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Reforming Juvenile Corrections Through Martial Arts

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#### Abstract

Juvenile delinquency is a prevalent problem in the United States and the rest of the world, which many behavioral reform programs have failed to effectively eliminate. While it is highly improbable that delinquency will ever be fully eliminated, there are ways to ensure that current or new programs are successful in lowering the level and degree of delinquency worldwide. The purpose of this research is to find exactly what leads a child to deviate from societal norms and to eventually turn to criminal acts. The research is also to evaluate what program components are necessary to most effectively help delinquent children, and the potential for a form of martial arts, Aikido, to have a positive impact on a juvenile's behavior. This paper discusses the major root causes of juvenile delinquency through examining, comparing, and contrasting the findings in previous research materials. It also describes and breaks down the programs that have been proven to be effective, harmful, or simply a waste of time.

Keywords: juvenile delinquency, reform programs, martial arts, Aikido, Tae Kwon Do

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## **Reforming Juvenile Corrections**

Approximately one out of every six boys and one out of every 12 girls under the age of 18 have been brought into a United States court for a crime (Allen, Latessa, & Ponder, 2010). Even though these figures exclude the countless other juveniles who have not been caught or brought to court, they still show that about one of every nine children in the US have been caught committing crimes. It is clear that delinquency is a problem that needs to be more effectively addressed. In the US, the two ideals of juvenile justice are the interventionist view, which aims to save juveniles from delinquency, and the diversionary view, which aims simply to be less harmful to the juveniles than the adult courts and prisons. Since its origins, the US juvenile court has aimed to follow the diversionary view and focus on the idea of keeping youth who have committed status offenses out of prison with harder criminals and on changing the justice system so that it no longer turns mild offenders into criminals (Zimring, 2000). That goal, combined with the percentage of juveniles who commit crimes, shows the need for further investigation and reform in the prevention and treatment of juvenile delinquency.

This paper will investigate the various causes of juvenile delinquency and the programs that have been used to address the issue through the interaction and analysis of current scholarly articles and other research on the subject. It will focus on the root of the faults and strengths of the programs, then discuss the potential of using martial arts, particularly Aikido, as a way to reduce recidivism and juvenile crime.

This paper will not conduct new research, but will instead explore the current works on the subject. No new surveys or research will be conducted because, in order to ensure accuracy, studies on delinquency as measured by observation and recidivism would require longitudinal studies on a widespread demographic. This would take three years minimum, so previous

studies will be compiled and used instead. In addition, because of the social nature of delinquency and the countless factors that affect juvenile behavior, this compilation will include sources and information that cannot be completely proven. However, the validity of these sources will be shown through comparing various longitudinal studies. These studies will be used to show the needs of the juveniles and the juvenile justice system and the potential of particular martial arts styles to directly address the causes of delinquency in each of its different stages. The focus will be on the theory of self-control as the main cause for delinquency, and all the findings will be tied to or discussed according to this theory. This discussion will include information that contradicts this theory, but this theory was chosen because the data in the majority of the studies were found to be in support of it.

## **Literature Review**

This section will discuss the research and findings from previous studies on juvenile delinquency and various programs that have been implemented to prevent or reform delinquent behavior. Various other research concerning the causes of delinquency and martial arts will also be discussed and evaluated below.

## **Causes of Delinquency**

There are a number of factors that contribute to delinquency. Sharma, Mishra, and Kumar (2013) discussed how poor educational and economic status, as well as urban living environment and personality are major contributing factors. This study, conducted in India, compared the personality traits of 30 juvenile delinquents with 30 non-delinquents of similar age and socioeconomic status using the Rorschach Inkblot Test. Most of the categories showed no significant difference, but the results suggested that juvenile delinquents are socially inept and struggle with interpersonal communication. The results also reflect maladjustment, a focus on

minor details instead of major, greater intelligence and complexity, an inward focus, and difficulty in accurately perceiving a situation (Sharma et al., 2013). Since these are the major factors that lead to delinquency, the current programs should directly address these psychological, emotional, environmental, and physical issues.

**Environmental Factors.** There are almost countless environmental factors that can lead to delinquency. However, parenting has been shown in numerous studies to have the most significant effect on a child's development.

A study by Hoeve et al. (2008) explored the role of parents further, by investigating "whether distinct developmental trajectories based on delinquency seriousness can be identified and whether parenting styles are differentially linked to membership of these trajectories" (p. 223). While numerous studies have investigated the effects parents have had on their children's behavior, Hoeve et al. (2008) first wanted to establish a trajectory, or a more concrete and dimensional visual of the path of delinquency. Then, once this was established, they wanted to investigate the use of parenting styles in projecting certain trajectories for the children. Unlike in previous studies, Hoeve et al. (2008) focused on the effect of parenting styles alone, not on the effect of various parental factors. In order to complete this study each youth was surveyed over a four-year span along with one of their teachers and their primary caretaker (Hoeve et al., 2008).

The group used the two-dimensional approach of Maccoby and Martin (1983), which looks at the parents' levels of control and support of their children to evaluate parenting styles. The three styles Maccoby and Martin (1983) established are authoritarian, authoritative, and neglecting. Authoritarian and authoritative styles both exhibit high levels of control, but authoritarian shows low support and authoritative high support. In contrast, the neglecting style shows low parental control and support. The parenting style for each family was determined by

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the amount of supervision, physical punishment, and positive reinforcement used by the parent, as well as the quality of relationship and communication between the parent and child. Each of these factors was determined from the interview data (Hoeve et al., 2008).

Hoeve et al. (2008) also identified five trajectories of development: nondelinquent, minor persisting, moderate desisting, serious persisting, and serious desisting. The nondelinquent trajectory showed little to no delinquent behavior, the persisting showed continuous delinquent activity, and desisting showed delinquent behavior that lessened over time. The minor persisting trajectory showed participation in low-level delinquency, the moderate showed a more serious level with a steep decline, and the serious persisting and desisting indicated participation in serious delinquent crimes (Hoeve et al., 2008).

Through their research, Hoeve et al. (2008) found that the neglecting style was strongly connected to the moderate and serious delinquency trajectories, and distinguished the trajectories by the different delinquency levels. In addition, authoritarian parent styles were far more represented in the serious persisting trajectory than in the nondelinquent trajectory (Hoeve et al., 2008).

While the research of Hoeve et al. (2008) does not show the exact effect of parenting on delinquency or prove that they are strongly connected, the research does indicate that delinquency and parenting styles are related factors that affect each other. They also mention that "difficult children negatively affect their parents' disciplinary strategies, resulting in harsher and inconsistent punishments and parents being less involved in the socialization process" (Hoeve et al., 2008, p. 224). This means, while the findings of this study reflect how neglectful or authoritarian parenting styles can lead a child to delinquency, the way a child responds or his innate characteristics can increase probability that a parent will take on a neglectful or

authoritarian style. This cause and effect cycle shows how parents and children must both work together to prevent delinquency. It also indicates the need to address parent-child relationships and communication, as well as effective parenting and self-control, in order to effectively prevent or treat juvenile delinquency (Hoeve et al., 2008).

Thornberry's Interactional Theory, as described by Jang (1999), looks into the parents' effect on delinquency further. Thornberry's theory states that, in the early stages of adolescence, the family and parents have the greatest influence because they are the people the child is around the most. However, around middle school age, adolescents begin to shift from finding the parent's opinion most important, to becoming strongly influenced by social ties at school. This is because middle school years are the age at which school—including academic ability and social skills—starts becoming more significant. The next stage is in the high school years, in which school seems to loose influence and the interaction and association with peers becomes the strongest influence (Jang, 1999).

Jang (1999) expounds upon Thornberry's theory to see if age affects the magnitude of influence that parents, school, and delinquent peers have on an adolescent's degree of delinquency. The lack of research on the effect of age on the influence of different factors of delinquency led Jang (1999) to conduct further research. In the study, Jang (1999) used longitudinal data from the National Youth Survey (NYS) of 1977 to test Thornberry's theory, find if age does have a correlation with involvement in delinquency, and what that effect is. The data in 1977 concerned self-reported information from adolescents aged 11 to 17 and their families. The NYS also included data from four additional surveys—one per year from 1978 to 1981—after the initial questioning in 1977 (Jang, 1999).

The surveys included the youths' involvement in delinquency or with delinquent peers, relationship with family, and their commitment to school. The involvement with delinquency was measured by their participation in activities that they could be arrested for. Association with delinquent peers was determined by whether the peers the juvenile spent time with participated in personal and property crimes, and illegal services, with the exclusion of any drug offenses. The survey also included self-reported data concerning the amount of time each youth spent on schoolwork, their GPAs, and how they felt about their teachers and how they felt their teachers felt about and treated them. Finally, the degree of family attachment was determined by the amount of time the youth spent with their families, as well as their reports on how close or open they felt with their families (Jang, 1999).

The data showed that while parental influence varied among ages, the significance of school increased until around fifteen years of age, then declined. The data also showed that the influence that delinquent peers have increases to only around thirteen years and then declines, which is in opposition to the ideas Thornberry expressed (Jang, 1999). However, as the data is self-reported and there is no concrete way to measure level of influence or delinquency, the results of the data can only suggest patterns, not prove them scientifically.

Alcohol and Drug Use. Another contributor to delinquency is drugs. According to a national study conducted in prisons in 1997, 52% of the prisoners were on drugs when they committed their crimes (Huebner, Varano, & Bynum, 2007). Another study also showed that 67% of drug offenders set free in 1994 recidivated (Huebner, Varano, & Bynum, 2007). This data shows that drugs are a major factor in crimes, so, in order to decrease crime and recidivism, this issue must be addressed. This can be done by first discovering how youth are first introduced to drugs (Huebner, Varano, & Bynum, 2007). In a recent study, Baglivio, Jackowski,

Greenwald, and Howell (2014) analyzed the arrests of youth over a five-year span. The data showed that these crimes were related to various disorders and issues, including low self-control, which is a highly common factor mentioned in articles on delinquency. The data also showed how many of these youth began their delinquent careers by the time they were twelve years old, so an effective prevention program would have to start very young (Baglivio et al., 2014). Burt, Sweeten, and Simons (2014) agree with this finding because the results of their study reflect how there is a pattern of development for each person's impulsivity and sensation seeking as it relates to self-control that changes with age. Welsh and Farrington's (2007) research also shows the necessity of prevention attempts in early childhood. Thus, to address delinquency, action to teach and ensure self-control must be taken as early as possible.

**Social Factors.** Peer influence and interaction is another major factor in whether a child begins to participate in delinquent behavior. Chapple (2005) conducted a study that looked into Gottfreidson and Hirschi's theory of self-control. The purpose of the study was to see the relationship between self-control, delinquency, and rejection by pro-social/association with deviant peers. This research includes identifying whether self-control could be used to predict an adolescent's association with deviant peers and whether the adolescent is rejected by his or her peers.

This study did not gather new information, but, instead, used information from the National Longitudinal Survey of Youth (NLSY). The initial survey, abbreviated NLSY79, was conducted on a "nationally representative longitudinal sample" (Chapple, 2005, p. 93) of 14-21 year olds in 1979. According to The Center for Human Resource Research (as cited in Chapple, 2005) the survey data included "extensive information about the employment, education, training, and family experience of the respondents" (p. 93), as well as the "pregnancy, postnatal

fertility, and child care experiences" (p. 93) of the females surveyed. From 1986 onward the children of the originally interviewed females were also surveyed, as shown in NLSY-Child. Once the children became fifteen years old, they were interviewed separately from their parents. An average of the data was used to approximate any missing data (Chapple, 2005).

The information that Chapple (2005) used for her research was selected out of the data taken from the women and their children in 1994, 1996, and 1998. Chapple (2005) used the self-control data from when the children were aged ten to eleven in 1994, and data about the youths' amount of rejection by peers and of their association with delinquent peers from 1996. She also used the race, sex, family's level of poverty, and age, as well as overall delinquency levels, from the data collected in 1998. The level of delinquency was determined through the youth's response to the question

How often in the last year have you: stolen from a store, damaged others' property, stolen something less than \$50, stolen something greater than \$50, used force to get something you wanted, hit or threatened to hit someone, attacked to seriously hurt someone, broken into a building, held or sold stolen goods and hurt someone bad enough to need a doctor? (Chapple, 2005, p. 97)

The self-control was measured through asking the mothers a series of questions about their kids with the response options "not true," "sometimes true," and "often true" (Chapple, 2005). Since most of the information used for this study was from surveys of the mothers, Chapple (2005) does acknowledge there is potential bias in favor of high self-control results.

The results of the study show that the children who exhibited low self-control in the 1994 data had a greater chance of peer rejection in adolescence. They were also more likely to associate with deviant peers, as discovered in the 1996 study. This is significant because

association with deviant peers, along with low self-control have been shown to be major contributors to juvenile delinquency. Further, if association with delinquent peers in caused by self-control, at least in part, then increasing a child's self-control would also decrease his or her time with deviant youth. This information, combined with how Chapple's (2005) data also reflected that delinquency could be predicted by peer rejection and low self-control, suggest that lack of self-control could also be at the root of other contributing social factors. Thus, further investigation into the causes of low self-control and its implications are necessary.

Other studies showed that children from intact families exhibited the highest self-control, followed by children with a single parent, and then from reconstituted families (McKee, 2012). A number of different writings also show gang involvement to be a major contributor to drug use and other forms of delinquency. According to the research of Ritter, Simon, and Mahendra (2014), 45% of kids in high school, as well as 35% of middle-schoolers are in gangs. Also, nearly 1/12<sup>th</sup> of the youth surveyed in the national report to the Department of Justice, were in a gang at some point in their teens (Ritter et al., 2014). The large percentage of juvenile gang involvement is especially problematic to the juvenile delinquency issue because gang membership can have a significant, long-term impact youth. Skardhamar and Savolainen's (2014) study shows how gangs use peer pressure and drugs to enhance delinquent behavior. Drugs increase recidivism through affecting social and job situations, as well as by impairing judgment. Gangs also increase recidivism because the sense of connection an offender feels to his gang often increases after incarceration (Skardhamar & Savolainen, 2014). Therefore, once a child has joined a gang, leaving the gang becomes increasingly difficult due to increased delinquent activity. It is apparent then that presenting youth with an alternative to gang membership would have a significant impact on delinquency.

**Biological Factors.** While most causes of delinquency are environmental or social factors, there are some biological influences as well. A major biological contributor to misbehavior is the brain's control center, the amygdala. The amygdala is the part of the brain that reads the emotional cues of others and causes the body to respond to those cues. For example, if a child is talking to an adult who is talking loudly and making large, fast hand motions as if he or she is angry, the child's amygdala perceives that he or she is in a threatening situation and causes the body to react in fear. In extreme cases of threat, the brain no longer follows its usual logical process, but acts instinctively to protect itself. This is an important factor because, in these cases, the child is not in control of his or her actions because biological factors make it impossible, not because the child has no self-control or has made the decision to act out. This instinctive response is also key in dealing with juveniles, because if an adult is trying to help a juvenile, yet acts distrusting and frustrated or condemning, the child will react based on those feelings. This is where Emotional Reaction (ER) cycles come in. ER cycles cause a person to mirror the feelings of others. In the case of the child who is being aided by an adult who is distrusting or condemning, the child will most likely be distrusting and condemning as well (Brendtro & Larson, 2006). Essentially, the adult is causing more pain and isolating the child he or she is trying to help. If, however, the adult treats the child with respect and genuine care, it is likely the child will begin to mirror those feelings instead.

**Psychological Factors**. Another incentive for delinquent behavior is pain. Socioemotional pain, as experienced through painful emotions, painful thinking, and pain-based behavior, is a common trait among delinquents. Painful emotions—including fear, anger, hopelessness, and shame—cause what Brendtro and Larson (2006) call a "negative inner state" (p. 5). These negative inner states or negative emotions then lead to painful thinking, which includes feelings such as denial, distrust, and vengefulness. These painful thought processes result in the display of pain-based and often delinquent behavior (Brendtro & Larson, 2006). With this behavior, the person aims to defend against, relieve, or reciprocate pain, or fix the issue that caused the hurt. This means that, when a child lashes out in anger, it is most often a call for help and relief from inner hurt. Therefore, to effectively prevent or lessen delinquency, a program must first focus on what is causing the inner emotion, not just dealing with the visible actions and emotions.

Psychiatric conditions can also amplify or contribute to delinquency. As Little, Robinson, Burnette, and Swan (2010) describe, there are five Axes set by the American Psychiatric Association to categorize psychiatric conditions. Axis I encompasses all psychiatric conditions except personality and mental disorders. Those two exceptions are found in Axis II, which includes developmental conditions that start in childhood. If a person is found to have an Axis II disorder and an Axis I disorder, he is often diagnosed only with the Axis I disorder. General medical conditions, including drug overdose, are placed in Axis III, and psychosocial and environmental issues are in Axis IV. The final and least severe category is Axis V. This Axis is a measurement of how people cope with everyday life, based on the Global Assessment of Functioning Scale (Little et al., 2010).

Antisocial Personality Disorder (ASPD), according to Little et al. (2010), can also contribute to delinquency. In fact, Little et al. (2010) claim that most criminals can be diagnosed with a personality disorder, namely ASPD. ASPD is a psychological disorder in which the person is not insane or suffering from a mental condition in which they cannot tell right from wrong. Instead, the person with ASPD simply does not care whether his or her actions are right or wrong and acts independently of that knowledge (Little et al., 2010). This can lead them to be manipulative, act impulsively to satisfy their wants, and show little to no remorse for their actions. Little et al. (2010) quotes Hervey Cleckley, in stating the main personality traits in ASPD are as follows:

Superficial charm and apparent "intelligence"; Not delusional or clinically irrational; Unreliable; Insincere and untruthful; Lack of shame; Lack of remorse; Antisocial behavior occurs without appropriate motivation; Poor judgment; Failure to profit from experience; Egocentric; Lack of ability to love; Restricted repertoire of feelings; Lack of loss and insight; Lack of appropriate interpersonal responses; Acts out under the influence; Capable of acting out while sober; May attempt suicide but rarely carries out; Impersonal sex life; Has no life plan. (pp. 44-45)

It is easy for most to see how any combination of these traits can both amplify and lead to criminal behavior, even if the traits are only temporary. However, in a person with ASPD, the above traits are exhibited as a long-term pattern. When these traits are combined with the other factors that lead to delinquency—which, for ASPD sufferers, is most commonly abuse of alcohol and drugs—the propensity to participate in delinquent acts is even greater. Also, since ASPD is an Axis II disorder, the 90 percent of ASPD sufferers who have substance and alcohol abuse issues (Axis I disorder) often are not diagnosed with ASPD as well. This is because the ASPD is treated as a result of the alcohol and drug abuse, which consequently leads to many failed attempts in treating diagnosed patients. The problem is that those treatments focus on the first issue in order to treat both, but the ASPD can also start before and cause the Axis I issue (Little et al., 2010).

This problem is further highlighted by how a person must meet three main requirements to be diagnosed with ASPD. One of those requirements is that the person must show antisocial behavior before the age of fifteen. Since the next requirement is that the diagnosed person be at least eighteen years old, he or she must have been exhibiting antisocial behavior for at least three years. That fact also means that, while a person may have had ASPD since his or her youth, though not diagnosed until adulthood, it is possible that other disorders he or she has might have started after or resulted from ASPD. It is also possible that the ASPD caused or contributed to other ailments as well. With those possibilities, it is important for a doctor or psychiatrist to either treat and diagnose all ailments or at least keep all the possibilities in mind, as opposed to only treating and diagnosing the Axis I ailment. The final qualification is that the person cannot be currently in an episode of mania or schizophrenia when diagnosed (Little et al., 2010). This further rules out the possibility of the diagnosis being based on an isolated incident, rather than a long-term behavioral pattern.

## **Strengths of Current Programs**

The issue of delinquency is not just finding an effective program to use, but discovering how to start and implement the effective programs successfully. An analysis of the common data between the various studies and programs reveals that there are some common characteristics of successful programs. Research suggests that these programs target the medium to high-risk youth to ensure maximum effectiveness. The programs also need to assess and address the specific needs of these youth according to the risk-need-responsivity principle (Jones & Wyant, 2007).

One of the most crucial factors in the effectiveness of a delinquency program is the age of the juveniles when it is implemented. The farther the youth progresses into delinquency, the harder it will be for him or her to completely change lifestyles (Palmer, 2014). Therefore, the timing of a program is not solely based upon the age of the child, but on their length of exposure to delinquency (Palmer, 2014). The timing of a program can be placed in one of three categories: primary, secondary, and tertiary (Mann & Reynolds, 2006). Each of these three categories can be thought of from a medical or a crime prevention standpoint. For the purpose of evaluating juvenile delinquency intervention programs, primary means preventing delinquency before children are exposed to it and secondary is addressing high-risk children who have been exposed to many factors that lead to delinquency, but are not yet fully delinquent themselves. Tertiary is intervening in the lives of youth who are already immersed in the delinquent lifestyle, which usually includes a number of prior arrests (Palmer, 2014; Mann & Reynolds, 2006).

Mann and Reynolds (2006), in their analysis of the Chicago Longitudinal Study, focused on primary prevention, as many studies have shown that prevention is the most effective way to reduce delinquency. The purpose of the Chicago Longitudinal Study (CLS) was to examine the effect that enrollment in the Child-Parent Center (CPC) has on a child's future delinquency. The CPC is the second oldest federally funded program, and its goal is to give the children of lowincome households the educational assistance they need to succeed in school. Children go into the program at three to four years old, and can receive additional CLS school assistance for up to six years, depending on their needs. The program consists of a number of services including whole-day and half-day preschool sessions with parent involvement, community outreach, and medical, physical, and nutritional assistance for those in the program (Mann & Reynolds, 2006).

The CPC was established after the Elementary and Secondary Education Act of 1965 was passed, with four main ideas behind its design. The first idea is that there be an intervention before the youth start primary school. The second idea is that the program needs to take a childcentered approach to teaching language and basic skills. The third concept behind the program is a focus on getting parents involved in their children's schools, while the fourth focuses on having educational assistance that is continuous from preschool to elementary school. These last two important aspects are designed to help foster positive relationships between children, their schools, and their parents in order to effectively help the child to succeed (Mann & Reynolds, 2006). The focus on these four elements is what has led CPC and other successful programs to be so effective.

The results of Reynolds and Mann's (2006) study show that CPC does have long-term, lasting benefits for the child. They found that the children with one year or more of CPC participation had a decreased rate of delinquency by about 40 to 50 percent. This difference is shown in the number of total arrests each of the youths had fifteen years later, as well as the number of violent arrests and of drug arrests. However, the study of the arrests and behavior of 1,406 of the original 1,539 youths—who received the special preschool education from 1985 to 1986—is ongoing, so there may be new data. Also, while the study did account for numerous factors besides preschooling that could have affected a child's future involvement in delinquency, it is impossible to completely isolate the study to the effects of preschool. Essentially, while Reynolds and Mann (2006) did account for other influences by choosing a control group with similar schooling, environment, social influences, and economic standing, those factors may still have altered the results to a lesser degree.

Zhang and Zhang (2005) display another essential aspect of a successful delinquency program in their review of the Repeat Offender Prevention Program (ROPP) in Los Angeles. This program was carried out by the Youth Intervention Program (YIP) in order to reduce juvenile recidivism and improve their performance and behavior at school. The ROPP's agreement with the school district gave them access to the youths' school records for their research. The youth in the ROPP were given specialized help from the community according to their specific needs. There were six probation officers in each group, with one officer for every 15-20 participants. In this study, 165 youth were put into the ROPP group, while 162 youth were used as a control. The results showed that the ROPP was successful because it had all services available at one location, the probation officers interacted a lot with the kids, the families remained involved, transportation was provided, and success was rewarded (Zhang & Zhang, 2005). The family involvement is especially important considering how poor parenting and family relationships are usually the most significant and common factor in delinquents (Greenwood, 2012; Wakefield & Wildeman, 2011; Wright & Fagan, 2013). These five attributes all address the specific needs of the youth as Jones and Wyant (2007) suggested. Implementing these ideas in the early life of a disadvantaged child would have a significant effect because it would decrease the unmet emotional, physical, and social needs of the child before poor habits were formed. If these ideas were supplemented with a focus on experiencing the process—not on rushing quickly to the desired result—the need or desire for gang membership or drugs or for participation in delinquent activity would be reduced (Cohn & Hinkle, 2000).

One of the most widely known and long lasting community and school-based delinquency prevention programs is Big Brothers Big Sisters, or BBBS (2015). BBBS was first launched 110 years ago by a New York City court clerk. According to the official BBBS website, the court clerk saw that a great deal of the male juveniles who came through the court system for crimes would get into far less trouble if they had a caring adult mentor to help them. Around the same time, a similar program was established for females by Ladies of Charity. The Big Brothers Association and Big Sisters International combined 73 years later to form the BBBS, which is in every state in the US as well as twelve countries around the world. Their mission is to "provide children facing adversity with strong and enduring, professionally supported one-to-one relationships that change their lives for the better, forever" (Big Brothers Big Sisters, 2015b, para. 3), and the program has demonstrated achievement of this goal all over the world through various examinations and evaluations by different researchers.

One evaluation that shows the BBBS' success is the Youth Outcome Survey Report (YOS), which the organization released for the first time in 2012. This report, reflected two longitudinal research studies of public/private ventures, is valuable for increasing program success, because it shows the effects of the program on the youth who participate in it (Big Brothers Big Sisters, 2015). According to Farrington and Welsh (2007), to be effective, programs must be founded upon the empirically proven data of which program attributes lead to success, lead to failure, or simply have no effect at all. The new report allows the BBBS to measure their success in lowering rates of delinquency and to better assess where they excel or need to make changes. This report also gives the organization concrete empirical data that they can use to improve their program based on what is shown to work longitudinally. This data also provides other programs with a scientific basis for supporting what is effective and lasting, which they may use to re-evaluate themselves and impact more children effectively (Big Brothers Big Sisters, 2015).

The information displayed in the YOS describes the youth's "school-related performance, [participation in] risky behaviors, and socio-emotional competency" (Big Brothers Big Sisters, 2015a, para. 4) through assessing the child's progress in the following outcome measures: "social acceptance; scholastic competency; grades; educational expectations; attitudes towards risk; parental trust; truancy; and presence of a special adult" (para. 5) after one year with an adult volunteer mentor from the program. The YOS reports the child's improvement in participation in risky behaviors and in school-related and socio-emotional competencies. For the school and community-based programs, the effects of the program on the outcome measures, as stated in the 2011 Youth Outcomes Report, were as follows:

Statistically significant improvement was found in 6 of 8 outcome measures for Big Brothers Big Sisters Community-Based mentoring program and 5 of 8 outcome measures for its School-Based program; 97.9% and 96.6% of youth maintained an average or above average score(1) or indicated improvement in the area of socio-emotional competence for Big Brothers Big Sisters Community-Based and its School-Based programs, respectively; 88.8% and 83.4% of youth maintained an average or above average score(1) or indicated improvement in the area of avoidance of risky behaviors for Big Brothers Big Sisters Community-Based and School-Based programs, respectively;

94.5% and 95.2% of youth maintained an average or above average score(1) or indicated improvement in the area of educational success for Big Brothers Big Sisters Community-Based and School-Based programs, respectively; 91.5% of youth showed improvement or maintained an average or above average score(1) across at least 3 of 8 outcome measures in Big Brothers Big Sisters Community-Based programs; and 89.4% in its School-Based program. (1) Maintaining and improving was determined by whether a child scored at or above the mean at baseline and maintained that score at follow-up or had a higher score at follow-up compared to baseline. (Big Brothers Big Sisters, 2015a, para. 6)

The high percentages reflect that the programs were not only successful in achieving the BBBS mission of helping children succeed, but also that they were significantly effective in changing the children's lives. In addition, these statistics show how great an impact that a positive adult

role model has in a child's life, even after just one year. On the other hand, this data also shows the difference that having no caring and involved parent or role model can have on a child's life. If one year can make that much of a positive difference in the child's behavior and abilities, then the children who grow up with neglectful parents, with parents or guardians who have destructive behavior and habits, or who are missing one or both parents start with that much of a disadvantage. This statement highlights how important it is for parents to be involved in their children's lives and for juvenile behavioral reform programs to involve and instruct the parents, community, and family members. Without including and helping everyone in the community to make changes and work together, the BBBS and many other programs would not have longlasting success.

Botvin, Griffin, and Nichols (2006) discuss another program that showed successful results—*Life Skills Training* (LST). Botvin et al. (2006) address violence as a "major public health problem" (p. 403). They also acknowledged that alcohol and drug use can both lead to crime and predict future delinquency (Botvin et al., 2006). The *Life Skills Training* program, therefore, was developed with the idea of dealing with violence and alcohol and drugs. In this program, 4,858 students from 41 different schools in New York participated with parental consent. These sixth graders were all given a test to assess their general life behavioral skills. The student from twenty of the schools were put through fifteen sessions of the *Life Skills Training* program, while the students from the other 21 schools went through the regular health education program in New York. The training, as Botvin et al. (2006) describe,

taught a variety of cognitive-behavioral skills for problem-solving and decision-making, resisting media influences, managing stress and anxiety, communicating effectively, developing healthy personal relationships, and asserting one's rights. These skills are taught using a combination of interactive teaching techniques including group discussion, demonstration, modeling, behavioral rehearsal, feedback and reinforcement, and

behavioral "homework" assignments for out-of-class practice. (p. 404) This program is looking to the causes of delinquency and attempting to address them. By teaching the youth how to deal with and manage their thoughts and actions, they are preparing them to face difficult situations in the future in a way that is healthy for them and others (Botvin et al., 2006).

Another key factor that seems to differ from other programs is that the *Life Skills Training* program teaches youth how to assert their rights instead of simply trying to correct bad behavior. This means that the program helps focus on teaching the youth to resist outside influences and how to resist being pressured. The program appears to focus on teaching good behavior and reinforcing it with encouragement and out-of-class assignments. This treats the youth not as delinquents, but as students learning to communicate and interact with the world. If the curriculum was focused on stating how the youth were delinquent and needed to change, then, according to the labeling theory (Bartollas & Schmalleger, 2011), they might actually be encouraged to participate in delinquent acts and behavior. In addition to these lessons, the LST program teaches material focused on drugs and alcohol, violence, and dealing with conflict with others (not avoiding or overreacting) (Botvin et al., 2006).

After the training was complete, the students were again given a test to assess their knowledge. This test used a questionnaire to measure violence (verbal and physical aggression and fighting) and delinquency using methods tested by other programs. The goal was "1) to determine the baselines frequencies of verbal and physical aggression, fighting, and delinquency in this population. 2) assess baseline equivalence of conditions. 3) test for intervention effects"

(Botvin et al., 2006, p. 405). From the data, the baseline measures from the first test, or questionnaire, showed 93.5% used verbal aggression, 68.3% participated in physical aggression (mild), 56.5% were involved in fighting (severe physical aggression), and 53.2% participated in delinquent acts (Botvin et al., 2006). After the program, however, the data showed overall that participation in all four of those behaviors was reduced, even if the youth only participated in half of the LST. The results showed decreased use of substances and of reckless driving. More follow-up observation is needed to assess how long the effects last, however (Botvin, et. al. 2006).

## **Shortcomings of Current Programs**

One of the most ineffective methods for reforming juvenile delinquents is punishment. While punishment can be an effective deterrent if done correctly, it is otherwise highly counterproductive. In order for punishment to be effective four conditions must be met. Larson and Brendtro (2006) describe the four conditions as

- 1. The punisher must be able to inflict pain without ill effects.
- 2. The youth must connect the pain to the behavior, not the punisher.
- 3. The youth must decide to change the behavior rather than hide it.
- 4. The youth must remember the punishment when tempted again. (p. 14)

The effective and ineffective aspects of juvenile delinquency programs are described by Greenwood (1996). Greenwood (1996), relied mostly on a meta-analysis Mark Lipsey compiled of over 400 juvenile reform programs and their recidivism rates to show which programs were most effective. Most of the juvenile programs decreased recidivism rates by about 10 percent, but the boot camps were shown to be ineffective and merely political. Greenwood (1996) analyzed the findings to discover that the more successful approaches were typically community-

based programs with high intensity and duration, took multiple approaches to intervention, and had a great deal of structure. Therefore, while recidivism rates are only one aspect of a program's success, these four factors should be considered to develop a successful program.

Royster (2012) shows through an evaluation of the "Scared Straight" program that keeping a program's environment practical and as close to reality as possible is also necessary. The fact that the youth in the "Scared Straight" program were heavily monitored and televised, the cultural and historical context of the time, the type of prison used, family-like prison groups, and the fact that the youth did not all think they would be caught skewed the results, which originally showed success (Royster, 2012). Once the youth were no longer so heavily monitored and they returned to real life conditions—where they were solely responsible for their selfcontrol and behavior, the youth relapsed into delinquent and criminal activity (Royster, 2012).

Poor training can also render a program ineffective. Shek and Wai (2008) address how the effect of the quality of training the instructors who work with the youth receive, in order to implement reform and prevention programs is often overlooked in the evaluation of juvenile program effectiveness. This is an issue because, as Shek and Wai (2008) demonstrate by compiling the data of other studies, the quality of instructor training can make the difference between a successful program and a failed attempt at helping reform youth behavior. In their analysis of various programs, Shek and Wai (2008) concluded that good training includes instilling the teachers with knowledge of their task and confidence in their ability to accomplish the task successfully.

While in-depth training that includes instilling knowledge and practice of skills is important, simply instructing teachers what needs to be done and how to do it is not enough. The teachers must also learn to be very hopeful and positive. According to Shek and Wai (2008), if instructors do not believe they can be successful in their attempts to help the troubled youth even with training, then the training is pointless. One study by Norland, DiChiara, and Hendershott (1995), as described by Shek and Wai (2008), gave the example of public school teachers who believed that, even with training, "teaching about drug and alcohol use was 'a relatively ineffective mode of prevention" (p. 824). This statement shows the importance of including positivity in instructor training. If teachers believe their efforts will fail no matter how well trained they are, then they will be far less likely to be successful and implement that program to their full capacity.

#### **Self-Control**

One program that would fulfill the requirements Shek and Wai (2008) mentioned for successfully reforming juvenile behavior is martial arts. The reason that martial arts is well suited for addressing the causes of delinquency is that martial arts focuses on control, or what Ahlin and Antunes (2015) describe as an "internal locus of control" (p. 1803). Ahlin and Antunes (2015) define internal locus of control as when a person feels in control of and responsible for his or her actions and the resulting outcomes. In juxtaposition, Ahlin and Antunes (2005) describe external locus of control as when a person "attribute[s] outcomes to luck, fate, or circumstances beyond their control" (p. 1803). Individuals with an internal locus of control tend to display "responsibility, tolerance, and a general sense of well-being" (Ahlin & Antunes, 2015, p. 1804), while persons with an external locus of control exhibit a greater tendency towards depression, anxiety, and aggressive and delinquent behavior. As a result, an internal locus of control is viewed as a "protective factor" (Ahlin & Antunes, 2015, p. 1803) against a person's involvement in or exposure to delinquent behaviors, activities, and environments. Therefore, since there is such a sharp difference between the repercussions of the two types of control, finding a way to help youth develop an internal rather than external locus of control could have dramatic effects on delinquency. This fact raises the question: what factor(s) affect which locus of control a person develops, and what action, if any, can be taken to influence whether a child gains an internal or external locus of control?

Ahlin and Antunes (2015) state that, while a person's locus of control generally remains the same over time, it can be altered through various life experiences that either consistently deter or reinforce the person's behavior. Also, each person is not born with a locus of control, but they form one over time. Therefore, for reducing juvenile delinquency, an effective program can help youth with external loci of control to be transformed into youth with internal loci of control. Another option is that preventative action can be taken before a child develops a sense of control, so that he or she can be taught to develop an internal locus of control from the beginning (Ahlin & Antunes, 2015).

In order for a person to develop an internal locus of control, Ahlin & Antunes (2015) state that two conditions are required. The first condition is that "reinforcements of behavior are plentiful and consistent" (Ahlin & Antunes, 2015, p. 1804), and the second is the development of "expectancies that a behavior will result in a particular outcome" (p. 1804). These conditions can be influenced by or result from environmental and social influences, including family, peers, neighborhood, and personal traits of the youth.

In their study, Ahlin and Antunes (2015) used information from the Project on Human Development in Chicago Neighborhoods, which is a combination of the Community Survey and the Longitudinal Cohort Survey. The Community Survey was taken in 1994-1995, and included 8,000 adults living in Chicago. The Longitudinal Cohort Survey is comprised of three waves of data, with 1,076 youth completing all three waves from 1994, 1997, and 2000 (Ahlin & Antunes, 2015). Ahlin and Antunes (2015) then used the information to further evaluate the effect of the variables from family, peers, neighborhood, and individual characteristics on developing an internal locus of control. The locus of control for the youth was assessed through an additional survey in wave three with 23 statements, each with a positive and negative phrasing of the same statement. These statements were used to determine how the child viewed him- or herself, so each child was asked to choose which perspective he or she identified with. The results showed that, family variables—including parental supervision and knowledge of their child's friends— had the most significant impact on a child's locus of control (Ahlin & Antunes, 2015). Therefore, a program that involves parents and positive reinforcement of prosocial and self-accepting behavior is necessary for reforming or preventing juvenile delinquents. One activity that consistently deters destructive behavior, encourages positive behavior, and allows parents to participate with their kids or presents the opportunity for youth to spend time with peers in a supervised manner is martial arts.

#### **Origins of Martial Arts**

Martial arts, as Burke, Al-Adawi, Lee, and Audette (2007) report, has no clear origin. This is because the vast majority of martial arts began all over the world—namely Asia—in secrecy, or at least many aspects of the training were kept hidden and, therefore, not written down. Since the original martial art was passed down from teacher to selected student, discrepancies in what was the correct teaching occurred over time, and a number of different schools developed under each martial art (Burke et al., 2007). Therefore, the teaching and ideals for one school under a martial art may not apply fully to the entire martial art. While the differences between individual schools is a result of differing interpretations over time, the differences between the types of martial arts originates from where and why they were developed (Burke et al., 2007). The three main countries from which the majority of popular martial arts originate are Japan, Korea, and China.

Japan is the birthplace of martial arts such as Aikido, Karate, Judo, and Jujutsu among others. Many of Japan's martial arts began with the practices of the Samurai, or arose from military techniques (Gatling, 2010). Similarly, many of the martial arts from China and Korea have also come from military roots. However, the styles from different countries often influenced and help form each other, so Japanese and Korean martial arts have some origins in China, and so on. Korea is where Tae Kwon Do, Tang Soo Do, and Hapkido originated, and China's martial arts include Kung Fu, Tai Chi Chuan, and Wing Fung (Gatling, 2010). For the purposes of a juvenile delinquency program, martial arts that exclude weapons are more costeffective, so this paper will describe a few of the most popular forms that are not solely dependent upon the use of weapons.

## **Types of Martial Arts**

There are many different martial arts, and not all of them would promote pro-social, nondelinquent behavior. Borkowski (1998) addressed some of the major differences between the most commonly practiced martial arts. The first of these differences was classical or traditional schools and modern schools (Borkowski, 1998). According to Borkowski (1998), modern schools are focused on developing physically, while classical schools are concerned with developing "the body, mind, and spirit" (p. 22).

Nosanchuk and MacNeil (1989) discussed a study performed in seven martial arts schools that compared the effects of traditional and modern martial arts on the aggression of their students. In the article, Nosanchuk and MacNeil (1989) discuss the difference between traditional and modern schools of martial arts, as well as two main hypotheses for the different effects on aggressive tendencies. These include the training hypothesis, in which the effects result from the teaching, and the selection hypothesis, which says these results of many studies are skewed because of the dropouts in each school. After they describe and explain the process they chose and why, Nosanchuk and MacNeil (1989) present and analyze the results of their study. These results reinforce the training hypothesis and show the aggressiveness of students in modern schools are directly connected to their belt levels, while the aggressiveness of students in traditional schools is inversely related to belt levels (amount of training) (Nosanchuk & MacNeil, 1989).

Twemlow and Sacco (1998) also address juvenile delinquency and how the "old style" of martial arts—not the modern—can be used to help prevent and reduce delinquent behavior. Then, the two delve into the different aspects—physical, physiological, psychological, and meditative—of the "old style" martial arts and how each of those aspects address part of the solution that other approaches to reform have lacked. They state that the emphasis of the traditional martial arts focuses on control and respect, while the modern martial arts focuses on fighting and competition. Also, the physical motions of modern martial arts are focused on overwhelming attack, while traditional focuses on self-defense with minimum force (Twemlow & Sacco, 1998).

Another way to categorize martial arts, is to determine whether the art is "hard" or "soft" (Borkowski, 1998). Burke et al. (2007) state that the difference between hard and soft martial arts is the goal. In hard martial arts, the student strives to attack the target with the greatest force possible, so as to inflict pain or injury. In soft martial arts, on the other hand, the student aims to calmly redirect and deflect any hits from the attacker. The focus here is on redirecting energy,

not physical force as in hard martial arts (Burke et al., 2007). Since soft martial arts focus on harmony and protecting the attacked person without focusing on inflicting physical pain, a soft martial art is a safer option for teaching juvenile delinquents. Therefore, while hard martial arts could also be useful in reforming delinquency, focusing on soft martial arts is a more productive and logical choice. However, as Borkowski (1998) emphasizes, each martial art can be a mixture of hard and soft. This means that the art can have elements of both hard and soft styles. It also means that a martial art can include both hard and soft schools. For example, Karate is one of the more prevalent martial arts in modern America. However, there are different schools or styles of Karate. Shotokai Karate, for example, would be considered a soft sport, but Kyokushin-Kai Karate would be a hard sport. In that way, a single martial art can encompass a wide degree of variation (Brokowski, 1998). In order for a juvenile delinquency program involving martial arts to be successfully implemented, it is important that the differences between schools are also researched and acknowledged. A generalization of all the schools under a single martial art could lead to the implementation of a not only useless, but harmful and counterproductive program. One traditional and soft martial art that focuses heavily on selfcontrol and minimal force is Aikido.

Aikido is a "soft" martial art that was developed in 1925 by Morihei Ueshiba, a versatile and accomplished martial artist. He decided to reject all violent or aggressive martial arts and focus on using his skills for peace (Kroll, 2008). His art, Aikido, directly translates "way [do] for the Coordination or Harmony [ai] of Mental Energy or Spirit [ki]" (Westbrook & Ratti, 1970, p. 17), and has no attacks. There are two moves: tankan, which involves turning the same direction as the attacker, and irimi, which is directly engaging the attacker. The focus is for the martial artist to redirect the attacker's energy and momentum to take control of the situation and protect both themselves and the attacker. These moves represent seeing another's point of view, cooperating and understanding that view, and then asserting and explaining your view in a respectful, non-aggressive manner (Kroll, 2008). These skills address some of the social, emotional, psychological, and self-control issues that lead to delinquency.

According to Westbrook and Ratti (1970), Aikido has three main motivations that set it apart from other forms of martial arts: defense, "centre," and neutralization. The first motivation is that Aikido is a solely defensive martial art in that it is designed to protect both the victim and the attacker from harm. In Aikido, it is considered primitive to cause injury because it demonstrates a lack of skill (Westbrook & Ratti, 1970). This is the reason that there are no attack moves in Aikido. The thinking behind this defensive focus is that a person will act instinctively to a hazardous situation. Therefore, he or she must learn to have a high degree of personal development, or have the responsibility to protect life and control his or her actions. Then, with proper training to accompany the mental development, the practitioner of Aikido can act instinctively to effectively protect him- or herself, without harming the attacker, who has not learned how to control or think thoroughly about his or her actions.

The second motivation that guides the practice of Aikido is "centre" or "ki." The word "ki" is used to depict powerful spectacles of wind and water that decimate everything they encounter. Similarly, in Aikido, the "centre" is where a person's power and strength come from, as well as where the force is directed. However, along with power, the "centre" is also the person's center of balance, both physically and mentally. This "centre," from the Aikido perspective, is "possessed by everyone although developed consciously by only a few" (Westbrook & Ratti, 1970, p. 21). With this statement, Westbrook and Ratti (1970) emphasize the importance of fusing the mind with the body, the need for a person to be "centered."

Together, the mind and body are the combination of action and direction, strengthening each other. In order to describe the effects of using mind and body as one, Westbrook and Ratti (1970) use the example of a baby's fist. The babe's hand is closed and he is entirely relaxed, yet an adult would have to use great force to open the small hand. This is what Aikido practitioners strive for; they wish to act instinctively as the baby and lessen the gap between thought and action. The focus on balance and power both mentally and physically enable a practitioner of Aikido to have both immense power to guard himself, yet the restraint and balance to disable the attacker without inflicting major damage. Both require immense focus.

The third motivation adds to the balance and power for defense. This focus is neutralization, or how a mentally and physically balanced person can react with great power to disable an attack without causing harm. This is accomplished through the use of a combination of the dynamic movements of extension, evasion, and centralization. As Westbrook and Ratti (1970) state, the "purpose of this practical training is to replace certain instinctive responses...with other more subtle and refined instinctive responses..." (p. 24). This commitment to discipline and training requires dedication and intentional practice.

These three motivations present Aikido as an effective candidate for a juvenile reform program. The physical exercise would permit an outlet for aggression, while the mental aspect would help teach the juveniles self-control. The sport's circular, tensionless motions can help release strain, and they can be accomplished by a person of any age, gender, or athletic ability. Therefore, this is not only a program that could be accomplished by the juvenile, but it could also be a way for families to participate together (Westbook & Ratti, 1970). In addition, since Aikido consists of various combinations of a few basic moves, there are an endless number of combinations to learn. Also, the only materials required for the practice of Aikido are as follows: a well-practiced instructor, a dojo (training space), a large practice matt to cushion falls, and willing participants (Westbrook & Ratti, 1970). Thus, the program can be used long-term in the delinquent's life to both teach them to be "centred" and to learn self-control and responsibility for their actions. However, before any of this can be accomplished, Westbrook and Ratti (1970) emphasize the new student must first commit to the training and the lifestyle that accompanies the training.

This dedication and willingness to change and to learn is especially important because, while Aikido has no attacks, the art follows the belief that "the very first requisite for defense is to know the enemy" (Westbrook & Ratti, 1970, p. 46), and, thus, their attacks. If the student is not focused on the ideals of Aikido, he or she may become the attacker he or she originally hoped to defeat. Westbrook and Ratti (1970) define attack as "an unjustified, unprovoked attempt to destroy or injure another person, or even interfere with his freedom of action" (p. 48). Every attack consists of three parts: the mental (intent), physical (attacker's body/weapon), and functional (how the body/weapon is used). The dynamic and physical aspects of each of these parts are what a person with Aikido training will use to defend himself.

Every defense in Aikido is tested and sorted using the theories of physical pain and physical injury. The theory of physical pain states that any pain the defense causes needs to be as extremely brief and minimal as possible to accomplish the goal. The theory of physical injury states that the practioner of Aikido must respect their attacker's anatomy. For example, a person's elbow bends only one way. If force is increasingly put on the elbow to bend it the other way, it will break. The concept of respecting the opponent's anatomy means that breaking the elbow, or any similar act, is forbidden (Westbrook & Ratti, 1970). The dynamic factors can make use of either the opponent's entire body, or a small part. The way in which the dynamic, or moving, factors are used depends upon the type of attack (punch, stab, etc.) and the motion of the opponent. In this stage, the Aikido student will use the momentum to redirect the motion around him- or herself, so that the student is free from harm (Westbrook & Ratti, 1970). For instance, if the attacker punches the Aikido student, the student could grab the punch, step out of the way, and guide the fist in the direction it was already going (Westbrook & Ratti, 1970).

Despite the non-aggressive ideals of Aikido, Zetaruk, Violán, Zurakowski, and Micheli (2005) find that injuries do occur in the martial art. Zetaruk et al. (2005) compares the differences in amount and type of injuries in Aikido, Olympic Tae Kwon Do, Tai Chi, Kung Fu, and Shotokan Karate. In their study, they had 263 volunteers from these five martial arts fill out a survey concerning the number and type of injuries they suffered in the practice of their martial art. In each survey, the participants also indicated their martial art, the number of years they had been training in that art, the amount of time they practice each week, and their rank or belt level, as well as their age and gender. Zetaruk et al. (2005) also recorded the severity of the injuries, which was judged by number of days the participant had to sit out because of an injury. If seven or more days of rest are required, or if there is a concussion, then the injury is major (Zetaruk et al., 2005).

In the findings, Zetaruk et al. (2005) found that Tae Kwon Do and Karate students over eighteen years of age with at least three years of experience and who trained over three hours each week suffered more injuries than younger, less experienced pupils, regardless of gender. Among the different martial arts, 29.8% (16.7% major injuries) of Karate students, 59.2% (26.5%) of the Tae Kwon Do students, 51.1% (27.7%) of the Aikido students, 38.5% (17.9%) of Kung Fu students, and 14.3% (7.1%) of Tai Chi students reported injuries (Zetaruk et al., 2005). In addition, 18.4% of the Karate students, 44.9% of the Tae Kwon Do students, 31.9% of the Aikido students, 23.1% of the Kung Fu students, and none of the Tai Chi students reported having multiple injuries (Zetaruk et al., 2005). This data indicates that, Tai Chi may be the least violent of the five martial arts, while Olympic-style Tae Kwon Do seems to be the most dangerous. Therefore, in relation to the use of martial arts in juvenile delinquency reform, Tai Chi may be a good candidate, while Olympic Tae Kwon Do may be counterproductive.

However, the information can only be used to show possible levels of danger for various reasons. The first reason is that the numbers of students from each martial art varied drastically. Out of the 263 participants, 114 practiced Shotokan Karate, 49 practiced Olympic Tae Kwon Do, 47 practiced Aikido, 39 practiced Kung Fu, and only 14 practiced Tai Chi (Zetaruk et al., 2015). There is also a margin of error to account for because the data was self-reported and on a volunteer basis, as well as the fact that the number of higher-ranking participants—who were shown to be more prone to injury—may differ between the participants of each martial art examined. Therefore, this data can only be used to show that Olympic Tae Kwon Do seems to be more injury-inducing than the other martial arts, as well as that different martial arts cause injuries to different areas of the body (Zetaruk et al., 2005). In order to determine the accuracy of these predictions, a more in-depth look into those five martial arts and into other studies on the injuries in martial arts was needed.

Tae kwon do, for instance, has schools other than the Olympic school that are far less focused on violence, or that are less of a "hard" martial art. Tae Kwon Do is based on five major tenets, and involves as much mental exercise as physical exercise. These tenants include courtesy, integrity, perseverance, self-control, and an indomitable spirit; these are the goals of the art (Amerland, 2005).

Tae Kwon Do originated in Korea during the Silla dynasty (660-890 AD) out of the need for new military tactics to defend against invaders from other countries (Sell & Sell, 2011). According to Sell & Sell (2011), the "Hwa Rang Dan," a specialized military group, was formed to discover these new tactics. As a result, this group observed instinctive animal fighting styles, and combined these with the discipline of Buddhist monks and the existing self-defense techniques to form "Tae Kyun." There is some written evidence that supports Tae Kwon Do's existence before the Silla Dynasty, as far back as 37 BC, but there is not a lot of information from that time due to the original secrecy of martial arts (Sell & Sell, 2011).

From the militaristic popularization in the Silla dynasty, Tae Kyun or Soo Bak Do became increasingly popular. By the Yi Dynasty, Tae Kyun had become popular as a respected sport in addition to its military use and standards. However, towards the dynasty's close, Korea had entered a time of peace. As a result, tae kyun practice diminished near the point of nonexistence until the Sino-Japanese War of 1894 (Sell & Sell, 2011). At this point in time, Korea again had need of their military art, so they began to modernize Tae Kyun using techniques from surrounding countries. The teachers who knew the art began to form their own training schools to teach others, and each teacher added their own modernization and choice of name to the sport. Now known by various names with many of the styles differing from each other, the schools were referred to as "Kwans," and the sport over military focus resumed. By 1950, there were over 17 different styles of the art, so, to eliminate confusion and preserve the values and teachings of the original Tae Kyun art, the Korea Tae Kwon Do Association was developed in 1965. This Association evaluated all of the schools and the teachers, and officially recognized only five schools as being Tae Kwon Do (Sell & Sell, 2011). One of the recognized schools Chung Do Kwan. Sr. Grandmaster Edward B. Sell (1942-2012) was the founder of the U.S. Chung Do Kwan Association (USCDKA), and the USCDKA is currently led by his wife, Sr. Grandmaster Brenda J. Sell. Sell and Sell (2011) state that, in practice, Chung Do Kwan Tae Kwon Do is the Korean counterpart to the Shotokan school of Karate.

Tae Kwon Do means the way (do) of striking with the foot (tae) and the hand (kwan) (Sell & Sell, 2011). Tae Kwon Do classes are taught in a 6-part structure that focuses on discipline, unity, and self-defense. The first part of the Tae Kwon Do class is stretching. The purpose of this portion is to warm up for the class and to help prevent injury while practicing Tae Kwon Do. The second part of the class is the teaching of the "Fifteen Basic Fundamentals" (Sell & Sell, 2011). These fundamentals are the basic blocking and striking moves, as well as stances, which act as the building blocks for all Tae Kwon Do forms and techniques. Therefore, if a student does not focus on perfecting these fundamentals, he or she will not be able to be successful in the other parts of the Tae Kwon Do class (Sell & Sell, 2011).

The third part of the Tae Kwon Do class is practice of the forms or "poomse." Sell and Sell (2011) report that the purpose of forms is to "create and strengthen defensive reflexes" (p. 84), as well as to develop the "fundamental qualities of Taekwondo performance: body balance, accuracy, concentration, coordination and endurance" (p. 84). Each form is comprised of a set sequence of fundamentals. Generally, after a student of Tae Kwon Do has earned his first belt, he will learn one form per colored belt level (Sell & Sell, 2011).

Following the forms is the one-step sparring section. There are 40 sets of one-steps in Chung Do Kwan Tae Kwon Do, but beginning students are only required to learn the first 20. Each one-step consists of four parts: the challenge, the acceptance of the challenge, an attack,

and a block/counter attack. In practice, the instructor will divide the class into pairs, with each person facing his or her partner. Then, the lower-ranking student will issue a challenge by stepping back into a specific stance and issuing a giyup, or yell. The other person will then accept the challenge with a giyup. After the challenge has been accepted, the challenging party will step forward and giyup as he or she punches his or her opponent in the nose. However, the punch will not make contact because the attacked person will block the attack and counterattack with a set strike. In all 40 one-steps, the first three parts are the same. It is only in the block and counterattack that each one-step differs. The point of these one-steps is to practice the fundamental techniques in a situation more akin to a real-life experience. In that way, one-step practice helps to develop practical self-defense skills, as well as skills for use in free-style sparring, which is part six of the class (Sell & Sell, 2011).

Free-style sparring is where two students get to use the techniques they have learned and "fight" each other. However, the goal in sparring is not to injure the opponent, but to demonstrate the ability to defeat the opponent without causing him or her injury. This ability is demonstrated by effectively blocking all the opponent's attacks and by getting past the opponents blocks with strikes. However, there are many rules and limitations to sparring in order to prevent serious injury. These rules vary between schools, but the rules for the Chung Do Kwan school are outlined by Sell and Sell (2011). In order to spar, each participant must first be wearing the proper safety gear. This includes a chest guard that wraps around the torso, a soft helmet, martial arts soft gloves and foot covers, a mouth guard, and males must wear a cup. Additionally, a student has the option to wear soft shin guards and arm guards, but those are not mandatory. It is important to note that all this equipment is specialized to martial arts practice, so the shin guards and other padding used are not the same as used in soccer or other sports. The

sparring match will also take place on a mat or padded flooring in case one of the participants falls (Sell & Sell, 2011).

In addition to the protective gear, sparring is also governed by a number of rules. These rules establish a set of permitted and prohibited strikes and blocks. For example, no strikes are permitted to the back of the head, below the belt, or the back of the torso. These will all result in the loss of points. Also, for students who have not yet reached black belt, the use of knee or elbow blocks is prohibited, as those can cause serious damage without the proper control and experience. Punches and various kicks are allowed, but there are no heels, chops, elbow or knee strikes, or spear hands permitted at all. Only kicks can be used on the head, and no blood can be drawn. In order to win a sparring match, the opponent seeks to receive the greatest amount of points in the set time limit. A student can score points by landing a kick to the sides or front of the head (without drawing blood) and to the front and sides of the torso, or by punching the side or front of the torso. In this way, while injuries in sparring do occur, the association attempts to prevent major injuries (Sell & Sell, 2011).

The final part of the six-part class is calisthenic exercise, or running in place, sit-ups, and push-ups. According to Sell & Sell (2011), there are four reasons that calisthenic exercise is necessary. The first reason is to condition the student's body in order to prevent a muscle injury. Other reasons include strengthening the muscles so that the student can both withstand harder strikes and to strike with greater force. The final reason for conditioning is because the previous parts of the training disciplined and strengthened the mind, so this final part is to strengthen and condition the body (Sell & Sell, 2011).

This information shows that Tae Kwon Do could possibly be used safely with juvenile delinquents to teach discipline. However, since there are strikes in Tae Kwon Do, it is

impossible to completely eliminate the possibility of injury. In addition, while the Chung Do Kwan school of Tae Kwon Do—described by its founder and grandmasters Sell and Sell (2011)—takes many precautions and focuses on preserving life, other schools may not. Therefore, other styles of martial arts should be investigated in order to see if they are better suited for use with delinquents.

Tai Chi, according to Wolf et al. (1997), is a martial art that originated in China in the late Ming or early Qing Dynasties. The idea of the art is that everything comes from Tao, "a primordial, potential energy" (Wolf et al., 1997, p. 886) in which "all elements in the universe are contained" (p. 886). Yin and Yang, or inactivity and activity, are opposite energies that keep the world in balance. According to Wolf et al. (1997), an imbalance of these forces is what causes physical disability and limitation, or illness. This Chinese concept is what Tai Chi is based on.

In Tai Chi, or Tai Chi Chuan, Tai Chi means "supreme ultimate" (Wolf et al., 1997, p. 886) and Chuan means "fist" (p. 886) which resembles how the original sport, as reported by Wolf et al. (1997), was similar to boxing. This was true until it was altered for military defense purposes into the martial art it is now. Modern Tai Chi involves a mindset of maintaining a balanced Chi, or the body's "vital energy" (Wolf et al., 1997, p. 886) through the combination of Yin and Yang. Therefore, every motion, whether an attack or a block, seeks the balance of energy through the perfect combination of activity and inactivity. As a result, a student of Tai Chi seeks to be acutely aware of his or her body and motions, so that each movement is smooth and relaxed, yet forceful and coordinated (Wolf et al., 1997). Modern Tai Chi follows three main principles: a relaxed and fully extended body, focusing on posture and breathing; an alert, observant, and calm mind; and "well-coordinated sequencing of segments" (Wolf et al., 1997, p.

886) or movements. These basic focuses have led Tai Chi to be used to maintain the health and physical activity of elderly people who are past their seventies (Wolf et al., 1997).

## **Martial Arts Ideals**

As in Aikido, respect and control is essential in all traditional martial arts. Bäck and Kim (1982) discuss how eastern martial arts encourage self-control through control and awareness of the body and its movements. They also discuss how martial arts and pacifism are connected through control. Bäck and Kim (1982) state how a pacifist must learn to fight to ensure his or her motives are pure. This way, when he or she chooses not to act violently, it is because of principle and control rather than inability. This also helps others to see pacifism as strength, not just an act of necessity or weakness. The authors also point out that everyone, including delinquents, is confronted in an aggressive manner at different points throughout their lives, so martial arts and control help the person to focus, and learn how to control the situation without unnecessary violence or aggression (Bäck & Kim, 1982).

Another key component to martial arts, as described by Young (2009), is courtesy. Courtesy, as defined through the development of Japanese culture and tradition, is not simply politeness, but genuine care. Sincerity of action is also emphasized in the bow, which signifies gratitude and respect toward the opponent. Also, success in martial arts requires a high level of focus on the situation. This does not mean tuning everything else out, but having harmony and peace with the situation and dealing with it. The Confucian ideals also play into martial arts, resulting in an emphasis on responsibility of each person and the community as a whole (Young, 2009). If delinquents can learn how to be courteous and respect others, how to focus, and to control and take responsibility for their actions, then they will have much lower rates of recidivism and crime. Twemlow and Sacco (1998) explored this idea. The testimonies of the

youth involved in these studies, as well as of the psychologists involved, confirmed that martial arts helped lessen the aggression of the kids, as well as help them to focus and learn more responsibility for and control of their actions (Twemlow & Sacco, 1998).

The concept behind Aikido is clearly explained through a set of Ratti's (1970) images depicting the "Ethics of Defense in Combat" (Westbrook & Ratti, 1970). There are four panels, each depicting an attack and a reaction. In the first panel, one man attacks and the other responds by attacking and killing the man. In the second, one man provokes the other, and the other man responds by attacking and killing the man. The third panel shows one man attacking and the other defending himself, which results in the attacker's death. The last panel shows the first man attacking the other, and the second man defending himself without harming his aggressor. These four panels are meant to depict the four possible defense strategies in physical combat. The first was responding to violence with a counter attack. The second was responding to a verbal or physical taunt with a physical attack. The third was defending himself with physical violence. The last one, the stance of Aikido, was defending himself by redirecting the aggressor's attack so that no one would be harmed. This last stance, in Aikido, is the only way to successfully win in a physical altercation (Westbrook & Ratti, 1970).

#### Conclusion

Essentially, if traditional martial arts were combined with psychological help and supervision, community involvement, and smaller group sizes, it could be very effective in juvenile corrections.

## **Analysis of Literature**

Martial arts address the lack of emotional and psychological stability and self-control that many juveniles have, as well as their aggressive tendencies. The traditional martial arts also

emphasize respect, which can help with interpersonal relationships—including the crucial parent-child bond. In addition, martial arts are a positive social activity, which would also help with social deficiencies and a safe activity to keep the juveniles busy. The effectiveness of the program would depend on whether the youth commits to learn, but, if he or she does, the art could help the juvenile to learn the social skills he or she was deprived of as a child. These studies show that martial arts have a tremendous potential to completely revolutionize the modern juvenile correction process. However, the data also show that participation in martial arts alone is not enough to reform a juvenile's delinquent behavior.

The sources concerning the causes of delinquent behavior revealed many different causes. However, all the sources made it clear that delinquency is not a one-problem issue. Delinquency is caused by the combination of many possible contributors, or stressors. These stressors come from the physical environment, the economy, peers, elders, and any other social encounters, the decisions of others, the juvenile's own decisions, their natural personalities and tendencies, traumatic or regular life experiences, and that is not all. Essentially, one can conclude that everything in life is a potential stressor or influence that interacts with all the other potential influences to effect a person's life; there is no way to avoid influences toward delinquency completely, especially if biological factors are also involved. The question is, then, what can be done?

There are certain factors that seem to contribute to delinquency or at least indicate a child's trajectory towards it. More observations and studies to locate the cause will always be needed, but, looking at the programs that have worked and failed and the different studies, it is apparent that one of the main things that can be done is to teach children how to live peaceably and how to develop self-control. If children can be taught to think through actions clearly, to

know right from wrong, and to make choices based off of that information regardless of how difficult, then delinquency can be prevented. The criminal justice system will never be able to eliminate delinquency altogether or force it away with a miracle program, but if they can teach children and those who influence them the most the skills they need to interact peaceably with the world and care for themselves and others, it can be lessened. For those changes to occur, there are a few necessary components.

## **Developing a Program**

The purpose of the following section is to attempt to identify the major components highlighted by the literature review and to develop a potential program. However, it is important to note that this program is conceptual only, as I lack the resources or time for a longitudinal study to implement and monitor the effectiveness. More research is still needed, but the goal is to form the idea for a program that is likely to succeed. The following paragraphs are my thoughts based upon the sources discussed above.

As stated above, juvenile delinquency is a multifaceted, widespread issue. Therefore, any program must be adapted for the area and the target population in that area. Also, any successful program must not only address the delinquent youths, but the environment and people who influence them most, such as the parents, family, peers, and role models. Another key component is that, for a program to be effective, the youth and the people around them must all agree to participate and be willing to learn to change. They must see that something needs change and be able to take responsibility for their past and future actions and make that decision. The reviews of programs above make it clear that a child cannot be coerced or forced to change, for he or she will simply recidivate later or fake the change. The adults in the child's life also cannot be forced, but it is necessary to involve them so that they can encourage the child to

reform and help guide him or her to do that. If the adults themselves do not know self-control, how to defend themselves, or how to interact peaceably to be productive members of society, how can they teach their children or the youth who look up to them? Then, in turn, how will the child who never learned, or learned incorrectly, teach his children? He or she cannot. That is also why delinquents should not be treated as "bad" or "failed human beings," but as people who do not know better. This will lessen the tension between the teacher and the student, between the person trying to help the delinquent and the misled child, and increase the chance of the two developing a positive relationship of trust. It is true that some delinquents were given the skills and resources to peaceably interact as part of society, yet they are the exception.

Another requirement for the program is that there be a psychology expert or counselor who can give each child one-on-one treatment and time. This is a necessary part because each child has undergone different experiences and stressors, and, in order to help them deal with those issues, they need professional and individual attention. In addition, a program that provides a positive social activity and opportunities for the children to interact with their parents and build relationships with non-delinquent peers, would help lessen their exposure to bad influences. Beyond that, the program would create positive influences to further counteract the stressors that encourage delinquency. Aikido would be effective because it can be practiced by all ages, levels of physical ability, and gender, and they can all learn the art in the same class. Also, Aikido stresses discipline, self-control, and respect for others to the extent that failure to do so is considered "primitive." This would be the opposite of how delinquent peers glorify and encourage delinquent activity, so this would provide a place where non-delinquent, prosocial behavior was encouraged and taught. Another benefit of Aikido is that it has no attack moves, but can show people how to defend themselves successfully. However, the child must commit to learning. He or she will also be taught attacks that others may use so that the child can learn to defend him- or herself from them. This exposure will risk teaching the child how to attack, and it will also require the children to compete and practice with others. There is potential here for harmful skills to develop, but there will never be a program that works for everyone. However, if the child does decide to commit to the art fully, Aikido has great potential to help him or her.

For the program to work, there would also need to be skilled teachers who can build a relationship of trust with the students and genuinely care for their wellbeing. This is crucial because these children need patience and to feel that the instructor truly cares, so that they can trust him enough to genuinely learn and want to learn. The class size should also be small enough for each participant to receive individual attention and accountability when needed. The facilities required would be a preferably safe location that could fit the necessary number of people for that area with a large cushioned square mat in the middle of the floor. The practice space must be large enough to allow all the program participants to practice and move about without accidentally hitting each other. The mat must be large enough for two or three people at a time to practice their techniques.

Unfortunately, the other needed aspects of the program cannot be identified until establishment of the program is attempted. Also, success is not guaranteed. With the above research, however, Aikido has the potential to successfully improve the behavior of juveniles long-term is promising.

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