to be fair and non-biased. This concept is also important
as there is a strong presence of police officers and school resource officers in many school environments.

Bronfenbrenner’s ecological systems theory allows for the understanding of how a student’s school environment impacts their ability to feel they are being treated with dignity and respect, a concept of procedural justice (Bronfenbrenner, 1977). Fostering the feeling of safety, building trust, and creating caring relationships are all aspects of a positive school climate (National Center on Safe Supportive Learning Environments, 2021). Further, the concept of building a trusting relationship with the individual who is enforcing school-based policies can allow for the increased feeling of school safety and positive school climate. Which in return, will increase the concept of procedural justice within the school system. The microsystem level of Bronfenbrenner’s theory explains that the interactions with the child and other individuals in their immediate settings, such as school and home, can influence if they feel safe at school (Hong & Eamon, 2012). Not only is it recommended that students perceive school rules as fair and appropriate to increase the feeling of school safety (Schreck & Miller, 2003), but Bronfenbrenner’s ecological systems theory also encourages that school staff build trusting relationships with students at school. Therefore, as reflected in the community, the concept of procedural justice can be better addressed in schools if students have a positive perception of the school staff enforcing the school policies.

Another important aspect of increasing procedural justice within the school environment is the concept of expressed interest versus best interest. School psychology, as a profession, practices under the concept of best interest. A child’s best interest refers to “deciding what type of services, actions, and orders will best serve a child,” (Child Welfare Information Gateway, 2020). However, there is a fundamental difference between the school psychology and law
profession. The law profession practices under the concept of expressed interest, following the voiced wants of the child. Often, there is a conflict between what may be of the best interest for the client and their voiced expressed interest. Therefore, it is important as a school psychologist on the holistic legal team, to assure that clients understand what may be in their best interest based off evidence-based literature and research before the client makes their final decision on what path they want to take. This concept is important to reflect in the school setting to increase feelings of procedural justice and school safety. In relation to increasing the five concepts of procedural justice in schools, it is particularly important for school psychologists to allow students to voice their concerns and opinions about a situation. The school psychologist can then take the student’s voice into consideration when determining what is best interest for them. As a result, this can increase their feelings of safety in school due to building a trusting relationship with the school psychologist.

**Types of Cross-Professional Training**

The education and training of students from three professional practice disciplines, all governed by independent accreditation standards, ethical codes, and credentialing requirements, requires the examination of: a) the purpose, function, and outcomes of the professional team and b) how practice competencies can be measured. Therefore, cross-disciplinary, interdisciplinary, and interprofessional education and training practices were reviewed.

Cross-disciplinary training involves the process of learning topics that are specific to a discipline outside your scope of practice, allowing for the synthesis of information across disciplinary boundaries (Seel, 2012). This practice may permit the integration of multiple approaches and perspectives, working beyond one’s own discipline, creating new logic, and reflecting on one’s own professional practice (Adams et al., 2009; Adams et al., 2008). As a
result, professionals may better understand how other disciplines function and where to seek consultation for their own practice needs.

Interdisciplinary training can be broadly defined as the education and training of various professionals from different disciplines regarding the coordination of services while working with an integrated team of professionals and depending on the other profession’s knowledge and skill sets to provide patient care (Degraw et al., 1996). According to the Interdisciplinary Training Guide (Association of University Centers on Disabilities, 2010), when using the interdisciplinary education approach, students learn the importance of working with an integrated team with collaboration from multiple team members. Through this approach, individuals learn how to access critical information needed even without interaction with a team member.

Interprofessional education (IPE) involves the integration of various professions, so that these professionals not only share their knowledge and values, but also are committed to promoting development and growth within other professionals (Falk et al., 2015). IPE is reported to benefit the overall wellbeing of the client and patient outcomes in medical research (Reeves et al., 2018). Given that one of the unique factors of holistic legal representation is to work on non-hierarchical teams and that these teams are promoting the development of each other’s practice, IPE was selected for the training of holistic teams.

Interprofessional Education

The World Health Organization (2010) defined interprofessional education (IPE) as occurring "when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes" (p. 13). IPE training involves the integration of various professions and how to improve future interprofessional collaboration in the workplace, which in turn benefits the overall wellbeing of the client and patient outcomes.
Interprofessional education is not a new training model (Brandt, 2015). However, it has not been widely acknowledged as a training model in higher education until more recently due to the barriers presented when only one professional attempt to provide care for patients with various health difficulties (APA, 2017; Rozensky, 2014). For example, interprofessional teams have shown positive outcomes regarding patient safety, coordination of care, quality of care, the experience of care, the advancement of population health, and reduction in health care costs (Berwick et al., 2008). Additionally, this approach has been promoted for its patient-centered, rather than discipline-focused, treatment (Institute of Medicine, 2001). Just as the implementation of IPE increases the positive experience of individuals regarding medical care, procedural justice also increases positive youth outcomes in regard to lowering the risk of dropout and recidivism.

As the benefits of positive holistic patient care have become clearer (Brandt, 2015), so too has the increase in demand for IPE. APA has encouraged graduate training programs to educate students regarding the practices of other professionals and where and how their competence boundaries intersect and interact. Specifically, APA (2017) explains if all healthcare professional programs altered their knowledge domains to cover the basis of the allied yet varying professions, individuals would be effectively trained in the ways in which to interact with other professionals in their work (APA, 2017).

In order to effectively implement integrated care in the field, IPE should occur early in the training sequence through classroom teaching strategies and clinical fieldwork throughout an
individual's program (Garr et al., 2012). Although there is a call to train psychology students in IPE, there is no developed curriculum published for higher education to integrate into their course sequence in the U.S. However, internationally, IPE is recognized through already established training sequences, including the Center for the Advancement of Interprofessional Education in the United Kingdom (APA, 2017) and a product developed in Canada, the Core Competencies for Interprofessional Collaborative Practice, which outlines the fundamental competencies necessary for interprofessional practice in the work setting (Canadian Interprofessional Health Collaborative, 2010).

According to Rozensky (2012), psychologists need to be trained to work in an interprofessional setting. However, there is a lack of educational guidance for psychology programs regarding how to teach students to practice this model appropriately. More commonly, other health care professionals are trained using this model to provide integrated care. Therefore, it should be recognized that psychologists are also a part of integrated health care teams and should be trained using an IPE model due to the number of psychologists entering primary care environments interacting with other health care professionals (APA, 2017).

There are multiple competencies and models that graduate programs follow in educating students working in primary care. Regarding psychology, the APA has approved competencies that students need to be trained in for primary care practice (APA, 2015). Furthermore, the Society of Health Psychology, Division 38 of the APA, has also developed graduate-level modules to train students on integrated primary care. McDaniel and colleagues (2004) developed a curriculum to educate graduate psychology students in this type of practice. Although these models allow for the proper education and training of psychology graduate students, none of them is focused upon training students using IPE (APA, 2017). Therefore, the APA (2017) has
developed a framework that provides graduate psychology programs with specific steps and modules to train students.

The Interprofessional Seminar on Integrated Primary Care (IS-IPC) was an initiative by a diverse taskforce to respond to psychology students being trained in IPE to work effectively with other health professions in an integrated setting (APA, 2017). This task force's goal was to create a curriculum that consisted of competencies for psychology graduate programs to incorporate into their courses to teach students how to work efficiently within integrated health care environments. Ultimately, the Interprofessional Seminar on Integrated Primary Care is segmented into two sections: topic-specific modules and guidelines on implementing the IS-IPC. The topics included within modules are interprofessional care elements, the rationale, population health, ethics, models of leadership, quality improvement, health finance, health policy, and advocacy. The second section of the IPE guide includes how to implement the modules within programs, including overcoming challenges, engagement of leadership and faculty, scheduling, assignment of course credit, enhancing teaching skills, potential partner profession participants, overcoming financial barriers, pedagogy, technology in an education context, and profession-specific accreditation standards (APA, 2017). Through these training modules, psychology training programs are able to integrate IPE education into their curriculum to better train students in the ways in which to work on an interprofessional team.

History of IPE

Beginning in 1965, interprofessional education and collaborative practice (IPEPC) became a known concept in response to the passing of Medicare and Medicaid legislation by the U.S. Government. In response to this bill that provides health care for those below the poverty line and over 65 years of age, there is increased demand for healthcare professionals to work
together to provide proper care. Therefore, in 1972, the Institute of Medicine released a report calling for training health care students to work on a team collaboratively. In response to this call, there was an enhanced need for health care professionals, and universities began to request federal funding to build new medical training hospitals and fund residency programs to train students using an interprofessional approach.

Therefore, an initiative known as the "Great Society Programs" was introduced by President Lyndon B. Johnson in 1964, identifying federal legislation that allowed for the development of programs teaching students effective collaboration between physicians, nurses, and other health care professionals. These programs included: Area Health Education Centers (AHECs), the National Health Service Corps (NHSC), Federally Qualified Health Centers (FQHCs), and the Geriatric Education Centers (GECs). The detractors of IPECP contended that this as an expensive training model that did not have a sound evidence base to defend its use. However, the lack of this model's adaptation resulted in poor teamwork between professions (Brandt, 2015).

The Institute of Medicine Trilogy, which was published in 2000, began with To Err's publication, which was followed by the second report, Crossing the Quality, in 2001. The publication of these reports pushed for the U.S. healthcare system to reconsider the use of IPECP in their training model and professional work based on an evidence base stemming from psychology, business, and the military (Salas & Rosen, 2013). In 2003, another report was published to create the trilogy of stories, Health Professions Education: A Bridge to Quality, which urged health care education programs to adopt a model that trains students to work on interprofessional teams. Further, in 2010, IPE began to gain more attention due to more reports
produced by organizations calling for the importance of IPE and IPCP being used in health care training programs.

Various organizations created a panel to develop competencies for programs to follow when training their students on IPE. The report, *Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel* (2011), discussed the panel that was organized to create these competencies, and were sponsored by organizations such as the American Association of Colleges of Nursing (AACN), American Association of Colleges of Osteopathic Medicine (AACOM), American Association of Colleges of Pharmacy (AACP), American Dental Education Association (ADEA), Association of American Medical Colleges (AAMC), and Association of Schools and Programs of Public Health (ASPPH). As a result, four competencies were developed as a guide for programs: values and ethics, roles and responsibilities, interprofessional communication, and teamwork/team-based care. This panel created a significant transition in the health care field; specifically, the education of medical students, and resulted in programs restructuring their programs to meet the above IPE competencies.

**Long-Term Effects of IPE**

As discussed above, interprofessional education training has a more notable history in the medical field, however it is beginning to become more acknowledged and encouraged in the field of professional psychology (APA, 2017). Therefore, building an evidence base to assure that IPE is being implemented effectively is critical. Further, evaluating the long-term impact IPE training has on students is beneficial to understanding if the training is effective in positively impacting the way individuals practice in their profession and can help alter future IPE trainings. In a study conducted by Sytsma et al. (2015), medical and physical therapy students participated
in IPE through their coursework. Results from a one year follow up survey found that both medical and physical therapy students perceive IPE as allowing them to better understand roles of different professions and contributed to their appreciation of learning with students from other disciplines. Further, a systematic review was conducted to evaluate IPE training on students in disciplines that received some type of mental health training during undergraduate course work compared to student in these fields who do not receive IPE training. The study found that IPE taught students to be more accepting of other professions expertise and increased their collaboration skills, however there were not significant changes in behavior and workplace practices. Therefore, due to the lack of IPE’s current use in the mental health field, there is a push for further evaluation of its long-term effects in mental health training (Marcussen, Norgaard, & Arnfred, 2018).

**Holistic Representation**

As discussed above, holistic legal representation is an approach whereby a team seeks to understand the issues that brought the defendant to court to support their development beyond simply winning a case. In contrast to the traditional approach of lawyers, arguing a case that is supplemented by expert consultation, the holistic representation team views its members as equal partners. Holistic teams conceptualize cases by learning the practices of each other’s professions to widen their professional approaches as well as effect better outcomes (Steinberg, 2006). For example, the client is perceived to be better supported through all aspects of system involvement via comprehensive intervention to prevent job loss, public housing discrimination, disruptions in child custody, immigration support, as well as to promote access to mental health services.

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**IPE and Holistic Representation**

Interprofessional education (IPE) is a training model designed to train school psychologists, social workers, and lawyers to provide holistic representation to juveniles involved in the system. Reintegrating juveniles into the school’s system contributes to the promotion of their future success. Education is an important part of a person’s future, being seen
as a health outcome through the disruption of the cycle of poverty and combatting inequities in
the health system (Hahn & Truman, 2015). As discussed above, IPE has been shown to be
related to positive health results benefiting the overall wellbeing of the client and patient
outcomes (Reeves et al., 2018). Interprofessional teams are also dedicated to the advancement of
population health and reduction in health care costs (Berwick et al., 2008). Therefore, due to the
integrated care that holistic representation uses through the collaboration between multiple
professions, interprofessional education is a fitting training model to promote holistic practice.
This training model allows for school psychologists, lawyers, and social workers to
comprehensively learn each other’s professions and include the juvenile as part of their school
reintegration process into the school system; allowing them their right to an education.

Summary

Overall, the utilization of zero-tolerance policies by schools as a disciplinary measure
removes students from their classroom, disproportionately affects minority students, and pushes
them into the juvenile justice system. As a result, school psychologists and social workers should
be integrated into the use of holistic representation, provided by lawyers, to youth at risk of
school dropout and entering the juvenile justice system. Through this type of integrated care,
these three professions can work together to provide effective school reintegration services to
youth. Interprofessional Education (IPE) is a training model that may be used to train these
professions to work with each other. However, currently, there is not a clearly defined model in
which to use to train these professions to provide holistic representation as a team.

Purpose of the Study

The purpose of this research study is to investigate the effectiveness of using
Interprofessional Education (IPE) as a training model for the professional development of school
psychology, law, and social worker graduate students to provide holistic team representation for at-risk youth.

**Research Questions and Hypotheses**

There is a current understanding that Interprofessional Education (IPE) is an effective training model in the health care field. Due to the high need of community support, legal services, and academic/behavioral support for at-risk juveniles, the expertise of social workers, lawyers, and school psychologists may be beneficial for these students. However, there is not a clear IPE model to train these professions in their graduate programs to practice holistic legal representation. Therefore, the research questions below will allow the researcher to understand if a current IPE model being used is effective in training a holistic legal representation team that includes school psychology, social work, and law graduate students. The research questions posed in this study are as follows:

**Research Questions**

**Research Question 1**

Is there a significant change between graduate student’s pre-test and post-test scores on the *Interprofessional Attitudes Scale (IPAS)*?

Hypothesis: There will be a significant improvement between graduate student’s pre-test and post-test scores on the *Interprofessional Attitudes Scale (IPAS)*.

**Research Question 2**

Is there a significant change between graduate student’s pre-test and post-test scores on the *IPEC Competency Self-Assessment Tool*?

Hypothesis: There will be a significant improvement between graduate student’s pre-test and post-test scores on the *IPEC Competency Self-Assessment Tool*. 
Research Question 3

Is there a significant change between graduate student’s pre-test and post-test scores on the *Interdisciplinary Education Perception Scale (IEPS)*?

Hypothesis: There will be a significant change between graduate student’s pre-test and post-test scores on the *Interdisciplinary Education Perception Scale (IEPS)*.

Research Question 4

Is there a significant difference between law students overall score on the *IPEC Competency Self-Assessment Tool* when compared to school psychology and social work students?

Hypothesis: There will be a significant difference between law students overall score on the *IPEC Competency Self-Assessment Tool* when compared to school psychology and social work students. It is predicted that law students will view themselves as significantly more helpful to the holistic team than school psychology or social work students.

Research Question 5

How did participation in IEP and providing services on a holistic legal team inform your conceptualization of at-risk youth needs? Did your experience alter your perspective of your professional role? Further, what information do you wish was included in the training that would assist with functioning on a holistic legal team?

Research Question 6

How did participation in cases that involved IEPs, educational and/or other community services on the holistic legal team alter your career goals, or impact your professional practices?
Chapter III

Zero tolerance policies in schools have become a common disciplinary practice that contribute to the funnelling of students into the school-to-prison pipeline. Due to these policies, even students who commit minor disciplinary infractions are being suspended or expelled. At-risk youth require extensive services that ideally involve legal defense, educational support, and community support to assure that their academic, behavioral, and familial needs are being met in order to encourage proper reintegration into the school system. Through the practice of holistic legal representation, juveniles are more likely to receive these supports. Therefore, the purpose of this research study was to investigate the effectiveness of using Interprofessional Education (IPE) as a training model for the education of school psychologists, lawyers, and social workers to provide holistic team representation for at-risk youth. This research investigated how graduate students were taught holistic representation as well as the impact it had on client outcomes. The goals of this research project were to enhance the education of graduate students on providing client-centered and integrated client care and to improve the representation at-risk juveniles receive.

Researcher Positionality Statement

The current researcher is a 5th year School Psychology Doctoral Candidate. At the time of data collection, the researcher was a School Psychology Doctoral student and a participant in the Youth Advocacy Clinic (YAC). Therefore, the researcher did participate in the pre and post-test measures that were used as data in this study. The researcher also participated in the Interprofessional Education (IPE) training and on Holistic Legal Representation (HRM) teams. As a result, it is important to note that the quantitative surveys were distributed and collected by
a designated individual within the clinic, not the current researcher, to eliminate conflict of interest.

In relation to the qualitative interviews, due to the current researcher have participated in the IPE training model, she was able to provide a unique perspective to conducting the interviews with student participants. During the interviews, the researcher was able to understand the true dynamics of participating in the IPE training and the HRM team. Therefore, she already had pre-existing relationships with study participants and was able to encourage students to elaborate on their experience with YAC and their training experience through follow up questions. Some probing follow-up questions may not have been asked if it was not for the researcher’s unique position of having experienced the training, therefore, this was seen as a benefit to the current study. The current researcher did not contribute her perspective or opinion to the qualitative results.

Research Design

In order to gather the necessary data, a pretest/posttest mixed-methods model was used to measure graduate students’ perspectives on the IPE training model. Additionally, interviews were conducted in order to obtain a more individualized view of the training experience from the perspective of each individual on the holistic team. Further, interviews were conducted with participants who participated in the Youth Advocacy Clinic when they were students in their graduate program but are now working in their respective professional field. The qualitative interviews were conducted via zoom and were transcribed to prepare for thematic coding.

Participants

Participants in this research study were sought from the Youth Advocacy Clinic (YAC). For this study, there was a total of 29 graduate students over a span of two training years;
including 23 law students, 1 social work student, and 5 school psychology graduate students. The YAC is a combination of the Education Law Clinic and Juvenile Defender Clinic at the Duquesne University School of Law located in Pittsburgh, Pennsylvania. This clinic was developed in 2016 to assist at-risk juveniles in an out-of-home delinquency or jail placement to navigate discipline and educational matters. Alongside the Education Law Clinic, the Juvenile Defender Clinic works to represent the delinquency side of these matters. Collaboratively, these clinics work together to dismantle the school-to-prison pipeline. In May 2020, the clinics merged and began to work under what is now known as the YAC. Through YAC, holistic legal representation (HRM) is provided by law students, master-level social work students, and doctoral-level school psychology students, to provide effective services to at-risk youth (Sizemore et al., 2020). Individuals from each of these graduate programs attend a meeting at the beginning of every school year, based on the concepts of IPE, to learn how to provide holistic representation as a team. For the purposes of this study, participants were sought from the YAC clinic.

The YAC clinic utilizes a client-centered approach to conceptualize the holistic legal representation being provided for clients. Therefore, the client is viewed as a team member alongside the lawyer, school psychologist, social worker, and researcher. A client-centered team is utilized because a main component of holistic legal representation is to work on non-hierarchical teams with the teams promoting the development of each other’s practice as well as assuring the clients voice is heard. Once the clinic receives client’s cases, either through client calls or referrals to the clinic, an initial screening is completed and reviewed to determine if the case is appropriate for the clinic. Fitting cases for the clinic include; delinquency, special education, and school discipline. When the case was deemed appropriate, the researcher then
completed a full intake, including any necessary releases and intake letters. After the intake was completed, a randomizer determined if the client will receive treatment as usual (TAU), only lawyer representation, or holistic legal representation (HRM), which includes the interprofessional team. Under special circumstances a client automatically got assigned HRM; such as the client being under 9 years old or the client having intense needs such as severe mental health. The interprofessional team consists of the student lawyer, student social worker, and student school psychologist, as well as one supervisor for each respective discipline. The student lawyer’s role on the team was the litigation of client cases including discovery and investigation, trials and hearings, sentencing, and school meetings. The student social workers were responsible for connecting their client to resources in the community, providing support, forming relationships with agencies that their client is required to connect with and providing advocacy within those agencies, keep close connections with clients who are placed away from home, in-court advocacy, school hearing and meeting advocacy and written advocacy. Lastly, the student school psychologist was responsible for intake and plan development, in-court advocacy, and school hearings and school meeting advocacy. Although each profession has their defined role, the team worked together to influence the practice of each other’s professions; being able to speak on each other’s behalf, within their boundary of competence, if one team member is not able to complete their duty for some reason (e.g., the lawyer can make IEP modification suggestions, the school psychologist can contact community agencies, the social worker understands the special education eligibility categories to discuss with the client’s parent, etc.). The researchers were responsible for collection and analysis of data only, having no direct contact with the client upon intake completion.
Procedures

After students from all three graduate programs completed the pre-test surveys, they then participated in holistic legal team training through the use of interprofessional education. This training was conducted by the supervising attorney, social worker, and school psychologist of the YAC clinic. After they participated in this training, students were then randomly assigned to client’s cases. Students were assigned to cases randomly unless there was a conflict of interest (e.g., school psychology students have been placed at the client’s school for other practicum experiences, etc.).

Independent Variable

Completion of IPE Training. Participants attended an interprofessional education program that provided training regarding the fields of law, social work, and school psychology. Based on the principles of interprofessional competency, this training was used to teach students how to work on a holistic team.

Participation as a Holistic Representation Team Member. After the individuals completed the IPE training, they were assigned to new clients or continued to work on the clientele with whom they were already working. A holistic team was comprised of a law student, school psychology student, and a social work student working together to provide services to youth who need special education representation and/or have been involved in the justice system.

Dependent Variable

Attitude toward IPE competencies. Each participant’s attitudes towards the interprofessional training were measured through the use of the Interprofessional Attitudes Scale (IPAS). This scale was designed to assess the attitudes of individuals toward the core competencies of Interprofessional Collaborative Practice. The IPAS included 27 items with five
subscales evaluating teamwork, roles, and responsibilities, patient-centeredness, interprofessional biases, diversity and ethics, and community-centeredness. Individuals answered questions using a five-point Likert scale; 1 = strongly disagree to 5 = strongly agree (Norris et al., 2015).

Originally developed to assess the interprofessional attitudes of health professional students, Norris et al. (2015) distributed the IPAS survey to 678 students within the University of Utah Health Sciences Center (UUHSC). Participants included both female (n=418) and male (n=260) students. In the sample, 81.7% of participants were Caucasian (n=550), 39% were from the School of Medicine (n=271), and 76% had experienced IPE at least one time (n=520). An exploratory factor analyses (EFA) and a confirmatory factor analysis (CFA) were conducted to determine and confirm the factor structure for the survey, respectively. EFA results indicate the correlation matrix was factorable using the Bartlett’s Test of Sphericity ($x^2 = 11,515, p <0.001$) and the KMO test (0.92). Internal consistency reliability for the five factors was also acceptable, ranging from 0.62 to 0.92. Furthermore, the CFA analyses indicated that all items loaded significantly, at $p <0.05$, in each of their specified factors from the EFA, with standardized regression coefficients ranging from 0.28 to 0.95. Finally, the CFA also indicated acceptable internal consistency with the Cronbach’s alpha ranging from $\alpha = 0.61$ and $\alpha = 0.92$ and appropriate linear correlation with the Pearson correlation ranging from -0.04 and 0.56 (Norris et al., 2015).

**Attitude toward individual’s ability to function as a holistic team member.**

Participants’ attitudes regarding their ability to function as a holistic team member was measured through the use of the IPEC Competency Self-Assessment Tool. The IPEC Competency Self-Assessment was a 16-item measure that evaluates individuals’ beliefs about their ability to
communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions. Individuals answered questions using a five-point Likert scale; 1 = strongly disagree to 5 = strongly agree (Dow et al., 2014).

Originally developed to self-assess health professional students on their ability level for each IPE competency, Dow et al. (2014), distributed the IPEC survey to 3,236 students who are enrolled in clinical health science degree programs, including allied health, dentistry, medicine, nursing, and pharmacy, at Virginia Commonwealth University. There was a total of 481 survey responses. Participants were both female (71.1%) and male (28.9%). Furthermore, 67.9% of participants were Caucasian, 23.9% were Asian, 4.9% were African-American, and 6.8% identified as other. An exploratory factor analyses (EFA) and a principal components analysis with varimax rotation was conducted to determine the factor structure for the survey and group items into components. EFA results indicate the correlation matrix was factorable using the Bartlett’s Test of Sphericity, which was significant, and the KMO test (0.98). Furthermore, the principal components analysis revealed four components: teams and teamwork, values and ethics, interprofessional communication, and roles and responsibilities. The variances ranged from 24.4%, 23.7%, 17.7%, to 13.7%, respectively. There was a high degree of internal consistency reliability for each component; ranging from 0.96 to 0.98 (Dow et al., 2014).

**Ability for each profession to function on a holistic team.** The Interdisciplinary Education Perception Scale (IEPS) was a measure that individuals completed to rate their perception of their own and other disciplines when being educated using an IPE model. The IEPS was an 18-item Likert scale tool that individuals completed in order to provide their perceptions of their own field of work and its helpfulness in encouraging functioning on a
holistic team. Individuals answered questions using a six-point Likert scale; 1 = strongly disagree to 6 = strongly agree (McFadyen et al., 2007).

Originally developed by Luecht et al. (1990) with limited statistical evidence, McFadyen et al. (2007) sought to build evidence regarding the stability of the instrument and its test-retest reliability. The authors report evidence for the use of the IEPS based on the responses of 308 students that attended eight undergraduate health and social care professional programs. These students were monitored two times a year, beginning in 2003, and provided information regarding their attitudes to and perceptions of interprofessional education. The 2004 follow up sample of 247 students was used to determine the measures stability of goodness-of-fit. Furthermore, a content analysis was completed to evaluate 19 academic health and social care staff groupings of each instrument item into one of the four already derived subscales determined by Luecht et al. (1990). Structural equation modeling (SEM) was used as a form of CFA to determine structure. Three items were removed from the original Luecht et al. (1990) model to create the new model based on the current SEM. The internal consistency of the new structure was acceptable with Cronbach’s Alpha being $\alpha = .88$ (McFadyen et al., 2007).

**Information that will improve the IPE training.** Individuals completed individual interviews after participating in the interprofessional education training and participating on the holistic legal team. These interviews consisted of questions regarding what individuals believe should be incorporated into the training to allow for better functioning as a holistic team, how the training has impacted their current education and case conceptualization, and how it has influenced their future career choice within their profession.

**Long-Term Effects of IPE training.** Previous students who participated in the IPE training and on a holistic legal team as school psychologists, social workers, and lawyers were
interviewed and asked questions regarding their current job, if they remember what IPE and holistic legal representation is, and how their training on a holistic team has influenced their current work with clients, their approach to cases, and their current career choice.

The above procedure was used to study the effectiveness of interprofessional education to train school psychology, social work, and law graduate students to work together on a holistic representation model. Therefore, the below research questions were explored using the explained measures above to measure this effectiveness.

**Research Questions**

**Research Question 1**

Is there a significant change between graduate student’s pre-test and post-test scores on the *Interprofessional Attitudes Scale (IPAS)*?

Hypothesis: There will be a significant improvement between graduate student’s pre-test and post-test scores on the *Interprofessional Attitudes Scale (IPAS)*.

**Research Question 2**

Is there a significant change between graduate student’s pre-test and post-test scores on the *IPEC Competency Self-Assessment Tool*?

Hypothesis: There will be a significant improvement between graduate student’s pre-test and post-test scores on the *IPEC Competency Self-Assessment Tool*.

**Research Question 3**

Is there a significant change between graduate student’s pre-test and post-test scores on the *Interdisciplinary Education Perception Scale (IEPS)*?

Hypothesis: There will be a significant change between graduate student’s pre-test and post-test scores on the *Interdisciplinary Education Perception Scale (IEPS)*.
**Research Question 4**

Is there a significant difference between law students overall score on the *IPEC Competency Self-Assessment Tool* when compared to school psychology and social work students?

Hypothesis: There will be a significant difference between law students overall score on the *IPEC Competency Self-Assessment Tool* when compared to school psychology and social work students. It is predicted that law students will view themselves as significantly more helpful to the holistic team than school psychology or law students.

**Research Question 5**

How did participation in IEP and providing services on a holistic legal team inform your conceptualization of at-risk youth needs? Did your experience alter your perspective of your professional role? Further, what information do you wish was included in the training that would assist with functioning on a holistic legal team?

**Data Analysis**

A paired samples t-test was used to compare pre and post test scores. A paired samples t-test was used because it allowed for the matching of participants pre-test and post-test scores and also investigates the mean of these scores. As such, the means of each group, law students, social worker students, and school psychology students, were compared from the pre and post-test. A Mann Whitney U Test was used to analyze research question four due to the possibility of having a non-normal sample distribution because of the studies small sample size. Further, thematic coding was used to identify consistent themes and key messages throughout qualitative interviews.
Summary

In order to answer the five research questions proposed for this study, a mixed methods design was utilized to evaluate the effectiveness of implementing an interprofessional education training model with law, school psychology, and social work students to provide holistic representation to at-risk youth. In order to answer the research questions, data was gathered from graduate level students participating in the Youth Advocacy Clinic (YAC). These students were provided with an interprofessional training on each other’s professions and participated on a holistic team representing at-risk youth and juveniles involved in the delinquency system. Students’ perceptions of the training and ability to function on the holistic team was evaluated using various evidence-based surveys and an interview conducted before and after training. Furthermore, results were statistically analyzed using a paired samples t-test, Mann Whitney U test, and thematic coding.
Chapter IV

The purpose of this study was to investigate the effectiveness of using Interprofessional Education (IPE) as a training model for the professional development of school psychology, law, and social worker graduate students to provide holistic legal representation for at-risk youth. This study is important due to the needed improvement of professionals who aim to disrupt the school to prison pipeline. These needed improvements include a better understanding of how the legal system impacts youth being incarcerated, how zero-tolerance policies in schools negatively impact students and contribute to the school to prison pipeline, and how working on an integrated care team can create better outcomes for at-risk youth.

It has been shown that the use of an integrated care teams is effective for improving patient outcomes (Reeves et al., 2018). Further, holistic legal representation is an approach that is reported to improve case outcomes and reduce future crime (Anderson et al., 2019). Holistic teams conceptualize cases by learning the practices of each other’s professions so to widen their professional approaches as well as create better outcomes (Steinberg, 2006); therefore, IPE is theorized to be an effective method to train HRM teams. However, evidence is limited for the use of IPE to train a holistic legal team. In result, this study aims to expand the research evidence on the use of this training model as well as to improve the current training program that the Youth Advocacy Clinic (YAC) utilizes. Therefore, it was hypothesized that by providing holistic legal teams with integrated care training, called Interprofessional Education (IPE), the legal teams within YAC would be better prepared to address at-risk youth’s outcomes. These outcomes include any legal, community, mental health, and educational needs that accompany their legal case. The potential implications from this research include improving the IPE training
structure currently used by YAC and contribute to the research evidence of utilizing IPE to train an HRM team. The results of the studies research questions are outlined below.

**Descriptive Analysis**

The descriptive analyses in Table 1 show that there were a higher number of law students (n=23) in the studies sample when compared to school psychology (n=5) and social work (n=1) students. This is an expected ratio given that in most years of training included 8-10 law students, 2 school psychology students and 1 social worker in the clinic. The gender, race, and age of the participants was not collected. All students that participate in the Youth Advocacy Clinic are considered advanced graduate students within their own programs.

**Table 1**

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Law student</td>
<td>23</td>
<td>79.3</td>
<td>79.3</td>
</tr>
<tr>
<td></td>
<td>Social work</td>
<td>1</td>
<td>3.4</td>
<td>82.8</td>
</tr>
<tr>
<td></td>
<td>School Psychology</td>
<td>5</td>
<td>17.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
<td>29</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Statistical Analysis**

**Missing Data**

Of the 29 participants, 7 were missing either a pre-test or a post-test. All missing data was handled using mean substitution in order to not eliminate existing data. There were participants who completed the pre-test but not the post-test and vice versa. Therefore, mean substation was used to avoid eliminating already existing data.
Research Question One

A paired samples t-test was used to compare student’s pre-test and post-test scores on the Interprofessional Attitudes Scale (IPAS). A paired samples t-test was used because it compares the pre and post-test mean of the same participant (Boston University, 2016). This scale was used evaluate the effectiveness of interprofessional education (IPE) and participation on a holistic legal team on the attitudes of individuals toward the core competencies of Interprofessional Collaborative Practice. In order to measure this effectiveness, the Interprofessional Attitudes Scale (IPAS) was used as a pre-test and post-test measure. When analyzing this research question, the independent variable was the completion of IPE training and participation as a holistic representation team member. The dependent variable was the Interprofessional Attitudes Scale (IPAS).

In order to analyze the pre-test and post-test scores using paired samples t-test, a composite score was created. This composite score was calculated by adding up the individual participants rating for all 27 questions that make up the IPAS, both their pre-test and post-test answers. The highest score an individual could rate on the IPAS was 135 and the lowest that could score was 27.

Hypothesis Question One. There will be a significant improvement between graduate student’s pre-test and post-test scores on the Interprofessional Attitudes Scale (IPAS).

Results Question One. As displayed in Table 2, there was not a significant difference between the pre-test scores (M= 117.24, SD=8.33, N=29) and post-test scores (M= 118.58, SD=9.51, N=29) of students from all disciplines (t (28) =.720, p = .478). Post-measure data shows that after participating on the HRM team and in IPE training, individuals’ attitude toward
the core competencies of Interprofessional Collaborative Practice decreased. Therefore, the null hypothesis is accepted.

**Table 2**

*Paired Samples Correlations for IPAS Scale*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>IPAS Total Pre</td>
<td>29</td>
<td>.377</td>
</tr>
<tr>
<td></td>
<td>IPAS Total Post</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3**

*Paired Samples Statistics on IPAS Scale*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>IPAS Total Pre</td>
<td>117.240</td>
<td>29</td>
<td>8.3358</td>
</tr>
<tr>
<td></td>
<td>IPAS Total Post</td>
<td>118.577</td>
<td>29</td>
<td>9.5138</td>
</tr>
</tbody>
</table>

**Table 4**

*Paired Sample Test Statistics for IPAS Scale*

<table>
<thead>
<tr>
<th></th>
<th>Paired</th>
<th>Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>IPAS Total Pre</td>
<td>-1.33724</td>
<td>10.00675</td>
<td>1.85821</td>
<td>-5.14361</td>
<td>2.46912</td>
<td>-7.20</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>IPAS Total Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Research Question Two**

A paired samples t-test was used to compare student’s pre-test and post-test scores on the IPEC Competency Self-Assessment Tool. A paired samples t-test was used because it compares the pre and post-test mean of the same participant (Boston University, 2016). The scale was used to evaluate the effectiveness of interprofessional education (IPE) and participation on a holistic legal team on individuals’ beliefs about their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions. In order to measure this effectiveness, the IPEC Competency Self-Assessment Tool was used as a pre-test and post-test measure. When analyzing this research question, the independent variable was the completion of IPE training and participation as a holistic representation team member. The dependent variable was the IPEC Competency Self-Assessment Tool.

In order to analyze the pre-test and post-test scores using paired samples t-test, a composite score was created. This composite score was calculated by adding up the individual participants rating for all 16 questions that make up the IPEC, both their pre-test and post-test answers. The total highest score an individual could have was 80 and the lowest they could score was a 16.

**Hypothesis Question Two.** There will be a significant improvement between graduate student’s pre-test and post-test scores on the IPEC Competency Self-Assessment Tool.

**Results Question Two.** As displayed in Table 3, there was a significant difference between pre-test scores (M= 70.92, SD=6.57, N=29) and post-test scores (M= 74.04 SD=6.44, N=29) of students from all disciplines (t (28) =2.45, p = .021). Post-measure data shows that
after participating on the HRM team and in IPE training, individual’s beliefs about their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions increased. Therefore, the null hypothesis is rejected.

**Table 5**

*Paired Samples Statistics on IPEC Scale*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 IPEC Total Pre</td>
<td>70.9200</td>
<td>29</td>
<td>6.56789</td>
<td>1.21963</td>
</tr>
<tr>
<td></td>
<td>IPEC Total Post</td>
<td>74.0386</td>
<td>29</td>
<td>6.44471</td>
</tr>
</tbody>
</table>

**Table 6**

*Paired Samples Correlations for IPEC Scale*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 IPEC Total Pre</td>
<td>29</td>
<td>.446</td>
<td>.015</td>
</tr>
</tbody>
</table>
Table 7

Paired Sample Test Statistics for IPEC Scale

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>IPEC Total Pre</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>Paired Differences 95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IPEC Total Post</td>
<td>-3.11862</td>
<td>6.85061</td>
<td>1.27213</td>
<td>-5.72445 - .51279</td>
<td>-2.452</td>
<td>28</td>
<td>.021</td>
</tr>
</tbody>
</table>

Research Question Three

A paired samples t-test was used to compare student’s pre-test and post-test scores on the Interdisciplinary Education Perception Scale (IEPS). A paired samples t-test was used because it compares the pre and post-test mean of the same participant (Boston University, 2016). This scale was used to evaluate individual’s general perception of their own opinions and other disciplines opinions of their profession before and after IPE training and participation as a holistic legal team member. In order to measure this effectiveness, the Interdisciplinary Education Perception Scale (IEPS) was used as a pre-test and post-test measure. When analyzing this research question, the independent variable was the completion of IPE training and participation as a holistic representation team member. The dependent variable was the Interdisciplinary Education Perception Scale (IEPS).

In order to analyze the pre-test and post-test scores using paired samples t-test, a composite score was created. This composite score was calculated by adding up the individual
participants rating for all 18 questions that make up the IPEC, both their pre-test and post-test answers. The total highest score an individual could have was 108 and the lowest they could score was a 18.

**Hypothesis Question Three.** There will be a significant change between graduate student’s pre-test and post-test scores on the Interdisciplinary Education Perception Scale (IEPS).

**Results Question Three.** As displayed in Table 4, there was not a significant difference between pre-test scores (M= 85.72, SD=6.65, N=29) and post-test scores (M= 87.07, SD=9.03, N=29) of students from all disciplines (t (28) = .859, p = .398). Post-measure data shows that after participating on the HRM team and in IPE training, individual’s attitudes toward their own profession participating on a holistic team increased; however, it was not statistically significant. Therefore, the null hypothesis is accepted.

**Table 8**

*Paired Samples Statistics on IEPS Scale*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEPS Total Pre</td>
<td>85.7200</td>
<td>29</td>
<td>6.64680</td>
<td>1.23428</td>
</tr>
<tr>
<td>IEPS Total Post</td>
<td>87.0700</td>
<td>29</td>
<td>9.03141</td>
<td>1.67709</td>
</tr>
</tbody>
</table>

**Table 9**

*Paired Samples Correlations for IEPS Scale*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEPS Total Pre</td>
<td>29</td>
<td>.451</td>
<td>.014</td>
</tr>
<tr>
<td>IEPS Total Post</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 10

**Paired Sample Test Statistics for IEPS Scale**

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Pair 1</td>
<td>-1.3500</td>
<td>8.46265</td>
</tr>
<tr>
<td></td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>- .859</td>
<td>28</td>
</tr>
</tbody>
</table>

### Research Question Four

A Mann Whitney U Test was used to determine whether there was a difference in pre and post-test scores between law students and school psychologists and law students and social work students on their beliefs about their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions. A Mann U Whitney Test was used to analyze this question to account for the non-normal sample distribution due to the small sample size. In order to measure this difference, the IPEC Competency Self-Assessment Tool was used as a pre-test and post-test measure.

**Hypothesis Question Four.** There will be a significant difference between law students overall score on the IPEC Competency Self-Assessment Tool when compared to school psychology and social work students. It is predicted that law students will view themselves as significantly more helpful to the holistic team than school psychology or social work students.
**Results Question Four.** When analyzing the results displayed in Table 5, there was not a significant difference between the law student and social work student post-test scores, (U=8.5, p=.750). Therefore, the null hypothesis is accepted, meaning that there was not a significant difference on how law students and social work students viewed their functioning on a holistic representation team.

| Table 11 |

Mann-Whitney U Test Ranks

<table>
<thead>
<tr>
<th>StudentType</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPEC Total Pre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law student</td>
<td>23</td>
<td>12.28</td>
<td>282.50</td>
</tr>
<tr>
<td>Social work</td>
<td>1</td>
<td>17.50</td>
<td>17.50</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPEC Total Post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law student</td>
<td>23</td>
<td>12.63</td>
<td>290.50</td>
</tr>
<tr>
<td>Social work</td>
<td>1</td>
<td>9.50</td>
<td>9.50</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Table 12 |

Mann-Whitney U Test Statistics

<table>
<thead>
<tr>
<th></th>
<th>IPEC Total Pre</th>
<th>IPEC Total Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>6.500</td>
<td>8.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>282.500</td>
<td>9.500</td>
</tr>
<tr>
<td>Z</td>
<td>-.729</td>
<td>-.438</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.466</td>
<td>.661</td>
</tr>
<tr>
<td>Exact Sig. [2*(1-tailed Sig.)]</td>
<td>.583</td>
<td>.750</td>
</tr>
</tbody>
</table>

a. Grouping Variable: StudentType
b. Not corrected for ties

Further, when analyzing the results displayed in Table 6, there was not a significant difference between the law student and school psychology student post-test scores, (U=50, p=.684). Therefore, the null hypothesis is again accepted, meaning that there was not a
significant difference on how law students and school psychology students viewed their functioning on a holistic representation team.

**Table 13**

*Mann-Whitney U Test Ranks*

<table>
<thead>
<tr>
<th>StudentType</th>
<th>N</th>
<th>Mean Rank</th>
<th>Sum of Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPEC Total Pre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law student</td>
<td>23</td>
<td>15.48</td>
<td>356.00</td>
</tr>
<tr>
<td>School Psychology</td>
<td>5</td>
<td>10.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPEC Total Post</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law student</td>
<td>23</td>
<td>14.83</td>
<td>341.00</td>
</tr>
<tr>
<td>School Psychology</td>
<td>5</td>
<td>13.00</td>
<td>65.00</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 14**

*Mann-Whitney U Test Statistic*

<table>
<thead>
<tr>
<th></th>
<th>IPEC Total Pre</th>
<th>IPEC Total Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>35.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>50.00</td>
<td>65.00</td>
</tr>
<tr>
<td>Z</td>
<td>-1.360</td>
<td>-0.455</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.174</td>
<td>.649</td>
</tr>
<tr>
<td>Exact Sig. [2*(1-tailed Sig.)]</td>
<td>.193</td>
<td>.684</td>
</tr>
</tbody>
</table>

a. Grouping Variable: StudentType  
b. Not corrected for ties

**Qualitative Data**

**Research Question Five**

A semi-structured qualitative interview was conducted to gather participants feedback regarding their experience working on a holistic legal representation team and being provided Interprofessional Education (IPE). A total of 5 interviews were conducted; 4 were law students.
and I was a school psychology student. Thematic coding was used to determine the most common concepts that the students discussed during interviews.

**Results Question Five.**

*Knowledge of Interprofessional Education (IPE)*

When students were asked to provide a definition of “interprofessional education (IPE)”, students were able to identify the basic concepts that are involved in this training structure such as learning about other professions line of work, educating the other professions you are working with on your own profession, and learning how to best handle situations in a variety of ways.

“My understanding of interprofessional education is having the core knowledge of disciplines outside of your own, whether it be from formal professional developments, trainings, things like that, or just working with people from other professions on an ongoing basis.”

However, students also demonstrated a lack of specific knowledge, as compared to other types of collaborative teams, when asked to define Interprofessional Education.

“I don't know. Do I know what that is? I don't know if I know that. Interprofessional education, maybe different professions educating each other in a way. You as a psychology student helping us as law students, and we helping you and us working together that way.”
Knowledge of Holistic Legal Representation (HRM)

When students were asked to define what holistic legal representation (HRM) was, the main themes that arouse were: helping clients receive help outside of legal services, multiple professions working together to provide various services for clients, helping clients by using a team approach to address their needs in all areas of life, and to decrease client’s involvement in the justice system.

“My understanding of holistic legal representation is having professionals from multiple disciplines working together on a team to not only address a child's needs within the legal system, but also other areas of their life, like if they have issues in the community or need connected to services within the community, having a professional that's able to help them connect them in that way, and then being able to support the student's needs in school or academically, so having a professional that's on the team to be able to bridge that gap as well.”

Training Modifications

Further, modifications to the training structure that the Youth Advocacy Clinic (YAC) provides to students was discussed throughout interviews. During interviews, students made many recommendations to the training structure such as, creating more clear examples and defined rules of what each person’s role is on the team. For example, some students mentioned that the training should provide a list of example tasks and which profession you would seek guidance from for that task (e.g., IEP meetings would be the school psychologist, food bank
resources would be the social worker, court hearings would be the law student, etc.). Students stated that they were unsure of who to turn to in certain situations.

“I think it really is just clarifying what everyone's role is, who do you go to for what, what do they do, what don't they do? Just being very clear, because for us, I think it was just it was a lot of confusion of who do we go to for what which is more clarifications on that.”

Additionally, students stated that being provided “real life examples” from previous participants experiences would be extremely helpful. Further, utilizing role play activities while in seminar to practice certain scenarios would be beneficial; specifically relating to courtroom situations, hearings, and speaking with clients.

“Give a hard situation, something that might be difficult, and actually play it out. So at least we're in the classroom and Professor Dempsey can help. Step in and go, okay, maybe say it like this, or maybe approach that. Because once you're in the moment, it's too late. You're trying to scramble. I think doing more activities like that.”

Another student stated that student transitions would be helpful from year to year. For example; the student from the current year will assist in transitioning the upcoming student who is taking over their cases. They stated that this transition time will give the upcoming student the ability to get caught up on the current case and will give the family a smoother transition to a new representation, versus a rigid transition with no warning.
“Now this person is in place. This person is not a brand-new person to the case. I don't need to explain everything and catch them up because they've already been caught up. They've already taken that responsibility on and done the work themselves, and they're ready to step in and take over where the last person left off. I think that that continuity is missing in a big way.”

Boundaries between the clinic and families was an area of concern that was brought up. The student explained that at times, the clinic was helping families with things that were not the responsibility of the clinics. Due to this, it was hindering progress that the family could make with gaining their own independence. Therefore, discussing boundaries with students and families, could be a more efficient way to assure the clinic is assisting the families in the most appropriate and beneficial manner.

“We weren't helping them to gain independence to get skills on their own. We were just sometimes being used as a crutch rather than the true role that we should have been used for. I think conversations about boundaries, why boundaries are so important, how you can still respond to a crisis, care about a family, do them a favor while still maintaining professional boundaries…”

When asked about the training all students were required to attend at the beginning of the school year, there were some students who reported they do not even remember the training and what it entailed.
“I remember Dr. Hughes coming in, Dr. Shook coming in. But honestly, I don't remember a whole ton about that. I remember more second semester.”

Some students expressed the importance of breaking up the training throughout the year and allowing for more contact with students from all disciplines on a scheduled basis including integrating students in the classes together.

“I would say maybe instead of… Because to me, as I'm remembering it, I feel like we did one big thing in the beginning of the year and one big thing at the end. I think it would be helpful to break everything up. I know it's hard because clinic's only once a week but doing it once every other week for 45 minutes.”

Supervision/Seminar Experiences

During interviews, participants were asked to describe their experiences with faculty supervision and assigned classwork. Common themes that emerged out of the interviews included the need for increased contacts with faculty supervisors and more productive weekly seminar sessions. Students stated that they enjoyed spending seminar time on case discussion, group supervision, guest presenters, and reading relevant books. However, at times law students were unsure if most of the seminar coursework was helpful, such as the journal entries they were required to complete.

“What else? I would say as far as class itself, like seminar, I wasn't always too thrilled to go because sometimes it's like a
waste of time. Some of the things we were doing were not, for me, helpful or productive.”

Further, another participant mentioned that there should be a more consistent meeting with all of the disciplines to discuss cases and incorporate coursework from all disciplines into the training.

“I think there should be ongoing, I don't want to say meetings, but almost like supervision or some sort of oversight that brings the whole team together. The school psychology students, the social worker, and the student attorneys all in the same place at the same time, talking about cases, having more conversations. I mean, in a way that this is expected, but it feels like there's a lot of phone tag that goes on and not a lot of sit-down quality conversations about kids and about cases. I feel like that's a piece that's missing.”

“I think it would be great to incorporate coursework that the attorneys have into the school psychology program, especially for the students that are going to be working in the clinic. But even not, it's knowledge that school psychologists should have regardless if they're working in a law clinic or not.”

Teamwork Experiences

During interviews, participants were asked to speak on their experiences working with the team. Various respondents reported positive interactions with team members such as being
able to reach team members, consistent communication, and collaboration amongst team members.

“It’s nice to have someone else on the team other than just you or one other person to simply talk about it and bounce ideas around.”

“I think we could have had a little more communication at times, just finally checking that nothing was really going on, but just knew that there was nothing going on. But as a whole, I think we did a good job of communicating when something big came up to figure out what we were going to do in the best course of action for the clients.”

However, many participants also mentioned that it was difficult to get in contact with the social work participants; although they always had positive interactions once they got in contact. Further, a student explained that at times the amount of work that was being completed was unequal amongst the team members.

“…it would again, just be nice for everybody to play an equal part. But there were times where we would step out of our role as school psychology students and would do social work things. Again, fine, but at times we didn't have a social worker, so there wasn't somebody that we could have those conversations with that we could bounce ideas off of, or
honestly, somebody that could go do the footwork for us. We had to do a lot of it ourselves.”

“There were several that were great. But certain law students just didn't participate as much. It felt like we were doing all three jobs and not learning from them. But if there was a problem and we needed the attorney piece of it, we would call the law faculty member, where we would be unable to get hold of the student attorney and we'd have to call the law faculty member. That was a difficult piece of it, and a piece that I hope changes in the future.”

“Again, I'm more than happy to run out to a family's home and check in with them or make a referral and connect them with a community organization. Or the kid needs med. We'll find the psychiatrist. Let's get you on the waitlist. Give me your insurance information. Comfortable with all of that. It's just a lot to do all of that and our job and everything else we do that's not with the clinic, all of our practicums, our responsibilities within the program, as far as coursework. Then our personal lives outside of it, it just gets to be a lot.”

**Personal Impact**

When asked about the impact that participating in the Youth Advocacy Clinic (YAC) had on individuals’ personal beliefs, many students reported that it has impacted them in a positive
manner. Students reported that it allowed them to view individuals involved with the justice system in a more understanding manner, such as “what is causing you” to break the law versus “you just broke the law”. Further, multiple students reported they learned how to function on a team of various professions and learned about the benefits that psychology and social work can have for their clients.

“It's been interesting to work with people from different disciplines because I have learned a lot about how other people conceptualize cases and prioritize needs and how that's different from the way that I do and the way that we're trained in school psychology to do. I'm trying to think about… There was another thing that I was going to say. It's just a very unique experience. It's unlike any other practical experience or whatever, employment experience that you'll get in a school psychology training program, because it's not just school psychology, it is school psychology, but it's also two other things.”

Other participants stated that they were able to relate to the clinic due to personal experiences, such as siblings having a mental health disorder and identifying with minority populations.

“I mean, I learned a lot, especially about psychology. That is something again, I didn't know much about prior, but my sister has autism and no, she was not tested. I don't think she was much older. The school just did not go about it properly, so now I think about things like that and I look at things differently, especially when it comes to school psychology, now I have an interest in education, education law and stuff I didn't have before, but I just saw that
there's, I think, an issue with some of these school districts and how that they're approaching things and not being, I don't say not being helpful, but... Yeah, just not being as helpful as I think it should be.

I've definitely thought about that more especially because, like I said, my sister, it's like a personal thing for me. She struggled for so long in school and she's autism and nobody cared enough, nobody didn't. My parents were fighting, trying to get her some help, and people just ignored it.

“I like the Holistic approach in that regard because I do want to do family law one day, but I want to help underserved communities specifically and including black families. I think the Holistic approach is helpful in that regard because there's a lot of stigmas about black people in therapy.”

Further, a participant mentioned that it impacted their perception of policies, specifically school policies.

“I think it's definitely impacted my perception of policies. I've seen school policies that were initially put in place to solve a problem but have created complex problems of their own, zero tolerance and things like that.”

Professional Impact

Students were asked how their professional work has been altered due to functioning on a holistic team. A major theme that arouse was the open-mindedness of working with other
professions. Students stated this allowed them the opportunity to have discussions about potential decisions being made from different perspectives. Further, this pushed students to be more open minded on how they approach their clients in the future with the understanding that other aspects of client’s lives could be impacting their legal involvement.

“I think my biggest takeaway is just that I think more about all areas of the kid’s life, all areas of the kids functioning, and just that, well, two things, I guess, that initiative piece. If I don't do it, no one might, so actually just doing things for kids that are within the realm of what we do, but maybe sometimes a little bit stepping out. But if that stepping out is what gets a kid a service that they wouldn't get otherwise, like it's something that I feel is important to do and something that I plan on incorporating into my practice. Then also, I think advocacy work is so important. That's something that I didn't realize the importance of it before this experience.”

**Research Question Six**

This final research question was aimed at understanding previous participants, who participated in the Youth Advocacy Clinic, and are now experienced professionals in their field.

**Results Question Six.** No previous graduates consented to participating in the interview. Therefore, no data was collected.
Chapter V

In this chapter, I will interpret the findings of the study outlined above. To begin, I will summarize the statistical analysis of results, which will then be followed by a discussion of these results, the limitations of the above study, and the implications the current findings have on future research and clinical practice.

Summary of Findings

Findings for Research Question One

The Interprofessional Attitudes Scale (IPAS) was developed to measure student’s opinions and attitudes toward participating in interprofessional education and interprofessional team work (Carpenter et al., 2015). Specifically, the tool examines the domains of teamwork roles and responsibilities, patient centered care, interprofessional biases, diversity and ethics, and community centeredness. The maximum score that an individual could receive on this scale is 135 and the minimum score an individual could receive on this scale was 27. Before completing the training, student’s average pre-test score was 117.24 and their post-test score was an average of 118.58.

Prior to students beginning their participation in interprofessional education and participation on a holistic legal team, they seemed to have had high positive attitudes toward interprofessional education and interprofessional team work; as reflected by their pre-test scores over 81. According to the data, students participating in the Youth Advocacy Clinic training structure did not affect how they felt toward interprofessional team work; however, they did feel consistently positive towards interprofessional education. Survey responses, both pre-test and post-test, demonstrate that students had a positive attitude towards teamwork. For example, on
average participants felt as if they are able to work with other professionals to problem-solve an obstacle, respect the values of other professions, and form professional relationships with team members. Further, on average participants felt that shared learning would help them become a better team worker, would help them think more positively about other professionals, and their clients would benefit from the teamwork of various professions.

**Findings for Research Question Two**

Participants’ attitudes regarding their ability to function as a holistic team member was measured through the use of the IPEC Competency Self-Assessment Tool. The IPEC Competency Self-Assessment measures individuals’ beliefs about their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions (Dow et al., 2014). The maximum score that an individual could receive on this scale is 80 and the minimum score an individual could receive on this scale was 16. Before completing the training, student’s average pre-test score was 70.92 and their post-test score was an average of 74.04; therefore, there was a significant change.

Before completing the training, students already viewed themselves as able to function on an interprofessional team productively; as shown by their pre-test scores over 48. Further, post-test scores demonstrate that students believe their ability to function on an interprofessional team increased after participation in IPE training and participating on a holistic legal representation team. These results suggest that the current training structure within the Youth Advocacy Clinic allowed students to grow in regards to communication with team members from other professions and they believe they are now able to solve difficulties on a team more effectively than before. Further, these results also suggest that students increased their ability to learn
information from other professions and then take that information to impact how they make decisions in their own profession. Finally, the training structure has allowed for students to now understand the importance of other professions and their role on an interprofessional team.

**Findings for Research Question Three**

The Interdisciplinary Education Perception Scale (IEPS) is a measure that individuals completed to rate their perception of their own discipline when being educated using an IPE model (McFadyen et al., 2007). The maximum score that an individual could receive on this scale is 108 and the minimum score an individual could receive on this scale was 18. Before completing the training, student’s average pre-test score was 85.72 and their post-test score was an average of 87.07. Although there was a slight increase between pre-test and post-test scores; there was no significant change.

Before completing the training, students already viewed their discipline as being able to function with other professions in a positive manner; as shown by their pre-test scores over 63. However, the post-test scores demonstrate that the interprofessional education training received through the Youth Advocacy Clinic did not impact how individuals view their own professions ability to function on an integrated care team. Therefore, participating in interprofessional education did not impact the way individuals perceived their profession as they continued to have a consistent positive attitude towards their respective discipline before and after the training.

**Findings for Research Question Four**

Participants’ attitudes regarding their ability to function as a holistic team member was measured through the use of the IPEC Competency Self-Assessment Tool. The IPEC
Competency Self-Assessment measures individuals’ beliefs about their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions (Dow et al., 2014). The researcher utilized this tool to examine the difference in scores between law students and school psychology students and law students and social work students; separately. It was predicted that, law students would see themselves as more helpful to the team when compared to both of these professions individually. This hypothesis was made due to the core training differences between the professions. School psychology and social work students are more likely to experience multidisciplinary decision making and team work experiences during their graduate training in comparison to law students, who are more likely to be trained that they are the clients only support.

However, results demonstrate that there was not a significant difference in scores between either of the professions; therefore, the null hypothesis is accepted. This means that law students did not view themselves as more able to function on a holistic team, before or after, the training occurred when compared to school psychology and social work students separately. However, it is important to consider, that there were far fewer school psychology and social work students than law students when completing this analysis.

**Findings for Research Question Five**

Throughout the interviews, there were seven major themes that arose. These themes were knowledge of Interprofessional Education (IPE), Knowledge of Holistic Legal Representation (HRM), training modifications to the current IPE training structure, supervision and seminar experiences, teamwork experiences, the personal impact participating in the clinic had, and the
professional impact participating in the clinic had on participants. These themes were commons areas of discussion that were focused on during the interviews.

In general, students provided information that suggested the training structure of the Youth Advocacy Clinic (YAC) requires adjustment. A major area of improvement that stood out during interviews was the need for structure. For example; many students mentioned the need for the training at the beginning of the year to provide more beneficial information regarding the roles of each profession and spreading the training throughout the year. Further, throughout the year, students recommended that there needs to be more structure regarding seminar experiences and in class activities. These modifications include supervision with all three graduate students on the HRM team and more beneficial coursework during the law student weekly seminar. Although not all students were able to define IPE and HRM well, the interviews demonstrated that the training they experienced did have a positive impact on their personal and professional lives.

**Findings for Research Question Six**

There were no findings for research question six. Therefore, there are no results to be discussed.

**Discussion**

The above study sought to evaluate the effectiveness of Interprofessional Education (IPE) and its use for training school psychology, social work, and law graduate students to provided holistic legal representation. This type of representation is important to address the needs of at-risk youth because of the unique needs at-risk youth have; including special education, legal, and community needs. Specifically, schools implement zero tolerance policies, which have been shown to increase punitive measures as disciplinary measures (APA, 2008). Although the
understanding of critical race theory by graduate students, was not researched in this study, it is important to understand the context of the theory in relation to zero tolerance policies. CRT beliefs are fundamentally rooted in that certain policies and laws perpetuate racism within larger structures, such as the educational system and zero-tolerance policies. Therefore, through the understanding of CRT, it can be understood how zero tolerance policies contribute to the school-to-prison pipeline, which is defined as a set of policies that contribute to the removal of students from the school environment and into the justice system, disproportionately impacting minoritized students (Justice Policy Institute, 2011). Therefore, working collaboratively to understand the basic principles of other professions is beneficial for the work of school psychologists with at-risk youth. However, evidence for this training structure in the psychology profession is limited. Below is further discussion of the study results.

According to a study conducted by Systema et al. (2015), medical and physical therapy students participated in IPE through coursework and after one year it was found that students perceived IPE as allowing them to better understand roles of different professions and contributed to their appreciation of learning with students from other disciplines. However, similar to the current study’s findings, students demonstrated positive attitudes to Interprofessional Education (IPE) before they participated in the curriculum. Additionally, in the above study, there was no significant change found between the student’s attitudes on their pre-test and post-test measures. Based on the findings from System et al. (2015), the results from the current study would be expected. Therefore, the minimal increase in scores between pre-test and post-tests may not be surprising given the student sample. Many student’s pre-test scores already reflected a positive viewpoint of interprofessional education and their participation on an interprofessional team. This suggests that students who self-selected to participate in the Youth
Advocacy Clinic may have done so due to their previously held positive attitude toward the concept of interprofessional work; a self-selection bias. This preexisting positive attitude on behalf of the students could be attributed to multiple reasons. For example, at their core, all of these professional fields (law, social work and school psychology) are aimed at helping others and therefore, these students may have had prior successful experience collaborating with other professionals and may have felt more inclined to participate in the Youth Advocacy Clinic. Additionally, the students relative graduate program may have emphasized the importance of collaborating with other professions when providing services to clients. As such, the results show that there was not a significant increase in the student’s positive attitude toward participating in interprofessional education after participation in the Youth Advocacy Clinic; however, the students entered the clinic with a positive attitude and maintained a positive attitude toward interprofessional education throughout their training experience.

As stated above, many of the studies participants already had a positive view of interprofessional education and teamwork, which is a very important aspect of holistic legal representation (HRM). More specifically, procedural justice is also an important aspect of a holistic representation team. Through effective teamwork, the idea of procedural justice can be enforced for the HRM team’s clients. Therefore, each professional on the team is responsible for contributing to the concepts of procedural justice; voice, respect, neutrality, understanding, and helpfulness. For example, the team can contribute to these concepts of procedural justice through assuring their clients perspective of the offense is being heard (lawyers), taking the time to explain school procedures such as special education eligibility to families (school psychologist), and demonstrating they care about the client in other areas of their life such as assisting with daily needs (social worker).
As discussed in the literature, interprofessional education training has a more notable history in the medical field, however it is beginning to become more acknowledged and encouraged in the field of professional psychology (APA, 2017). For example, interprofessional teams have shown positive outcomes regarding patient safety, coordination of care, quality of care, the experience of care, the advancement of population health, and reduction in health care costs (Berwick et al., 2008). Therefore, this could be an explanation of the lack of significant increase in the data and the training feedback during qualitative interviews. The IPE model being used within the Youth Advocacy Clinic, has minimal research to support its use within the school psychology, social work, and law graduate programs. Therefore, the training structure being used in this study has been newly introduced to these professions; specifically, the school psychology profession.

The point of this research study was not only to build the evidence supporting the benefits of using IPE to train students; but was also to improve the quality of the training structure that is currently being used within the YAC. Therefore, through the qualitative interviews, students were provided with the opportunity to express the ways in which the training structure can be improved moving forward. Further, in the study conducted by Sytsma et al. (2015), the training structure included; a social event, prior to beginning the curriculum, where students were able to meet their interdisciplinary colleagues and two structured teaching sessions completed by the students (one discipline teaching the other discipline). Currently the Youth Advocacy Clinic (YAC) does not include the training experiences that the Sytsma et al. (2015) study utilized. Additionally, the feedback from students in the qualitative interviews align with the training structure in the Sytsma et al. (2015) study. Therefore, the YAC should consider including more structured learning sessions where all disciplines are required to attend and
students teach each other and a social event where the disciplines will meet each other and their team members.

Effective teamwork and collaboration are a critical component of Interprofessional Education (IPE); as this is one of the core competencies for interprofessional collaboration (Interprofessional Educational Collaborative, 2016). Study results demonstrated that student participants had both positive and negative experiences with teamwork throughout their training. Based on the quantitative results, students demonstrated a positive attitude towards their ability to function on a team and the positive benefits working on a team has for clients. Further, based on qualitative interviews, individuals felt it was beneficial to have others assisting with treatment planning and determining the best course of action for their client. However, at times, students felt the communication between team members could be stronger. Additionally, student feedback demonstrated the need for all team members to have an equal and active part in their responsibilities to avoid burnout of other team members.

**Limitations**

While interpreting the above results, there are limitations that should be taken into consideration. The first limitation is the number of participants who took part in the data collection. There was a total of 29 participants; 23 law students, 5 school psychology students, and 1 social work student. Although, the number of students was expected, based on the student enrollment over the years, the imbalanced number of students could contribute to skewed statistical results and does not necessarily allow the results to be generalizable to all three graduate programs equally. Due to the higher number of law students that took part in the data collection, results are likely more reflective of their views than those of school psychology or social worker students or professional orientations. Further, the same notion is represented in the
qualitative results. Of the individuals who were interviewed, only one of them was a school psychology student and none of them were social workers. Therefore, the qualitative results also primarily stem from the viewpoint of a law student. For future studies, researchers should strive to recruit a larger sample size to allow for a more even distribution of disciplines.

Although there are advantages to utilizing mean substitution, such as not reducing your sample size, there are also limitations (Statistics Globe, n.d.). Out of the 29 participants that completed the quantitative surveys, seven individuals had missing data. Certain participants only completed the pre-test and certain participants only completed the post-test. Therefore, mean substitution was utilized to assure any existing data was not thrown out due to the already small sample size. One limitation that could arise from using mean substitution is the underestimation of the relationship between variables (Statistics Globe, n.d.). Therefore, the relationship between the independent variable (participating in interprofessional education training) and the dependent variable (completion of the pre-test and post-test surveys) may have been underestimated resulting in not clinically significant results. Further, the sample mean of the variable is more than likely bias due to mean substitution. For example, if most of the missing data in the sample stems from a certain graduate program, then the data would be bias towards the program with the most respondents. In this study, due to law students being the primary respondent on the surveys, the average sample mean that is used for substitution would be bias towards law student answers but would also be used to fill in the missing data for school psychology and social work students.

Lastly, self-selection bias is another limitation of the current study. The pre-test results demonstrate that the students participating in the clinic already perceived teamwork and interprofessional collaboration as positive for their clients; being a reason they chose to participate in the clinic to begin with. Therefore, the true impact of understanding how the clinics
training structure impacted the views of students who have never experienced team work and collaboration before could not thoroughly be understood through this current study.

**Future Implications**

Although, the above results are not statistically significant, they should be taken into consideration in combination with the qualitative interview feedback to continue improving the Interprofessional Education (IPE) training structure within the Youth Advocacy Clinic (YAC). More specifically, the YAC should make training modifications based on the quantitative and qualitative results above. More specifically, based off of qualitative interviews, some future modifications that could be made to the training structure include modifying the training session at the beginning of the program to include more defined roles of each profession for student trainees to reference. In addition, real examples of situations previous students have experienced in the clinic should be discussed to prepare student trainees for possible dilemmas and how to approach them. Throughout the training program, it is encouraged to incorporate required and structured seminar sessions with all disciplines to allow for continuous education of each profession as well as structured supervision with team members and supervisors from all disciplines. To ensure this is implemented, sessions should be required as part of the YAC coursework for the trainees. Additionally, student feedback suggested that more meaningful seminar experiences should be increased that add to their learning. Students provided both positive and negative feedback regarding their teamwork experiences. Some aspects of the teamwork experience that students felt should be improved was communication amongst team members and unequal distribution of work. Therefore, the above training modifications can only contribute to increasing positive teamwork experiences for students.
Although participants held a positive view towards interprofessional education (IPE) core competencies prior to beginning the Youth Advocacy Clinic (YAC) training, quantitative results showed that their attitudes did not increase significantly. However, it is still important to make an impact on participants’ attitude and viewpoint towards IPE, even if they held a positive attitude prior to participation. This is important to ensure that the trainees are continuing to learn through the IPE training model within the YAC and not staying stagnant in their knowledge. Based on these quantitative findings it is important to address active trainees’ needs and gaps in knowledge while the training is actively occurring. Therefore, moving forward, to address trainees needs in the moment, develop future trainings, alter supervision experiences, and improve communication models for trainees within the holistic teams, it is encouraged that YAC develop a survey or qualitative interview that can be conducted at the beginning of the training and at halfway through the training. This type of feedback structure can allow the clinic to address the trainees needs immediately during their training experience. Additionally, each year, trainees may have different needs or gaps of knowledge that differ from previous trainees; therefore, this allows for the unique needs of each group of trainees to be addressed in a timelier manner versus after their training experience has ended.

IPE is a training model supported by research evidence, mainly in the medical field, and is a training structure that can be used to promote the use of holistic representation. As a developing model, holistic legal representation may be used to provide services for youth from traditionally-marginalized communities encouraging them to remain in school. Further, APA has encouraged graduate training programs to educate students regarding the practices of other professionals and where and how their competence boundaries intersect and interact. Therefore, researchers should continue to investigate the effectiveness of training school psychology
graduate students, law graduate students, and social work students using IPE to work on a holistic legal representation team. Additionally, due to the benefits integrated care has evidenced in the medical field, holistic representation should continue to be studied for evidence regarding its effectiveness working with at-risk youth.

Further, this study resulted in clinical implications as well. Moving forward, all graduate programs, law, school psychology, and social work, should strongly consider the integration of interprofessional education training into their curriculum due to the many benefits it has been shown to have on client outcomes (Berwick et al., 2008). Additionally, the current study found that the IPE training structure used within the Youth Advocacy Clinic significantly increased graduate level law students, school psychology students, and social work students beliefs about their ability to communicate on a team, make decisions using information from other professions, solve conflict on a team, and understand other professions; all of which are important aspects of working on an integrated care team. More specifically, school psychology graduate programs should consider incorporating it due to the unique nature and the implications of the school-to-prison pipeline. When working with and advocating for at-risk youth, there are many areas that need addressed outside of the school environment, including law and social work. As school psychologists, the profession has the responsibility to assure students are being provided with the best well-rounded treatment that allows them the opportunity to stay in school. Therefore, all graduate programs are recommended to begin incorporating interprofessional education into their curriculum.
References


https://www.americanbar.org/groups/diversity/women/initiatives_awards/the_zero-tolerance-program-toolkit/


https://www.americanbar.org/groups/crsj/publications/human_rights_magazine_home/civil-rights-reimagining-policing/a-lesson-on-critical-race-theory/


http://www.apa.org/pubs/info/reports/zero_tolerance


https://doi.org/10.1080/1045988X.1996.9944657


tolerance-


[https://www.educationworld.com/a_issues/issues303.shtml](https://www.educationworld.com/a_issues/issues303.shtml)


[https://doi.org/10.1007/978-1-4419-1428-6_1476](https://doi.org/10.1007/978-1-4419-1428-6_1476)


[https://www.courtinnovation.org/sites/default/files/Procedural_Fairness.pdf](https://www.courtinnovation.org/sites/default/files/Procedural_Fairness.pdf)


National Association of Social Workers. (2021). *Why choose the social work profession?*  


[https://safesupportivelearning.ed.gov/topic_research/environment/discipline](https://safesupportivelearning.ed.gov/topic_research/environment/discipline)

[https://trustandjustice.org/resources/intervention/procedural-justice](https://trustandjustice.org/resources/intervention/procedural-justice)


[https://sphweb.bumc.bu.edu/otlt/mph-modules/bs/sas/sas4-onesamplletest/SAS4_OneSampleTtest7.html](https://sphweb.bumc.bu.edu/otlt/mph-modules/bs/sas/sas4-onesamplletest/SAS4_OneSampleTtest7.html)
https://www.prisonpolicy.org/reports/youth2019.html#:~:text=4%2C535%20confined%20youth%20E2%80%94%20nearly%201,services%20are%20available%20to%20them.


https://digitalcommons.iwu.edu/crisscross/vol4/iss1/7/


http://www.jstor.org/stable/1555077


[https://b.3cdn.net/advancement/5351180e24cb166d02_mlbrqgxlh.pdf](https://b.3cdn.net/advancement/5351180e24cb166d02_mlbrqgxlh.pdf)


[https://safesupportivelearning.ed.gov/school-climate-improvement](https://safesupportivelearning.ed.gov/school-climate-improvement)


[https://nij.ojp.gov/topics/corrections/recidivism](https://nij.ojp.gov/topics/corrections/recidivism)


[http://www.rethinkingschools.org/archive/2](http://www.rethinkingschools.org/archive/2)


Appendixes

Examining the Usefulness of Interprofessional Education (IPE) for Law, Social Work & School Psychology Graduate Students Trained to Support Justice Involved Youth

Mary Comis

1. Statement of the research question
   1. Is there a significant change between graduate student’s pre-test and post-test scores on the:
      i. Interdisciplinary Education Perception Scale (IEPS)?
      ii. Interprofessional Education Collaborative (IPEC)Competency Self-Assessment Tool?
   2. Is there a significant difference between law students overall score on the IPEC Competency Self-Assessment Tool when compared to school psychology and social work students?
   3. How did participation in Interprofessional Education (IPE) trainings impact graduate student conceptualization of at-risk youth needs?
      i. Did school psychology, law, and social work graduate students IPE training alter their perspective of their own disciplinary professional role?
      ii. Did school psychology, law, and social work graduate students IPE training alter their perspective of others professional role?
      iii. Upon reflection after IPE training, what information did school psychology, law, and social work graduate students find the most useful? Wish was included in the training from the start? Would change for upcoming graduate students engaged in the IPE trainings?
   4. Did participation in IEP training and / or experience providing professional services on a holistic legal team impact their career practices?

2. Purpose and significance of the study
The purpose of this study is to investigate the effectiveness of an Interprofessional Education (IPE) training for the professional development of graduate students in school psychology, law, and social work to provide holistic legal representation for at-risk youth. Holistic legal representation is an interdisciplinary team that includes not just (educational and delinquency) lawyers but also nonlawyer social workers and school psychology advocates — all working collectively and on an equal footing with each other — to address the issues that bring youth in contact with the justice system.

This study is important given the need to document what might improve the professional functioning of teams dedicated to disrupting the school-to-prison pipeline. First, holistic legal representation has been shown to be effective and cost saving when used with adults (Anderson et al., 2019). Therefore, its use with youth is thought to be even more promising as the juvenile justice system is premised on addressing the underlying causes of problematic behaviors that
may also be illegal. Second, the use of integrated care teams have been shown to be effective for improving a range of patient outcomes (Reeves et al., 2018). Integrated care has documented the training sequences and practices that contribute to positive outcomes. Therefore, it is hypothesized that by providing holistic legal teams with the approach documented in integrated care training, called Interprofessional Education (IPE), these legal teams will be better prepared to address at-risk youth’s needs with community supports needed to positively impact their legal, and health and educational outcomes. Potential implications from this study are to determine the usefulness of IPE for training holistic legal teams.

3. Research design and procedures

In order to gather the necessary data, a mixed-method design will use quantitative (pretest/posttest) measures to determine graduate students’ perspectives of the IPE training. Additionally, interviews will be conducted to in order to obtain a more individualized view of their personal training experience as well as from participating on the holistic team. Finally, reflections from alumni, who served at the Youth Advocacy Clinic (YAC) when they were students in their graduate program, will provide information that reflects how this IPE graduate training experiences has impacted or addressed their current practices.

4. Instruments

Participants’ attitudes regarding their ability to function as a holistic team member is measured using the Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool (Appendix A). The IPEC Competency Self-Assessment is a 42-item measure that evaluates individuals’ beliefs about their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions. Individuals answer questions using a five-point Likert scale; 1 = strongly disagree to 5 = strongly agree (Dow et al., 2014). Originally developed to self-assess health professional students on their ability level for each IPE competency, Dow et al. (2014), distributed the Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool to 3,236 students who are enrolled in clinical health science degree programs, including allied health, dentistry, medicine, nursing, and pharmacy, at Virginia Commonwealth University. There was a total of 481 survey responses. Participants were both female (71.1%) and male (28.9%). Furthermore, 67.9% of participants were Caucasian, 23.9% were Asian, 4.9% were African-American, and 6.8% identified as other. An exploratory factor analyses (EFA) and a principal components analysis with varimax rotation was conducted to determine the factor structure for the survey and group items into components. EFA results indicate the correlation matrix was factorable using the Bartlett’s Test of Sphericity, which was significant, and the KMO test (0.98). Furthermore, the principal components analysis revealed four components: teams and teamwork, values and ethics, interprofessional communication, and roles and responsibilities. The variances ranged from 24.4%, 23.7%, 17.7%, to 13.7%, respectively. There was a high degree of internal consistency reliability for each component; ranging from 0.96 to 0.98 (Dow et al., 2014).
The Interdisciplinary Education Perception Scale (IEPS) (Appendix B) measures how individuals rate their perception of their own and other disciplines when being educated using an IPE model. The IEPS is an 18-item Likert scale 1 = strongly disagree to 6 = strongly agree that also measures helpfulness in encouraging functioning on a holistic team. Originally developed by Luecht et al. (1990) with limited statistical evidence, McFadyen et al. (2007) sought to build evidence regarding the stability of the instrument and its test-retest reliability. The authors report evidence for the use of the Interdisciplinary Education Perception Scale (IEPS) based on the responses of 308 students that attended eight undergraduate health and social care professional programs. These students were monitored two times a year, beginning in 2003, and provided information regarding their attitudes to and perceptions of interprofessional education. The 2004 follow up sample of 247 students was used to determine the measures stability of goodness-of-fit. Furthermore, a content analysis was completed to evaluate 19 academic health and social care staff groupings of each instrument item into one of the four already derived subscales determined by Luecht et al. (1990). Structural equation modeling (SEM) was used to verify the factors that the survey questions represent. Three items were removed from the original Luecht et al. (1990) model to create the new model based on the current SEM. The internal consistency of the new structure was acceptable with Cronbach’s Alpha being α = .88 (McFadyen et al., 2007).

Graduate students at the YAC have filled out the Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) for several years as part of the standard educational practice in the law school training clinic for considering student learning outcomes. This is pre-existing information that can be made available for the dissertation process once approved by IRB. After IRB approval, current and former graduate students and alumni will be asked to voluntarily complete an individual semi-structured interviews (Appendix C). The interview will include 17 questions regarding what graduate students and / or alumni believe should be incorporated into the training to allow for better functioning as a holistic team, how the training impacted their education and case conceptualization, and how it has (if an alumni) or might (if a graduate student) influence their future career practices within their profession.

5. Sample selection and size:

Participants in this research study are defined as adults who are former graduate students (still in graduate school but not yet an alumni) as well as alumni who have been trained in IPE and delivered professional services through the YAC clinic.

Given that the quantitative information (i.e., Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) was collected as a part of standard practice during graduate training, these participants will be giving an account of their personal perspective of their educational experiences during their time at the YAC. There are approximately, 49 adult graduate students whose deidentified information would be used for the quantitative data analysis.

For the qualitative interviews, I will seek to interview alumni and former graduate students from every discipline (law, social work and school psychology). Given that is it now summer, students have completed their training at the YAC; there are no current students in training.
6. Recruitment of subjects

For the qualitative interviews, an email invitation will be sent (Appendix D) seeking their participation in an individual semi-structured interview about their experiences in IPE while at the YAC.

For the purposes of the quantitative information from the Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) deidentified data from previous cohorts of adult students will be used once IRB approval is obtained. That is, this study, participants are defined as graduate students who were currently in training at the time of the assessments and who delivered professional practice services through coursework the YAC clinic.

Duquesne University Law Students that participate in this study are in the YAC clinic for course requirements. Duquesne University School Psychology students and the University of Pittsburgh Social Work students participate in the YAC clinic for additional training experiences.

7. Informed consent procedures

There is no informed consent procedure for Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) information due to this process being a part of the graduate students training experiences.

Informed consent for interviews will be gathered orally when these adults agree to respond to interview questions. Verbal agreement will be documented at the beginning of the qualitative interviews. Due to these interviews being conducted via zoom, this verbal agreement will be recorded through its transcription service being used during the interviews.

8. Collection of data and method of data analysis

The purpose of this study is to investigate whether the use of interprofessional education (IPE) is an effective training model to use when training law students, social work students, and school psychology students on how to participate on a holistic legal representation team. As a standard practice, prior to participating in training quantitative pre-test (pre-training) Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) surveys are administered to establish students baseline knowledge regarding interprofessional teams. At the end of training year, post-test / post-training Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) are administered.

Specifically, after students from all three graduate programs have completed the pre-test / pre-training surveys at the start of the Fall semester, they then participate in IPE trainings across an academic year. These training are conducted by the supervising attorney, supervising social worker, and supervising school psychologist faculty in the YAC clinic. During professional practice, all graduate students are then randomly assigned to client’s cases -- unless there is a
conflict of interest whereby adjustments are made to ensure the integrity of the team engagement. Supplemental to the trainings, IPE supervision as well as discipline specific supervision occurs throughout the academic year. There is an orientation that includes all members of the YAC, standard trainings (e.g., addressing the holistic model, how to work on integrated teams, the intersection of the legal and education system, ethics) and, at least, weekly contact with client teams.

At the end of training year / spring semester, graduate students take the post-test / post-training Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS) surveys to evaluate if their knowledge of interprofessional teamwork has changed over the course of the year. After gaining IRB approval, graduate students and alumni may also participate in a semi-structured interview regarding their experiences in the training and how it can be improved. This information will be used to supplement the quantitative data.

Analysis: Given that information about student skills is routinely collected as part of the course evaluation procedure, information from previous students will be redacted and deidentified for the analyses. Datasets will be examined and cleaned prior to analysis; these processes include the management of omitted data.

For research questions 1 through 3, results will allow the researcher to evaluate if the IPE training made a significant impact on perceptions of graduate students regarding their ability to communicate on a team, ability to make decisions using information from other professions, work collaboratively and solve conflict on a team, and understand the responsibilities of other professions and their perception of their own and other disciplines when being educated using an IPE model.

These questions will be analyzed using a paired sample t-test. A paired sample t-test was chosen as the analysis method due to study comparing the graduate student’s pre-test / pre-training scores to their post-test / post-training scores on the Interprofessional Education Collaborative (IPEC) Competency Self-Assessment Tool and Interdisciplinary Education Perception Scale (IEPS). Further, a paired sample t-test is also use to test for a “statistical difference between two time points” (SPSS Tutorials, 2022), therefore it was the best fit for this study.

The purpose of research question 4, is to see if it is possible to capture differences between legal and mental health professionals (social worker and school psychology graduate students). This is because it is acknowledged that here are notable differences between traditional legal training as compared to the holistic legal representation approach. First, traditional legal teams do not regularly consult with other disciplines. Second, when traditional legal teams do engage other experts, lawyers tend to prioritize their own guidance as the driving force in decision-making. In contrast, traditional school psychologist and social worker graduate preparation includes training for participation on interdisciplinary teams. In these traditional practices, discipline specific guidance and opinions are weighed evenly among team members. As such, it is hypothesized that law students, who have a year of training before their placement in the YAC, will perceive their own ability to be helpful when working on a holistic team as more positive than the other (mental health focused) graduate students. Examination of the magnitude of change will provide insight into how the training structure impacts law students as compared to other graduate
students. This will be analyzed using a one-way MANOVA due to investigating the differences between the three graduate programs and one dependent variable. A one-way MANOVA will determine if there are significant differences between the school psychology, law, and social work graduate students on the survey measures.

The homogeneity of variance assumption will be tested in order to determine if the population means are equally distributed across the three populations; school psychology, law, and social work graduate students. Additionally, the mean distribution within the population surveyed will be checked to assure that is normal and there will be assurance that each variable is independently sampled, meaning each variable only provides one value. If any of the assumptions listed above are violated or not met, the statistical analyses performed may be misleading.

For research questions 5 and 6, these questions will be analyzed using thematic coding.

9. **Emphasize issues relating to interactions with subjects and subjects' rights**

In this study, all measures and interviews of the adult participants will be kept confidential. Everyone’s identity will be replaced with a unique number identifier for comparisons on the quantitative surveys and qualitative feedback. Specifically, when completing the qualitative surveys, each individual’s identity will be replaced with a unique number identifier for thematic coding. Additionally, participation in this study is voluntary and they can withdraw at any time. If the participant chooses to withdraw, their data will not be used in analyses.

Participant’s data, associated with this dissertation, will be kept for 5 years within a password secured document and computer.

10. **COVID-19 Considerations**

There are no specific COVID-19 procedures required for gathering this data. Students in the YAC clinic are following all Duquesne University COVID-19 procedures including mask wearing during training and pre/post-test measures. Further, the qualitative interviews will take place virtually.
INSTRUCTIONS: Based on your education or experience in the health care environment, select/circle the number that corresponds with your level of agreement or disagreement on each item.

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<th>Stongly Disagree</th>
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<td>I am able to place the interests of patients at the center of interprofessional law&amp; health care delivery.</td>
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<td>I am able to engage other professionals in shared problem-solving appropriate to the specific situation.</td>
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<td>I am able to respect the privacy of clients while maintaining confidentiality in the delivery of team-based care.</td>
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<td>I am able to inform decisions by integrating the knowledge and experience of other professions appropriate to the situation.</td>
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<td></td>
<td>I am able to embrace the diversity that characterizes the Holistic Representation team.</td>
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<td>7.</td>
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<td>I am able to apply leadership practices that support effective collaborative practice.</td>
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<td></td>
<td>I am able to respect the cultures and values of other professions.</td>
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<td>9.</td>
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<td></td>
<td>I am able to engage other professionals to constructively manage disagreements about client care.</td>
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<td>10.</td>
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<td></td>
<td>I am able to develop a trusting relationship with other team members.</td>
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<tr>
<td>11. I am able to use strategies that improve the effectiveness of interprofessional teamwork and team-based care.</td>
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<tr>
<td>12. I am able to demonstrate high standards of ethical conduct in my contributions to team-based care.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>13. I am able to use available evidence to inform effective teamwork and team-based practices.</td>
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<td>14. I am able to act with honesty and integrity in relationships with other team members.</td>
<td>1</td>
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<td>15. I am able to understand the responsibilities and expertise of other health professions.</td>
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<tr>
<td>16. I am able to maintain competence in my own profession appropriate to my level of training.</td>
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</tr>
</tbody>
</table>

For more information, contact Kelly Lockeman, PhD, Virginia Commonwealth University (kslockeman@vcu.edu).
INTERDISCIPLINARY EDUCATION PERCEPTION SCALE

PRE / POST
You will be asked to complete this at the beginning and end of your placement. Thanks for your assistance.

Using the scale below, (Strongly Disagree–1 to Strongly Agree–6) please rate your perception of your profession and other disciplines.

<table>
<thead>
<tr>
<th>DESCRIPTOR</th>
<th>Strongly Disagree 1</th>
<th>Moderately Disagree 2</th>
<th>Somewhat Disagree 3</th>
<th>Somewhat Agree 4</th>
<th>Moderately Agree 5</th>
<th>Strongly Agree 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individuals in my profession are well-trained.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>2. Individuals in my profession are able to work closely with individuals in other professions.</td>
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<td>3. Individuals in my profession demonstrate a great deal of autonomy.</td>
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<tr>
<td>4. Individuals in other professions respect the work done by my profession.</td>
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<tr>
<td>5. Individuals in my profession are very positive about their goals and objectives.</td>
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<td>6</td>
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<td>6. Individuals in my profession need to cooperate with other professions.</td>
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<tr>
<td>7. Individuals in my profession are very positive about their contributions and accomplishments.</td>
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<td>8. Individuals in my profession must depend upon the work of people in other professions.</td>
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<tr>
<td>9. Individuals in other professions think highly of my profession.</td>
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<tr>
<td>10. Individuals in my profession trust each other’s professional judgment.</td>
<td>1</td>
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<td>6</td>
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<tr>
<td>11. Individuals in my profession have a higher status than individuals in other professions.</td>
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<tr>
<td>12. Individuals in my profession make every effort to understand the capabilities and contributions of other professions.</td>
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<td>13. Individuals in my profession are extremely competent.</td>
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<td>14. Individuals in my profession are willing to share information and resources with other professionals.</td>
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<td>2</td>
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<td>15. Individuals in my profession have good relations with people in other professions.</td>
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<tr>
<td>16. Individuals in my profession think highly of other related professions.</td>
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<td>17. Individuals in my profession work well with each other.</td>
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<td>18. Individuals in other professions often seek the advice of people in my profession.</td>
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</table>

Questions for Former Graduate Students

1. What graduate program are you in?
2. What year are you in the program?
3. How many years have you participated in the IPE training and on a holistic team?
4. What strengths and weaknesses do you feel your profession contributes to a holistic team’s functioning?
5. What aspects of the law profession do you wish to know before working on a team with this profession?
   a. What aspects of the law profession do you wish you had known before working on a team with this profession?
   b. What have you learned about the law profession since working on a team with these individuals?
6. What aspects of the social work profession do you wish to know before working on a team with this profession?
   a. What aspects of the social work profession do you wish you had known before working on a team with this profession?
   b. What have you learned about the social work profession since working on a team with these individuals?
7. What did the IPE training teach you that assisted your functioning on a holistic team?
   a. What do you wish was included in the IPE training that would have helped you succeed on the holistic team?
8. How did you conceptualize client/patient cases before you participated in IPE training and a holistic team?
   a. How do you conceptualize cases after?
9. If you were to choose one aspect of participating on a holistic team that will guide your future practice, what is it?
10. When on the holistic legal team, how did you feel the team functioned?
    a. Roles each person played on the team?
    b. Team interactions?
11. How do you feel participating in the IPE training and providing holistic team personally changed you?
    a. Perspective taking
    b. Interpersonal interactions
    c. Morals, view on policy/government, etc.
12. Did participating on the holistic team alter the way you approach problem solving with your current patients/clients?
13. How has the experience you had providing holistic representation altered your view of individuals you work with?

Questions for Alumni

1. What was your graduate program?
2. How years in the program did you participate in the clinic?
3. How many times did you go through the IPE training?
4. How many youths did you represent on a holistic legal team?
5. What is your current degree?
6. What is your current job title?
7. Do you remember what IPE is? What do you remember about it?
   a. After this give them a brief overview of it to refresh their memory
8. Do you remember what holistic representation is? What do you remember about it?
   a. After this give them a brief overview of it to refresh their memory
9. Do you believe these training experiences have assisted in your professional development through your current career?
   a. Please provide examples of how you think you have used IPE and holistic representation.
10. When on the holistic legal team, how did you feel the team functioned?
    a. Roles each person played on the team?
    b. Team interactions?
11. How do you feel participating in the IPE training and providing holistic team personally changed you?
    a. Perspective taking
    b. Interpersonal interactions
    c. Morals, view on policy/government, etc.
12. Did participating on the holistic team alter the way you approach problem solving with your current patients/clients?
13. How has the experience you had providing holistic representation altered your view of individuals you work with?
Dear law clinic participants,

My name is Mary Comis, a 5th year school psychology PhD student. As you may know, my dissertation is focusing on the effectiveness of the interprofessional education training received through the law clinic and the experience of graduate students practicing on the holistic representation legal teams. As part of my dissertation, I am completing qualitative interviews to gather further information on your experience and on how the training can be improved for future students. Therefore, I am seeking your participation in these qualitative interviews. Below is a google document where you are able to sign up for a date and time for a zoom interview.

https://docs.google.com/document/d/1Z5QAd15hKnESQUnfSJokbgEm996FRRmtbVhn1dmERHA/edit

Thank you in advance for your participation,

Mary Comis
Hello XXXX,

Thank you for taking the time to meet with me today for this interview. If we have not already met, my name is Mary Comis and I am a school psychology doctoral candidate at Duquesne University. As you know, part of your coursework as a law student in the Youth Advocacy Clinic included being trained using interprofessional education (IPE) to help guide your participation on a holistic legal representation team providing services for at-risk youth. Therefore, I wanted to meet today to discuss this experience with you to further improve this training that students are receiving. Additionally, I will be using this qualitative interview data for my dissertation; therefore, before we begin, I am going to read you important information that you should know before you verbally consent to your participation in this study:

1. If you provide your consent to participate in this interview, you will be asked to answer questions regarding your experience on the holistic team and how it influenced your education. These interviews will be recorded and transcribed via this current zoom session, in which you were made aware of at the beginning of this session.
2. There are minimal risks associated with participating in this study, but no greater than those encountered in everyday life.
3. You will not receive any compensation for participating in this study and there is no cost for you to participate in this project.
4. Your participation in this study, and any identifiable personal information you provide, will be kept confidential to every extent possible, and will be destroyed 4 years after the data collection is completed. These audio recordings will be stored in a password protected computer and your name will be removed from the transcription. Additionally, if this research is ever published or presented on, the research will only use data that is combined together with all subjects; therefore, no one will be able to determine how you responded.
5. You are under no obligation to start or continue this study. You can withdraw at any time without penalty or consequence. At anytime during this interview, you are able to inform me you do not want to participate anymore. The recording and transcription will be permanently deleted and not used in data analyses.
6. This information may be used in future studies to continue the improvement of these services for at-risk youth. Any information collected that can identify you will have the identifiers removed.
7. Now, I am going to ask you to verbally consent that you understood the conditions above and that your participation is voluntary and you are free to withdraw at any time, for any reason, without any consequences. Based on this, are you willing to participate in this research project?
8. Great, if you have any questions you are free to contact me at comism@duq.edu or Dr. David Delmonico, Chair of the Duquesne University Institutional Review Board for the Protection of Human Subjects at 412.396.1886 or at irb@duq.edu.
To: Mary Comis
From: David Delmonico, IRB Chair
Subject: Protocol #2022/06/8
Date: 07/28/2022

The protocol 2022/06/8, Examining the Usefulness of Interprofessional Education (IPE) for Law, Social Work & School Psychology Graduate Students Trained to Support Justice Involved Youth has been verified by the Institutional Review Board as Exempt according to 45CFR46.101(b)(2): (2) Tests, Surveys, Interviews on 07/28/2022.

If applicable, the consent form and/or recruitment flyer have been stamped and are attached to this email or are accessible via Mentor. Please use these stamped versions to distribute or display.

Exempt status means there is no specific expiration date, and you are not required to file annual reviews or termination reports. However, any unanticipated problems, adverse effects on subjects, or protocol deviations must be immediately reported to the IRB Chair before proceeding with the study.

Further, any changes to your study requires the filing of an amendment and is subject to the approval of the IRB Chair. You must wait for approval before implementing any changes to the original protocol. Changes to your protocol may affect the exempt status of your research.

Please contact me if you have any questions regarding this study.

Best wishes in your research,

David Delmonico, Ph.D.
Institutional Review Board, Chair
irb@duq.edu