

AN EXAMINATION OF BARJ SERVICES IN FOUR PENNSYLVANIA COUNTIES

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BACKGROUND

Beginning in the late 1950s, the incidence and severity of juvenile delinquency began to increase in a step-wise fashion that continued into the 1990s. The trend observed by a number of researchers (Wolfgang, Figlio, & Sellin, 1972; Empey, 1979; Zimring, 1979; Tracy, Wolfgang, & Figlio, 1985; PCCD, 1989; Blumstein & Petersilia, 1995; Howell 1997) indicated substantial increases in youth offending for extended periods of time which would eventually level off before increasing again. For example, Empey (1979) reported a 144% increase in juvenile arrests nationally between 1960 and 1973 even though the U.S. Youth Population increased by only 32%. Moreover, the most substantial increase involved violent crimes. Juvenile crime trends in Pennsylvania reflected the national statistics. For instance, statistics compiled by the Pennsylvania Juvenile Court Judges' Commission indicated a relatively stable trend in arrests for violent offending between 1984 and 1988 followed by a substantial increase of 68% from 1988 to 1994 (PJCJC, 1995).

In response to the dramatic increase in youth offending, Pennsylvania amended its Juvenile Act with passage of Act 33 of Special Session No. 1 of 1995. This new law set forth a statutory scheme that excluded designated felonies from the definition of "Delinquent act" and placed them within the original jurisdiction of the criminal court. However, the most important provisions of Act 33 redefined the very mission of the juvenile justice system to require:

"Consistent with the protection of the public interest, to provide for children committing delinquent acts programs of supervision, care and rehabilitation which provide balanced attention to the protection of the community, the imposition of accountability for offenses committed and the development of competencies to enable children to become responsible and productive members of the community."

The principles upon which this legislation was based have their origin in a policy paper submitted by Maloney, Romig and Armstrong (1988) to the National Council of Juvenile and Family Court Judges entitled “Juvenile Probation: The Balanced Approach”. Maloney’s policy model featured a tripartite approach to youth offending which placed equal emphasis upon community protection, youth accountability, and competency development. The Pennsylvania legislation is rooted in the philosophy of “restorative justice,” which gives priority to repairing the harm done to crime victims and communities, and which defines offender accountability in terms of assuming responsibility and taking action to repair harm. The “balanced attention” mandates in The Juvenile Act have provided the framework for implementing restorative justice principles in Pennsylvania’s juvenile justice system. Also at the foundation of this mandate is the concept that crime victims and the community, as well as juvenile offenders, should receive balanced attention and gain tangible benefits from their interactions with Pennsylvania’s juvenile justice system.

The principles which serve as the foundation for the 1995 amendments to the purpose clause of the Juvenile Act included community protection meaning that citizens of Pennsylvania have a right to safe and secure communities, accountability meaning that when a crime is committed by a juvenile, an obligation to the victim and community is incurred; and, competency development meaning juveniles who come within the jurisdiction of Pennsylvania’s juvenile justice system should leave the system more capable of being responsible and productive members of their community.

In contrast to the *parens patriae* model that emphasized rehabilitation, balanced and restorative practices are designed to include the offenders, victims, and communities directly affected by the crime. Under restorative practice each party plays a role in collectively

addressing the harm caused by the crime (McCold, 2000; Sawin & Zehr, 2007). Ostensibly, Act 33 reflected the retributive paradigm. The Tier I and Tier II amendments were designed to expand the definition of offenses that could be prosecuted in the criminal justice system. However, with the inclusion of restorative principles, Act 33 tacitly reflected a shift toward a restorative paradigm designed for the inclusion of youth offenders under networks of informal, community-based services (Zehr, 1990; Bazemore & Walgrave, 1999; Van Ness & Strong, 2010).

Balanced and Restorative Justice (BARJ) is the Pennsylvania model that incorporated restorative principles into Act 33. The restorative model has developed inductively drawing from such disparate approaches as the behavioral sciences, religion and ethics, as well as ideologies. Consequently, the model lacks clear conceptual definitions which have inhibited effective implementation and assessment (Marshall, 2003). BARJ includes elements of restorative practice, retribution, and rehabilitation in what might aptly be described as a partial restorative approach (see discussion in McCold & Wachtel, 2003). Interestingly, the inclusion of restorative and retributive principles that emphasize reparation of harm, known as the outcome-focused approach (see discussion in Zernova & Wright, 2007), is now being espoused by many contemporary writers in the restorative field who acknowledge the interdependency of these seemingly disparate approaches (also see discussion in Johnstone & Van Ness, 2007). If these assertions are correct, BARJ represents a hybrid approach that a number of writers are currently advocating. Nevertheless, disparate ideas mixed together in any treatment model pose serious theoretical, practice, and methodological problems.

Recognizing the problem inherent in a multi-paradigmatic policy approach, groups of juvenile justice practitioners and policymakers across the Commonwealth have labored to

articulate the various dimensions of balanced and restorative practice. Their efforts have been instrumental in developing research strategies to isolate the effects of BARJ practice. Since foundational work has been done to flesh out restorative constructs an evaluation of BARJ is possible at this time. Obviously, there has been no statewide outcome-based evaluation of BARJ to date even though Act 33 was implemented in 1996. This problem is not unique to Pennsylvania, however. There is a distinct paucity of outcome based research on balanced and restorative justice and restorative practices nationally and internationally.

In light of the absence of any outcome-based studies, in 2009 the Pennsylvania Juvenile Court Judges' Commission (JCJC) and the Pennsylvania Chief Juvenile Probation Officers' Council (PCJPO) authorized the current evaluation of BARJ practice. The present study was exploratory in nature and examined three questions that address the adequacy of BARJ policy and practice. The first question explored the context in which BARJ services were rendered by providing a detailed description of the sample of at-risk youths who received these services. The second question considered the reliability of the BARJ services by describing and classifying the services they received while under court supervision. The final question evaluated the effectiveness of BARJ services in mediating the effects of demographic and ecological risks (see discussion in Catalano & Hawkins, 1996), prior and current offending, and compliance to court supervision on two measures of recidivism.

LITERATURE REVIEW

The Paradigm Debate

Most of the issues that confound restorative justice policy boil down to a construct validity problem. What is restorative practice? There is no clear consensus. A logical starting

point in understanding this interesting but ambiguous idea begins with the paradigm debate. While it has been argued that restorative practice represents a paradigm shift within the justice system; it is important to understand that restorative approach is an ambitious and dynamic movement with broad applications and diverse goals. The restorative justice model is only one application of restorative principles that is best understood in the context of competing ideologies, social theories, and historical events. For instance, Christie's (1977) abolitionist thesis argued that the state has used the adversarial system of justice to consolidate political power over communities and proposed that restorative practice could be a mechanism to empower communities vis-a-vis strong, centralized governments. Weitekamp (1996) argued that the dismantling of restorative practices (the established practice of conflict resolution within hunter-gatherer and early agrarian societies) by the state, was part of a stratification scheme that led to the exploitation of the masses by the coalition of the First and Second Estates. Others (Yazzie & Zion, 1996; Consedine, 2003; Morris & Maxwell, 2003; Wright 2003) have highlighted the merits of restorative practices in maintaining social solidarity among indigenous peoples and that these practices were replaced by Western models of jurisprudence during the period of colonialism. These writers further speculate that these indigenous restorative practices could serve as models to repair the broken justice systems that currently exist in post-modern Western Culture.

Zehr (2002) was one of the first theorists to present restorative practice as a paradigm shift. He envisioned restorative justice as the application of the ethics of care, a philosophical alternative to justice practice dominated by law and science. Zehr's ethics of care can be described as an existential approach that calls for self-reflection and self-responsibility, human qualities lost in the process of modernity and buried by the machinery of the modern justice

bureaucracy. His work reflects existential questions such as how does man find meaning in the face of inhuman conditions such as exploitation and crime. Zehr argues that meaning is found through reparation and inclusion. The Christian theology that underscores Zehr's writings reflect Kierkegaard's message that faith is essential, whereas reason is only kept alive by the energy of faith (Barrett, 1958). Whether Zehr can be labeled a Christian apologist or not, existential themes are evident throughout his writings and have implications beyond the scope of justice practice. Modernity has created an existential vacuum that has allowed man to forsake "why" he lives for "how" he lives (see discussion in Frankl, 1963). For Zehr, restorative practice offers meaning to an otherwise meaningless process of laws and science. While it is clear that justice practice is the tip of the spear in the restorative movement, the diversity of ideas that underscore the movement make it clear that justice practice is merely the tip.

Restorative justice is a recent term given to reintegrative social practices dating back several thousand years to aboriginal cultures which are being gradually updated to fit Western systems of justice (Bazemore & Walgrave, 1999; Bradshaw & Roseborough, 2005). The first ad-hoc application of restorative practice in the juvenile justice system was the Victim Offender Reconciliation Program in Kitchener, Ontario in 1974 that involved face-to-face meetings between victims and offenders that involved interpersonal reconciliation and reparation plans (Peachey, 2003; Umbreit, Vos, Coates, & Lightfoot, 2007). The Kitchener Experiment is generally recognized as one of the first inductive applications of restorative principles. It served as a viable alternative to the traditional rehabilitative and retributive practices existing within modern juvenile justice systems. Other proponents (e.g. Bazemore & Walgrave, 1999; McCold, 2004) further point out that restorative justice is a third alternative, where attention is focused not

on punishment or treatment but rather on repairing the harm and reintegrating the offender into society.

In his essay *Retributive Justice, Restorative Justice* (1985) and later in *Changing Lenses* (1990), Howard Zehr articulated the first conceptual model of restorative practice featuring victim-offender mediation emphasizing the development of relationships and addressing individual and community needs (see discussion in Marshall, 2003). Zehr's ideas posited a view of restorative practice as a paradigm shift in which he articulated a justice model based on radically different formula than retributive assumptions. Zehr's initial ideas about a paradigm shift were soon articulated by Bazemore and Umbreit (1995) who outlined a 13-point differentiation between restorative practice and the existing paradigm of retributive justice. For instance, restorative practice defined crime as an act against a person or the community, whereas in the retributive model crime is defined as an abstract violation against the state. Later, Bazemore and Walgrave (1999) applying Zehr's principles called for a systemic reform of the juvenile justice system that included replacing justice professionals, including judges, with community members who would facilitate the decisions on delinquent offenses within individual neighborhoods.

Most writers would acknowledge that restorative justice can be understood as both a process conception and a values conception. On one hand, restorative justice focuses on the process of bringing together all involved parties including victims, offenders, families, community members, and other stakeholders to discuss what happened, how it affected the involved parties, and what should come as a result to restore any grievances; on the other hand, the values conception focuses on distinguishing restorative justice from the traditional punitive

system (e.g. repair of harm versus accountability to the state) (McCold, 2004; Morrison & Ahmed, 2006).

By many standards, the restorative justice is still a fledgling movement. Controversy regarding what restorative justice *actually is* remains unresolved. Several scholars including Bazemore and Walgrave (1999) have acknowledged that definitions are so disparate that there is no single, unified restorative justice movement. Some scholars contest that restorative justice should be a face-to-face process, a meeting between involved parties, to discuss how to repair the harm suffered (McCold, 2004; Menkel-Meadow, 2007); others contend that restorative justice should include services provided to victims to ease their pain, even if the offender is not known (Van Ness & Strong, 2010). The unresolved debate over process versus value conceptions has naturally limited theory development and any empirical validation of the restorative model.

Bazemore and Walgrave (1999) posit, that whatever the form of intervention, restorative justice practice should consider: the harm; the victim; the restoration; and the process of doing justice. “Crime is defined by the harm it has caused to victims, and the primary function of the reaction against it is not to punish, nor even to rehabilitate, but to repair or compensate for the harm caused by the crime” (p.49). The process of doing justice includes three related concepts: equity, or being treated similarly to others in similar circumstances; satisfaction, or a general feeling of content amongst all involved parties; and legal protection, or ensuring civil safeguards against the state (Bazemore & Walgrave, 1999). Other scholars have adopted similar definitions emphasizing the repair of harm to social relationships (Braithwaite, 2002; McCold, 2004; Menkel-Meadow, 2007; Rodriguez, 2007). The key to restoration is healing, not inflicting more harm by punishing offenders for wrongdoings.

Radical applications of restorative practice such as the value-driven reforms proposed by Bazemore and Walgrave (1999) are not necessarily supported by other writers. Some (Daly, 2002; Van Ness & Strong, 2002; Duff, 2003; Roche, 2007; Zernova & Wright, 2007) argue that the idea of restorative justice as a paradigm shift is over-stated. Among her criticisms of the paradigm rhetoric, Daly (2002) argues that restorative practices incorporate retributive principles and provided examples from Van Ness and Strong's Dual-Track, Backup, and Hybrid Models of restorative justice as well as Braithwaite's Enforcement Pyramid. Duff (2003) contends that restorative practice is not only compatible with punishment but requires it. Van Ness and Strong (2002) cite a variety of reasons for maintaining multiple justice models including the need for a variety of alternatives in dealing with the needs of victims, offenders, and the community; to protect the due process rights of the accused, to coerce resistant offenders; while acknowledging that the state has a legitimate role to sanction crime. Roche (2007) points out that the simplistic distinctions that have been drawn between restorative and retributive justice is not only inaccurate but confounds a more sophisticated understanding of the function of punishment in restorative practice. Roche further adds that restorative practice must be built on empirical research rather than ideological, biblical, and historical images. Zernova and Wright (2007) agree with Roche and advocate a maximalist (Bazemore & Walgrave, 1999) or what they refer to as an 'outcome-focused model' that features repairing harm through voluntary restorative processes and when that is not feasible through judicial coercion.

Even Zehr (2002) acknowledged, contrary to his earlier writings, that restorative justice can actually complement some retributive practices. Zehr has consistently argued that restorative justice must first and foremost address the needs of victims. Consequently, restorative practices are not intended to mediate between victims and offenders as if they were on a level moral plane.

It is the victims who have been harmed and the offenders must be held accountable for the harm. Zehr (2002) further spelled out four ways victims' justice needs can be addressed. This includes providing them with information about the legal process; allowing them the opportunity to discuss their victimization experience, preferably in the presence of the offender when possible; empowering them so they can regain some control and balance in their lives; as well as vindicating them for the harm caused by the crime. He further pointed out that punishment can be an effective tool in making offenders' aware of their responsibilities to their victims, especially if the punishment is handed out in a respectful manner.

Theoretical Development

Restorative justice could be accurately described as an inductively developed model drawing from divergent theoretical and philosophical positions. Some applications of restorative practice evolved in the absence of theory as part of professional practice, such as the Kitchener Experiment (Peachey, 1989). However, the conceptual foundation for restorative practice has developed largely through the writings of behavioral scientists, theologians, and philosophers. The entire model is guided by such diversity of perspectives that it can be argued that it doesn't actually fit Kuhn's definition of a paradigm (see discussion in Kuhn, 1970). Restorative justice is multidisciplinary in nature, with roots in sociology, criminology, psychology, theology and other disciplines.

Restorative justice is grounded in Durkheimian Functionalism, especially Durkheim's notions on social solidarity. Restorative practices among indigenous cultures reflect Durkheim's notions of mechanical solidarity, particularly the collective conscience (see discussion in Zeitlin, 1968; Coser, 1977; Rossides, 1978). Restorative processes are effective among cultures that can exert communal norms and values upon their members. The criminological approach that is most

fully compatible with the restorative justice model are contained in the theories of social control (Marshall, 2003). Hirschi's theory of the Social Bond (1969) reflects Durkheim's ideas on social solidarity. The assumption that underscores the control theory paradigm is that conformity is a function of the individual's connection to the community while deviancy is the result of detachment.

The ideas of the social bond were later applied by Braithwaite (1989; 1993) in the development of reintegrative shaming. In his studies of aboriginal cultures in Australia, Braithwaite concluded that potential offenders were positively influenced by being shamed by primary groups within their communities. Conversely, offenders were negatively influenced by the alienating shaming of the state in retributive justice systems. The implication of Braithwaite's findings is that networks of informal social controls are the most effective means to rehabilitate and reintegrate offenders into society. Braithwaite's conclusions are consistent with an array of other criminological approaches, ranging from social disorganization (Shaw & McKay, 1942) to the social developmental model (Catalano & Hawkins, 1996). Nevertheless, conflict theory is also reflected in restorative principles, particularly the ideas of abolitionism (Christie, 1977) and theories of economic and state development (Weitekamp, 1996). The fact that restorative principles reflect the idea of social cohesion (i.e. reintegrative shaming) as well as a zero-sum model of social change can be problematic in maintaining a coherent model of policy and practice. The balancing of functionalist and Marxist ideas, while theoretically unsound, does not pose a major problem for justice systems in the United States. U.S. justice systems that employ restorative practices do so for the pragmatic reasons of seeking solutions to problems inherent in the administration of justice. These include balancing punishment with mercy which both rehabilitative and retributive models of justice attempt to do. In this regard, restorative models in

the U.S. reflect the social cohesion perspective. A more relevant problem for the U.S. justice system is the balancing of restorative principles with due process of law.

Construct validity issues pose a more pressing problem for restorative justice policy. The current model embraces divergent ideas that reflect an array of definitions of restorative practice. For instance, McCold and Wachtel's (2003) restorative practice typology reflects the dispute as to whether victim-offender mediation should be included with community-based models (e.g. circles and family group conferences) as a fully-restorative approach. While this might seem to be the '*splitting of theoretical hairs*', the debate over restorative justice definitions is critical. Programs that claim to be restorative are nearly unlimited and include restitution, community service, electronic monitoring, house arrest, family therapy, and so forth. In a cursory examination of the various dimensions of the restorative justice model, one can readily observe disparate theoretical and philosophical influences. For instance, competency development is rooted in cognitive behavioral theory. Interestingly, the key assumption that underscores cognitive behavioralism is that deviant behavior is driven by irrational thinking derived from core beliefs related to attachment and self-efficacy (see discussion in Beck, 1995). Choice Theory, which emphasizes deviant behavior as a function of irrational attempts to meet basic needs (Glasser, 1965; Wubbolding, 2000), is a prominent cognitive-behavioral approach that underscores competency development. In the treatment of victims, cognitive behavioral therapy allows victims to "decondition" their fear of criminal victimization through repeated victim-offender processes and discussions; while interaction ritual theory depicts why and how victims restore their identity and self-worth as a result of restorative justice interventions, both approaches provide insight into the victim-driven aspects of restorative justice (Strang et al., 2006).

On the other hand, youth accountability reflects a utilitarian philosophy which assumes that behavior, including deviant behavior, is driven by a rational means-end calculus. This perspective underscores the deterrence model. Although the key assumptions of cognitive behavioralism and deterrence are radically opposed, both are included in applied models of restorative practice. The inconsistencies reflected in these disparate assumptions affect the coherency of the model as well as its application for practice. The implications for theory, research, policy, and practice are enormous. Since restorative justice has developed inductively through these disparate approaches, there is an absence of a consistent theoretical core. Much of the problem of policy implementation and evaluation is reflected in the absence of a coherent theoretical model.

A Review of Victim Satisfaction Studies

The outcome least suitable for quantitative analysis, and perhaps the least telling in terms of what the results “mean,” may feasibly be victim/offender satisfaction with the restorative justice process. Nonetheless, restorative justice outcomes typically indicate a greater sense of satisfaction, broadly defined as a general sense of contentment and approval with the process, on the part of both offenders and victims (Hayes, 2005; Hayes & Daly, 2003; Latimer, Dowden, & Muise, 2005; Rodriguez, 2007; Umbreit, Vos, Coates, & Lightfoot, 2007; Wenzel, Okimoto, Feather, & Platow, 2008). Latimer et al. (2005) found an average victim satisfaction effect size of .19 across 13 studies ($p < .01$), indicating a significant increase in satisfaction. Furthermore, victim fear of and anger toward their offender sharply decreased following restorative justice interventions regardless of demographics, economics, culture, and other factors. Other studies have reported that indicators of satisfaction were much greater following restorative justice interventions than before (Hayes & Daly, 2003; Strang et al., 2006). Of all restorative

interventions, victim-offender mediation appears to produce the greatest sense of satisfaction (Umbreit et al., 2007), perhaps logically because of the direct interaction between victim and offender. However, the literature does not address why satisfaction is important and what it entails. Does increased satisfaction reduce recidivism, strengthen social capital, or just generally make people happier, and are these outcomes worth measuring?

Research consistently indicates that what victims desire more than monetary compensation or punishment of the offender is an apology which seems to help offenders understand the harm caused by their actions (Menkel-Meadow, 2007; Strang et al., 2006), indicating that, while not quantitatively significant, measures of victim satisfaction are necessary as part of any restorative justice program evaluation. However, it is also important to keep in mind that victim (and offender) participation rates significantly vary, typically from 40% to 60%, (Umbreit et al., 2007). Furthermore, participation may even have *negative* effects on some victims (Strang et al., 2006), such as reliving their victimization. A curvilinear relationship exists between participation rates and offense seriousness – participation rates are lowest when crimes are either too petty (due to a sense that the interventions are not worthwhile) or too serious (that the interventions incite too much fear from the victims) (Menkel-Meadow, 2007). It remains uncertain why some victims and offenders are more willing to participate in voluntary restorative processes than others.

Recidivism

One of the more common criteria for evaluating the success of restorative justice programs is offender recidivism studies. It is necessary to maintain validity by appropriately and consistently defining recidivism across studies; failure to do so will drastically affect apparent recidivism rates (Bergseth & Bouffard, 2007; Hayes, 2005; Menkel-Meadow, 2007). As the

recidivism “net” widens with broader definitions (e.g. including all police contact as recidivating), inflated recidivism is witnessed and restorative justice is seen as ineffective; too narrow of a definition (e.g. including only new convictions) suggest greater program success with lower recidivism rates. Perhaps it is best to take a middle ground, which most studies do (e.g. Hayes & Daly, 2003), by defining recidivism as any new arrest.

Given the definition of recidivism, restorative justice programs reduce recidivism across the spectrum of various practices and programs (Wenzel et al., 2008; Latimer et al., 2005). In their literature review, Bonta, Wallace-Capretta, Rooney, & McAnoy (2002) found an average effect size of .03 across thirty studies. This equates to an average 3% reduction in recidivism after program completion compared to traditional court processes (e.g. probation). Latimer, et al. (2005) reported similarly conservative results, with an average effect size of .07 across 32 studies ($p < .01$). Although restorative justice’s impact is apparently limited, it is similarly important to note that the range of recidivism reduction between the various studies was far more disparate, with some studies reporting as high as a 39% reduction in recidivism.

More recently Rodriguez (2007), using a quasi-experimental design, found lower recidivism rates for restorative justice participants compared to traditional probationers, although the effects were mediated by various legal and extralegal variables. For instance, chronic offenders in the restorative group were *more* likely to re-offend than their counterparts in the comparison group over 24 months, while first-time offenders were significantly less likely to re-offend furthermore, girls were less likely to recidivate than boys.

Other programs indicate similar recidivism reductions, with most meta-analyses indicating effects between .09 to .30 (Bergseth & Bouffard, 2007; Bonta et al., 2002; Bradshaw & Roseborough, 2005; Nugent, Williams, & Umbreit, 2003). Bradshaw & Roseborough (2005),

in conducting a meta-analysis of 23 studies spanning four countries, found that victim-offender mediation entailed an effect size of .34 and family-group conferencing yielded an effect size of .11, indicating a reduction in recidivism of 34% and 11%, respectively, compared to traditional court processes ($p < .05$). The apparent disparity between victim offender mediation and family group conferencing is one which may be taken lightly due to methodological concerns (e.g. lack of random assignment, variations in recidivism definitions from re-arrest to re-conviction, and self-selection biases). Interestingly, higher effect sizes are generally found in more recent studies with greater methodological safeguards, whereas lower and negative effect sizes are more frequently found in older research, although the exact reasons for this phenomenon are unknown.

Recidivism effects are not constant across the variety of programs and studies. Reasons include but are certainly not limited to: individual offender characteristics and demographics; offender “risk” propensities; high rates of attrition; community dynamics; type of offense(s) committed; type of intervention received; a lack of comparison or control groups; and the simple – but often-overlooked notion – that restorative justice is, by its voluntary nature, subject to self-selection bias (Bonta et al., 2002; Bradshaw & Roseborough, 2005; De Beus & Rodriguez, 2007; Latimer et al., 2005). Both individual and community-level risk factors significantly affect both program completion and recidivism, such as prior record and community disenfranchisement. Several studies (e.g. Bergseth & Bouffard, 2007) found that prior record and poverty are significant predictors of future reoffending ($p < .05$). Similarly, poverty has a considerable effect on recidivism and completion, with impoverished, inner-city youth experiencing lower success rates (Bergseth & Bouffard, 2007; De Beus & Rodriguez, 2007) than more rural counterparts ($p < .05$). Finally, although recidivism rates for restorative sanctions typically are lower than rates in the comparison group, they begin to group closer as time progress with little

apparent difference between the two groups (Nugent, et al., 2003). These disparities are further compounded by numerous methodological issues, such as length of follow-up and, as mentioned before, how recidivism is defined.

Also, most of the current literature does not address the effects, if any, of restorative justice practitioners on recidivism (e.g. victim-offender mediators), something that could feasibly affect individual success in these programs – more qualified, personal, professional staff may be more effective than unpaid volunteers, for instance. Ideally, restorative justice evaluations should include random assignment to experimental and control groups to determine if the effect on recidivism is really as poignant as indicated by the literature. Few studies are able to provide effective assessments of restorative justice programs due to these inherent methodological problems (Bonta et al., 2002). It is, therefore, important to note that most of the conclusions about the effectiveness of restorative justice are clouded, at best.

We cannot, as a result, effectively draw specific conclusions regarding which type of intervention is “most” effective at reducing recidivism, only that – as a whole – restorative justice interventions are more effective than traditional court processes. Spatial and temporal disjunctions may alter what works, and when; for instance, what was effective in circa-1995 Massachusetts may not be as effective in Massachusetts in 2010 and certainly not in Pennsylvania at either time. Furthermore, restorative justice has multiple goals not limited strictly to recidivism reduction. To say a program is effective because it reduces recidivism while completely neglecting other goals (e.g. satisfaction, life skills, etc.) fails to capture a critical piece of the puzzle entirely. Finally, some scholars (e.g. Bonta et al., 2002) argue that recidivism is just a byproduct of the restorative process and not necessarily a goal. If restorative justice

performs as envisioned – that is, restoring the victim, offender, and community to their respective whole before the crime occurred – recidivism should naturally be reduced as a result.

Restorative practice must be understood in the context of individual and environmental risk factors as well as prior and current offending. Maxwell and Morris (2001) reported that poverty and child maltreatment reduced the effects of restorative services on at-risk youths. Likewise, Rodriguez (2007) reported interactions of gender and prior offenses on the effects of restorative practices. In order to develop a comprehensive understanding of restorative practice, it is important to consider ecological risk factors (Farrington, 1986; Catalano & Hawkins, 1996; Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998) including behavioral, academic, family, peers, and community risks as well as delinquent history in building models to evaluate restorative services.

Developing a Measure to Evaluate the Effects of Restorative Practice

Heretofore, restorative justice evaluations have typically focused on victim satisfaction or recidivism rather than other intermediate and long-term outcomes. What stems from such a mindset is a focus, primarily, on the *offender* and not so much on the victim or community. By evaluating recidivism rates, we could assume in part that other positives would come as a result – surely if juveniles are not committing as much crime, victims would not feel as afraid, the community would appear more cohesive, and so forth. However, limiting analyses to recidivism effects fails to capture an array of other impacts of restorative justice programming, and effectively allows the victim and community to fall by the wayside for the sake of “bettering” the offender.

Effectively defining victim satisfaction, recidivism, and other less tangible outcome measures (e.g. apology, dimensions of competency development, etc...) although valuable is not nearly as important in outcome-based research as developing a precise measure of the causal variable, restorative practice. Thus far, much of the discussion of defining restorative justice has been limited to a process debate (see restorative practice typology; McCold & Wachtel, 2003). The development of conceptual models of restorative practice is a spin-off of the restorative justice as a paradigm shift perspective. For those who question the validity or even the efficacy of this perspective, the conceptualization of pure models of practice detract from the more pressing question dealing with the effectiveness of the intervention. Moreover, measures of this nature are naturally limited to process evaluations only. They can only address whether the intervention fits a conceptual model, not whether the model is effective. On the other hand, Zernova and Wright's (2007) 'outcome-focused approach,' which succinctly defines restorative practice as any action that directly addresses the harm caused by the crime, could be a logical starting point in an outcome-based evaluation of restorative justice. Since the purpose of the study is to evaluate the effectiveness of restorative practice, the most appropriate measurement scheme would have to include interventions that directly repair the harm caused by the crime.

RESEARCH QUESTIONS

1. What were the characteristics of the sample including demographic factors, ecological risks, prior delinquent history, nature of the referral charges, court dispositions that prompted BARJ services, and compliance to court supervision while services were being offered?
2. What BARJ services were offered and were they provided in a reliable manner?
3. Did BARJ services mediate the effects of the demographic and ecological risks, prior and current offending, and compliance to court supervision problems on various measures of recidivism?

METHODOLOGY

Data Collection Protocol

The data collection protocol was primarily archival and drawn from items constructed in a survey instrument and outlined in an instruction codebook. A copy of the survey instrument can be located in Appendix A and the codebook in Appendix B.

The survey was used to collect the following information. Data was collected on administrative information including the subjects' juvenile case identification number, the county of jurisdiction, and the subjects' home zip code. The zip code information was used to capture community risk indicators (i.e. percent of individuals living below the poverty level by zip code, etc.) from the 2000 U.S. Census.

The survey also included demographic data on gender, ethnicity (Non-Hispanic and Hispanic), race, and socioeconomic status (Middle or Upper and Lower Income). Dichotomous data (yes/no) was collected on sets of ecological risks including a set of nine (9) clinical diagnoses from the *Diagnosis and Statistical Manual of Mental Disorders, 4th edition (DSM IV)* (American Psychiatric Association, 1994), eighteen (18) behavioral, twenty (20) family, seventeen (17) academic, eight (8) peer group, and seventeen (17) community risk factors. In addition, the zip code information was used to collect 2000 U.S. Census Data on six additional community risk indicators.

Data was collected on the subjects' delinquency history including age at initial referral as well as the number of prior juvenile court referrals, adjudications, and placements. Information on the charge(s) that prompted BARJ services included the date that the case was opened, the lead charge, charge code, grading, the offense gravity score on the lead charge, initial

disposition, charges or violations of probations occurring during the course of services, closing date, total months of services, and status at closing.

Categorical data (yes/no, or omit because the service was not rendered) was collected on twenty-two (22) BARJ Services (e.g. victim offender mediation, curfew, community service programs, etc.). This information was derived from a 2008 statewide survey of juvenile probation officers and supervisors completed by Ms. Susan Blackburn of the Pennsylvania Juvenile Court Judges' Commission (JCJC) which captured a listing of BARJ services provided by the county probation departments. A copy of the 2008 survey instrument can be located in Appendix C. Data was also collected on six dimensions of competency development services (e.g. pro-social skills services, academic skills services, etc.) that was constructed from surveys completed by the Chief Juvenile Probation Officers in the four county departments that participated in the study. A copy of the survey can be located in Appendix D. Dichotomous data (yes/no) was also collected on three BARJ service outcomes including productivity, connectedness, and law biding behaviors documented at the time the subject completed services. Finally, data was collected on juvenile and adult recidivism including the number of juvenile referrals and adult arrests, the lead charges, the offense gravity score on the lead charge, referrals dates, juvenile placements, and adult jail and prison incarcerations. In addition, statewide data was also collected from the JCJC and the Administrative Office of Pennsylvania Courts (AOPC) data bases on adjudications, convictions, dispositions, and sentences that would not be contained in the county probation and court data bases.

After construction of the survey instrument and codebook, data collectors from the four counties were trained in-person in collection of the archival data. As part of the training, the data collectors used the survey to code case studies and agency records which was an effective

mechanism to address questions on how to properly and consistently complete the instrument which improved the reliability of the measures. The data collectors were probation officers most of whom were alumni of the JCJC Weekend Masters Program. The research training they received in the masters program proved to be invaluable. Implementation of data collection was relatively seamless due to their knowledge and understanding of methodology. The reliability was further enhanced by the fact the probation officers were collecting data within their own county departments. Ongoing consultation and training was provided via phone contacts and e-mail throughout the period of data collection activities and during data entry and data cleaning to clarify and verify data items. Data collection began in September 2010 and was completed in August 2011.

The data was collected from three (3) sources. The primary source was the subjects' case records and was supplemented with reports from the juvenile probation officers who supervised the cases. There was one exception to the protocol. Data on the clinical diagnoses (e.g. reactive attachment, bi-polar disorder, etc.) had to be verified through clinical reports in the records. All other data could be verified from written information contained in the case records or from verbal accounts by a supervising probation officer. Archival data was also collected from the Pennsylvania Juvenile Case Management System (PJCMS), AOPC, and the U.S.Census FactFinder databases. The survey and archival data were used to construct other variables and composite measures that were also employed in the study.

Sampling Strategy

A multi-stage sampling design was employed for the study. In the initial sampling frame, we employed a purposive sample by selecting four county juvenile probation departments that appeared to be providing reliable BARJ services. These counties included Allegheny,

Cumberland, Lancaster, and Mercer. The four counties were selected from reviewing the data from the 2008 BARJ Survey¹. The data indicated that each of these counties was providing a reliable and an extensive array of BARJ services. To verify selection we conducted telephone interviews with administrators from the four counties to ensure that the services indicated through the survey had been provided.

This sampling strategy facilitated our primary analytical objective that called for a model-fitting approach. Since we were unable to use experimental or quasi-experimental designs², we identified juvenile probation departments that offered empirical evidence of providing extensive and consistent BARJ services. Data from these programs allowed us to construct and test best-practice models of services.

In the final sampling frame, we selected a stratified random sample of (n=100) closed cases³ from each county for the year 2007. Even though these counties varied in size and demographic features the sample sizes remained equal since the purpose of our sampling design was to identify best-practice programs. If BARJ services mediated the effects of demographic and ecological risks and prior delinquency on recidivism under these conditions we could offer intervention models for other departments to follow.

The parameters in sample selection included a case identifier, the date the referral was opened for services, the disposition at case opening, the date the case was closed for services in 2007, and the total months of services. The sampling frame included cases opened for services in which the disposition was either an informal adjustment (also referred to as extended services or community court in some of the counties), a consent decree, probation or probation with some condition such as day treatment, or placement. In order to clarify the opening date of services we divided the cases into two types. In cases in which no petition was filed, such as intake

adjustments, the opening date of services was defined as the date of the first face-to-face intake conference. In cases in which a petition was filed, such as adjudications, the opening date of services was defined as the date the petition was disposed of in juvenile court. To be included in the sample, each subject had to receive at least four (4) months of services. The *four month minimum length of service requirement* facilitated an examination of a cross-section of subjects receiving BARJ services particularly first time and low risk offenders on informal adjustments/extended services and consent decrees as well as subjects on probation and in placements.

Measures

Exogenous Variables

Demographics

A set of four demographic measures were collected for the study and included the following:

Gender coded as female (0) and male (1).

Ethnicity coded as Hispanic (1) if the subject was a member of any of the following ethnic groups, Mexican, Central American (i.e. Honduran, etc.), South American (i.e. Columbian, etc.), Puerto Rican, Cuban, or the Dominican Republic. All other ethnic groups were coded as Non-Hispanic (0). Ethnicity is reported as a descriptor of the sample but was not employed in the multivariate analysis due the skewness of the distribution. Non-Hispanics comprised over ninety percent (93%) of the sample.

Race coded as White (0), African-American (1), Asian-American (2), Native-American (3), Multi-Racial (4), and Other (5). Since whites and African-Americans comprised 97% of the sample, whites (68.3%) and African-Americans (28.7%); race was recoded for the analysis to

include only these racial groups; whites (0) and African-Americans (1). Nevertheless, all racial groups are reported in the description of the sample

Socio-Economic Status (SES) coded as middle or upper income (0) if the family's primary source of income was derived from permanent (at least six continuous months) of full-time employment; and, low-income (1) if the family's primary source of income was derived from unemployment compensation, federal and/or state income assistance (e.g. Federal Social Security or Supplemental Security Income, state public assistance, etc.) or from part-time employment only.

Demographic Typology was constructed from the dichotomized race, gender, and socio-economic status (SES) variables to create an eight part categorical measure. The typology was used in Part I of the results (*Description of the Sample*) to examine mean differences on the six ecological risk factor indices via Oneway ANOVAs and Multiple Group Comparisons.

Ecological Risk Factor Indices

Six ecological risk factor indices were constructed and used as controls. The items included in the construction of the indices are listed in Table 1 below. A further description and location (i.e. V5 for Variable 5: Subject has been diagnosed as ADD or ADHD, etc.) of the items can be found in Appendix A (BARJ Research Study Survey) along with descriptions and coding instructions located in Appendix B (BARJ Research Codebook). The indices include:

a four item ***Psychological Risk Index Score*** comprised of diagnoses made by clinical practitioners based on psychological symptoms or treatment of symptoms spelled out in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (American Psychiatric Association, 1994). These items included diagnosis or treatment for attention deficit or attention deficit with hyperactivity disorder (V5), conduct disorder (V8a), oppositional defiant disorder

(V8b), or depression (V9a) occurring prior to case opening or during the provision of the BARJ services. The four item index scores ranged from zero to four with higher scores indicating greater co-morbidity, (mean=.75, s.d.=1.02). The inter-item correlations ranged from .138 to .360. The reliability of the index as measured by Cronbach's Alpha was marginal at $r=.551$. Factor analysis isolated one component, an externalizing/psychological stressor dimension that included all four items. The eigenvalue for the component was 1.71 but provided only 42.8% of the explained variance on the extracted loadings.

a twelve item ***Behavioral Risk Index Score*** measuring ontogenic risk factors that included a history of aggression (V11), a history of lying (V12), a history of risk-taking behavior (V13), a history of drug use (V14), a history of alcohol use (V15), a history of theft (V16), a history of trespassing (V17), a history of injuring another persons requiring medical attention (V18), a prior police contacts (V19), a history of purchasing drugs (V23), a history of selling drugs (V24), or a history of carrying a concealed weapon (V25). The twelve item index scores ranged from zero to eleven with higher scores indicating a history of more serious externalizing and anti-social behaviors, (mean=4.34, s.d.=2.67). The inter-item correlations ranged from -.137 to .801. The reliability of the index as measured by Cronbach's Alpha was robust at $r=.746$. Factor analysis isolated four components of pre-delinquent attitudes and behaviors including a drug and alcohol dimension, an anti-social attitudes dimension, an anti-social behaviors dimension, and a formal police involvement dimension. Eigenvalues for the drug and alcohol (3.49), anti-social attitudes (1.58), anti-social behaviors (1.28), and formal police involvement (1.06) components provided 61.7% of the explained variance on the extracted loadings.

a fourteen item ***Family Risk Index Score*** measuring family dysfunction that included a history of child physical abuse victimization (V28), a history of child neglect victimization (V30), a

history of parental alcohol abuse (V32), a history of parental drug abuse (V33), a history of domestic violence (V34), parental separation or divorce (V35), residing in a single-parent home (V36), a history of inadequate parental supervision (V37), a history of chronic parent/child conflicts (V39), a history of parental mental health disorders (V40), a history of threatening or hitting a parent (V42), a history of threatening or hitting a sibling (V43), a history of running away from home (V44), a history of inconsistent parental discipline (V46). The fourteen item index scores ranged from zero to thirteen with higher scores indicating greater family dysfunction, (mean=3.60, s.d.=2.99). The inter-item correlations ranged from .037 to .634. The reliability of the index as measured by Cronbach's Alpha was very robust at $r = .815$. Factor analysis isolated two specific components of family dysfunction including a family violence/parental problems dimension and a family structure dimension. Eigenvalues for the family violence/parental problems (4.19) and the family structure (1.44) along with two other unspecified components of over 1.00 provided 56.9% of the explained variance on the extracted loadings.

a fourteen item *Academic Risk Index Score* measuring academic deficiency, motivation to learn, and discipline issues in school that included poor reading skills (V48), grade retention in elementary or middle school (V49), a history of truancy (V50), non-participation in school activities (V51), a grade point average less than 1.50 on a 4.00 scale (V52), inability to pay attention in school (V53), having no future educational goals (V54), showing no motivation to succeed in school (V55), a history of threatening or hitting teachers (V57), a history of threatening or hitting other students (V58), poor math or reading comprehension (V59), a history of school suspensions (V62), a history of school expulsions (V63), or a placement in an alternative educational program (V64). The fourteen item index scores ranged from zero to thirteen with higher scores indicating a history of more serious academic and disciplinary problems in school, (mean=3.96, s.d.=3.15). The inter-

item correlations ranged from -.030 to .746. The reliability of the index as measured by Cronbach's Alpha was very robust at $r = .802$. Factor analysis isolated four components of academic risk. One reflected academic difficulties while the remaining three reflected various behavioral problems. Eigenvalues for academic deficiency (4.06), minor disciplinary action (1.56), aggressive behaviors toward teachers and other students (1.50) and major disciplinary action (1.00) provided 57.9% of the explained variance on the extracted loadings.

a three item ***Peer Group Risk Index Score*** measuring delinquent peer associations and activities that included having at least one friend who had been adjudicated delinquent (V68), non-participation in school or extra-curricular activities (V69), or a history of participation in group fights (V70). The three item index scores ranged from zero to three with higher scores indicating stronger delinquent peer associations, (mean=.70, s.d.=.858). The inter-item correlations ranged from .151 to .356. The reliability of the index as measured by Cronbach's Alpha was marginal at $r = .489$. However, the factor analysis isolated one component of peer group risk, a delinquent peer group association dimension that included all three items. The eigenvalue for the component was 1.49 which provided 49.7% of the explained variance on the extracted loadings.

a fifteen item ***Community Risk Index Score*** derived from Shaw and McKay's (1942) Social Disorganization Theory that included residing in a low-income neighborhood (V73), the majority of housing in the community are rentals (V74), the majority of persons living in the community are minorities (V75), the majority of people living in the community have resided there for less than three years (V76), the majority of families living in the community have moved at least once a year over the last three years (V77), police are commonly called to resolve non-crime related problems (V78), drugs are easily accessible in the community (V79), gangs exist in the community (V80), crimes go unnoticed in the community (V81), people in the community do not intervene when

crimes occur (V82), adults rarely supervise children in the community (V83), the community favors norms that support crime (V84), weapons are easily accessible in the community (V85), crime is a common occurrence in the community (V86), or the subject has witnessed a felony-level violent crime (V89). The fifteen item index scores ranged from zero to fifteen with higher scores indicating greater social disorganization, (mean=4.03, s.d.=4.59). The inter-item correlations ranged from .059 to .742. The reliability of the index as measured by Cronbach's Alpha was exceptionally robust at $r=.931$. Factor analysis isolated two components of community risk including a social disorganization dimension and a social cohesion dimension. Eigenvalues for the social disorganization (7.89) and the social cohesion (1.02) components provided 59.4% of the explained variance on the extracted loadings.

TABLE 1. List of Ecological Risk Factor Index Items

Psychological Risk Index	Behavioral Risk Index	Family Risk Index	Academic Risk Index	Peer Group Risk Index	Community Risk Index
V5 ADD/ADHD V8a Conduct Disorder V8b ODD V9a Depression	V11 Aggression V12 Lying V13 Risk Taking V14 Drug Use V15 Alcohol Use V16 Stealing V17 Trespassing V18 Assaults V19 Police Contacts V23 Bought Drugs V24 Sold Drugs V25 Carried Weapons	V28 Physical Abuse Victim V30 Neglect Victim V32 Parent Alcohol Abuse V33 Parent Drug Abuse V34 Domestic Violence V35 Divorced or Separated V36 Single Parent Home V37 No Parent Supervision V39 Parent/Child Conflict V40 Parent MH Disorders V42 Assaulted Parents V43 Assaulted Siblings V44 Ran away from home V46 Inconsistent Parental Punishment	V48 Behind in Reading V49 Grade Retention V50 Truancy V51 No Extracurricular Activities V52 Low QPA/GPA V53 Attention Difficulty V54 No Future Goals V55 No Motivation V57 Assaulted a Teacher V58 Assaulted a Student V59 Poor Math/Reading Comprehension V62 Suspended V63 Expelled V64 Alternative Education Program Enrollment	V68 Delinquent Friends V69 No Extracurricular Friends V70 Participated in group fights	V73 Low Income Community V74 Rental Community V75 Minority Community V76 Transient Community V77 Family recently moved V78 Police are commonly called V79 Drugs are easily accessible V80 Neighborhood Gangs V81 Unreported Crimes V82 Neighborhood intervention is uncommon V83 No Adult Supervision V84 Favorable Crime Attitudes V85 Weapons easily accessible V85 Crime is common V89 Witnessed a felony

History of Prior Delinquent Offending

A set of four measures of prior delinquent offending were collected for the study and included the following:

Age at Initial Referral to Juvenile Court coded as the subjects' age in years, (i.e. 15) at the time of the first referral to the juvenile court.

Prior Juvenile Court Referrals coded as continuous variable measuring the number of prior juvenile court referrals excluding the current referral.

Prior Juvenile Court Adjudications also coded as a continuous variable measuring the number of prior adjudications of delinquency.

Prior Out Of Homes Placements also coded as a continuous variable measuring the number of prior out of home placements including foster care, group homes, secure and open general child facilities. Temporary and short term out of home care including placements in detention facilities, shelter care, diagnostic centers, and weekend programs were not included in this measure. This variable is included as a descriptor of the sample but was excluded from further analysis due to the skewness of the distribution. Over ninety-five percent (95.5%) of the sample were never placed in an out of home program.

Charges That Prompted BARJ Services

A set of four measures were used to provide information on the nature of the charges that prompted BARJ services and the disposition of the cases. It includes the following:

Lead Charge That Prompted BARJ Services coded as a categorical measure providing descriptions of the lead charges in the current referral that prompted BARJ services, (i.e. simple assaults comprised 13.3% of the lead charges). This information was used as a descriptor of the sample and is reported in Part 1 of the results, (*Description of the Sample*).

Grade of Lead Charge also coded as a categorical measure documenting seven levels of severity ranging from felony 1 to summary offenses. This information was used as a descriptor of the sample and is also reported in Part 1 of the results.

Lead Charge Offense Gravity Score coded as interval level measure, the offense gravity score was developed by the Pennsylvania Sentencing Commission (Pennsylvania Commission on Sentencing, 2008) as a measure of offense severity. Offense gravity scores were collected on all lead charges in the sample. Scores ranged from 1 to 14 with higher scores indicating greater severity (e.g. Disorderly Conduct (M3) (1), Aggravated Assault (F1) (10), etc.). This variable was used as (1) a descriptor of the sample, and (2) an outcome variable in multivariate prediction models of youth offending that prompted BARJ services reported in Tables 15 and 16; and, (3) a risk factor in the multivariate prediction models of recidivism reported in Tables 24 through 27.

Court Disposition also coded as a categorical measure providing descriptions of court dispositions on the charges that prompted BARJ services, (i.e. consent decrees comprised roughly 34% of all dispositions). This information was used as a descriptor of the sample and is reported in Part 1 of the results.

Recursive Risk Factors

Two measures were used to measure subjects' compliance to court supervision while receiving BARJ services. These measures were used in the multivariate analyses as predictors of recidivism and included:

Violation of Probation or Failure to Adjust to Placement coded as dichotomous variable as either no incidents of violation of probation or failure to adjust to placement while under current court supervision (0), or at least one incident of violation of probation or failure to adjust to placement while receiving BARJ services (1). Data was collected on violations of probation and failure to

adjust to placement incidents occurring while the subjects were under court supervision (i.e. April 30, 2006 through September 13, 2007).

Severity of Offending while receiving BARJ Services coded as a continuous variable as either zero (0) indicating no arrests while under court supervision or a score of 1 to 14 measuring the offense gravity score of the most serious rearrest charge while receiving BARJ services. Data was collected on up to four delinquent incidents occurring while the subjects were under court supervision (i.e. April 30, 2006 through September 13, 2007). The highest offense gravity score was selected from the four possible arrest charges to reflect the most serious offense committed while under court supervision.

BARJ Services

Five BARJ measures were used as independent variables in the study. Three of these measures (an index of BARJ programs and two factors of competency development services) demonstrated sufficient reliability to be employed in the recidivism analysis. Two, length of BARJ services and BARJ outcomes did not demonstrate sufficient reliability to be included for further study. However, descriptive statistics on all measures are reported in the results.

Length of BARJ Services coded as a continuous variable as the number of months under court supervision. The minimal length of services was four (4) months. For informal adjustments and extended services, length of services ranged from the first face-to-face intake conference until case closing. For formal court services (i.e. probation, etc.), length of services ranged from the date of the court disposition until case closing.

BARJ Programs consisted of twenty-two programs that included youth aid panels (V113), victim notification (V114), victim services beyond notification (V115), victim offender mediation (V116), victim awareness (V117), restitution (V118), victim restitution fund (V119), community

service (V120), school-based probation (V121), community-intensive supervision (V122), victim impact statements (V123), offender apologies (V124), curfews (V125), random drug testing (V126), electronic monitoring (V127), house arrest (V128), intensive probation (V129), community placement (V130), residential placement (V131), mental health placement (V132), non-traditional partnerships (V133), and non-traditional services (V134).

Starting with the description of these variables, it should first be explained how they were coded. The BARJ program items was categorically coded and included “no”, the subject, victim, or community did not receive or complete the program (0); “yes”, the subject completed the program (e.g. victim notification, restitution fund, or victim impact statements) or the victim or community participated in the program (1); or “omit”, the program was not available to the subject, victim, or community (2). The variables were later collapsed by recoding the “omit” responses as “no” responses. This was done to identify those juveniles who did complete the program, and those who did not receive or complete the program – whether it was due to the program not being provided or not being available. The result was a dichotomous classification scheme of “no”, the program was not provided or completed (0) or “yes”, the subject completed the program or the program was provided to the victim or community (1).

Recoding of the variables was done to construct a composite measure of BARJ programs. Reclassification of attributes also allowed us to determine if enough variation existed for inclusion in the index. If there was very little variation, that variable was removed from further analyses. Of the twenty-two BARJ services in the study, seven were removed for a lack of variation among attributes. Variables that were removed from the study included youth aid panel (no = 377, yes = 23), victim offender mediation (no = 364, yes = 36), community-intensive supervision (no = 385, yes = 15), curfew (no = 27, yes = 23), intensive probation (no = 367, yes

= 33), community placement (no = 360, yes = 40), and mental placement (no = 380, yes = 20).

Further analyses were then conducted on the remaining fifteen BARJ programs to finalize a composite measure of index. The composite measure was created by using scale reliability procedures. Each of the fifteen remaining BARJ program variables was tested for inter-reliability using the Cronbach's Alpha statistic. School-based probation (V121) and offender apologies (V124) were removed in order to provide the most reliable composite measure for BARJ programs. The resulting BARJ program index was comprised of the following thirteen variables: victim notification, victim services beyond notification, victim awareness, restitution, victim restitution fund, community service, victim impact statements, random drug testing, electronic monitoring, house arrest, residential placement, non-traditional partnerships, and non-traditional services. The index had acceptable reliability (Cronbach's Alpha = .705). The thirteen variable index ranged from zero to twelve with higher scores indicating more completed BARJ program received (mean = 5.37, s.d. = 2.63). The inter-item correlations ranged from -.075 to .857. Factor analysis identified four components providing 66.1% of the explained variance on the extracted loadings.

Competency Development Services was comprised of six dimensions that included pro-social skills (V135), moral reasoning skills (V136), academic skills (V137), workforce development skills (V138), independent living skills (V139), and other treatment program services (V140). These dimensions were dichotomously coded as no (0) or yes (1) variables based on the subjects' completion of programs providing services in these six specific domains. A list of programs offering specific competency development services (e.g. the Abraxas NRT Program provides pro-social skills services to youths in Cumberland County, charter schools taught academic skills to subjects in Allegheny, Lancaster and Mercer Counties, etc.) were identified by surveying the

Chief Juvenile Probation Officers and their staffs in the four participating county juvenile probation departments. Programs providing pro-social, moral reasoning, academic, workforce development, independent living, and other treatment services for the four counties were then listed on the survey. An additional three 'other program' listings were included on the survey (i.e. other pro-social skills programs, etc.) to address the exhaustiveness of the variable. A list of the identified programs can be found in Appendices A and B (V135a through V140z). If a subject completed at least one program within a specific dimension (i.e. academic skills through a cyber school in Mercer County or moral reasoning skills by completing the Samenow Thinking Errors Program in Allegheny County, etc.) a score of 1 (yes) was assigned to that specific dimension. As previously noted, scores were dichotomously coded. If a subject completed two or more programs within the pro-social skills dimension the score for pro-social skills variable would still be coded one. Consequently, the scores on the composite measure represent the number of competency development dimensions that were covered while the subject was under court supervision. The scores ranged from zero (the subject failed to complete a program in any dimension) to six (the subject completed at least one program in each of the six dimensions). Higher scores represent more competency development dimensions covered.

An attempt was made to classify the six dimensions into one index, but the resulting index as measured by Cronbach's Alpha was considerably weak (.534) with inter-item correlations ranging from .018 to .384. Factor analysis proved a more effective technique in creating composite measures for competency development. Two components, pro-social/moral competency and life skills competency were identified in the factor analysis and were employed as specific indices in the analyses of effects on the recidivism measures.

BARJ Outcomes was comprised of twenty-one (21) dichotomously (yes/no) coded variables covering three categories of outcomes, (e.g. productive outcomes, connected outcomes, and law abiding outcomes) that resulted from BARJ services. The values assigned to each variable were derived from ratings given by the subjects' probation officers *at the time of case closing in 2007* and based on observations of productive (i.e. was the subject was attending a traditional or alternative school or GED program and maintaining passing grades, or has earned a diploma or passed the GED test at the time of case closing, etc.), connected (i.e. the subject was involved with a mentor at the time of case closing, etc.), and law abiding (i.e. the subject did not recidivate while under court supervision, etc.) behaviors observed while the subjects were under court supervision. In the survey instrument (see Appendix A) three of the variables were continuously coded to capture the percent of community service completed, restitution paid, and fees and fines paid which were ordered in Allegheny County only and used in lieu of ordering restitution. These items were later recoded as dichotomous variables (i.e. no restitution paid or restitution paid in full) since the overwhelming majority of court-ordered community service, restitution, fees and fines were completed in full. Higher scores indicate greater productivity, connectedness, and law abiding behaviors.

The productive outcomes category was comprised of seven (7) variables that evaluated productive behaviors at the time of case closing and included: subject is currently living independently (V142), subject is currently attending school or an alternative educational program, or attending a GED program and maintaining passing grades, or earned his/her diploma or passed the GED test (V143); subject was accepted to or is currently attending a post-secondary vocational training program or an institution of higher learning (V144); subject is currently employed full time or employed part-time while attending school (V145); subject

completed all court-ordered community service hours (V146), subject paid restitution in full (V147a), and subject paid all fees and fines (V147b).

The connected outcomes category was also comprised of seven (7) variables that examined connected relationships at the time of case closing and included: subject is currently engaged with a mentor (V148), subject is currently involved in clubs and/or extra-curricular activities at school (V149), subject is currently involved with clubs and other community groups (V150), subject is currently involved with a positive peer group in the community (V151), subject is currently involved with church groups (V152), subject has a positive and supportive home environment (V153), and subject has a positive relationship with teachers, employers, and other community members (V154).

The law abiding outcomes category was also comprised of seven (7) variables that examined law abiding behaviors observed while under court supervision and included: subject did not recidivate while under court supervision (V155), subject did not recidivate in the last six months of court supervision (V156), subject did not violate probation while under court supervision (V157), subject was drug free during the last three months of court supervision (V158), subject successfully completed one of the Blueprints for Violence Prevention Programs (V159), subject successfully completed at least one clinical program while under court supervision (V160), and subject successfully completed court supervision (V161). Attempts to construct indices were unsuccessful due to the independence of the items. Consequently, the variables are reported as descriptive data only.

Outcome Variables

The study includes two categories of outcome measures of recidivism. These included the:

Arrest or No Arrest at Six and Twenty-Four Months Intervals after Case Closing coded as a dichotomous variable to determine the occurrence of arrests for a juvenile or an adult offense at the 6 and 24 month intervals after case closing in 2007. Measuring arrests as opposed to adjudications and convictions provided the most comprehensive and valid measure of reoffending. A dichotomous measure of arrests (arrested/not arrested) was employed in the analyses because this type of measure was considerably less skewed than the continuous measures of arrest (e.g. 0, 1, 2, 3 arrests, etc.) and thus provided a more reliable measure of recidivism. Moreover, it offered a more precise indicator of the extent of recidivism among the sample. However, continuous measures of juvenile and adult arrests are also reported in Tables 18 and 19 of the results.

Offense Gravity Score on the Lead Charge at Arrest at Six and Twenty-Four Months Intervals coded as a continuous variable with scores ranging from zero (indicating no arrests) and from one to fourteen to measure the most serious offense (see discussion in Pennsylvania Commission on Sentencing, 2008) in which the subject was arrested on during the two years the cases were tracked after the case was closed in 2007. For subjects who recidivated, the highest offense gravity score was calculated at each six month interval over the two year course of the study. For example, suppose a subject was arrested twice within six months of case closing. The first arrest was for disorderly conduct (M3) with an offense gravity score (OGS=1) and simple assault (M3), (OGS=3). In this hypothetical situation, the subject's offense gravity score at six months would be 3 to reflect the simple assault. If there were no further arrests the offense gravity score would remain at three at the 24 month interval. However, if the subject was arrested again on a more serious charge, (i.e. aggravated assault (F2) with an OGS=10) the score would increase to 10 at the 24 month interval. The offense gravity scores were used to measure the severity of reoffending.

RESULTS

I. Description of the Sample

a. Demographic Descriptors

The data collection instrument contained five demographic variables, gender, race, ethnicity, socio-economic status and county. Males comprised the majority of the 400 cases, (73.8%). The overwhelmingly majority are of Non-Hispanic origin, (93%). Whites account for 68.4%, African-Americans, 28.7%. Asian-Americans, Native-Americans, multi-racial and others each account for 1% or less. In terms of socio-economic status, 61.8% are classified as middle or upper income and 36.5% low income⁴. As previously noted, each of the four counties included 100 cases. Table 2 presents the descriptive for gender, race, ethnicity, and socio-economic status.

TABLE 2. Variable Coding and Frequencies for Sample Demographics

Variables	Coding	Frequency	Valid Percent
Gender			
<i>Female</i>	0	105	26.2%
<i>Male</i>	1	295	73.8%
Race			
<i>White</i>	0	273	68.4%
<i>African-American</i>	1	115	28.8%
<i>Asian-American</i>	2	4	1.0%
<i>Native-American</i>	3	2	.5%
<i>Multi-Racial</i>	4	4	1.0%
<i>Other</i>	5	1	.3%
Ethnicity			
<i>Non-Hispanic</i>	0	372	93.0%
<i>Hispanic</i>	1	27	6.8%
Socio-economic Status			
<i>Middle or Upper SES</i>	0	247	61.8%
<i>Lower SES</i>	1	146	36.5%

In order to determine if the demographic variables exhibited any disproportionally, three bivariate tables were constructed using gender, race and socio-economic status. Ethnicity is excluded as most all of the cases are Non-Hispanic and only African-Americans and Whites are included due to the insignificant number of the remaining races. Table 3 below shows no significance difference in the percentage of males and females based on race. White females account for 65.3% of the cases, white males 72.1% while African-American females account for 34.7% and African-American males 27.9% (Phi=-.066, p=.192).

TABLE 3. Cross tabulations: Race by Gender

Race	Gender		Total
	<i>Female</i>	<i>Male</i>	
<i>White</i>	66	207	273
	65.3%	72.1%	70.4%
<i>African-American</i>	35	80	115
	34.7%	27.9%	29.6%
Total	101	287	388
	26.0%	74.0%	100.0%

Phi = -.066, p=.192

Similar results are observed in Table 4, below with respect to socio-economic status. Females account for 57.8% of the cases that are middle or upper income. Males account for 64.6%. Females account for 42.2% of low income cases and males 35.4%. (Phi=-.062, p=.215).

TABLE 4. Cross tabulations: Socio-economic Status by Gender

SES	Gender		Total
	<i>Female</i>	<i>Male</i>	
<i>Middle/Upper</i>	59	188	247
	57.8%	64.6%	62.8%
<i>Lower</i>	43	103	146
	42.2%	35.4%	37.2%
Total	102	291	393
	25.9%	74.1%	100.0%

Phi= -.062, p=.215

Table 5, below, does show that race has a considerable effect on socio-economic status. Whites account for 70.5% of the middle/upper income cases, African-Americans 45.6%. For lower incomes the trend is reversed, Whites account for just 29.5% while African-Americans 54.4% (Phi=.236, p=.000).

TABLE 5. Cross tabulations: Socio-Economic Status by Race

SES	Race		Total
	<i>White</i>	<i>African-American</i>	
<i>Middle/Upper</i>	189 70.5%	52 45.6%	241 63.1%
<i>Lower</i>	79 29.5%	62 54.4%	141 36.9%
Total	268 70.2%	114 29.8%	382 100.0%

Phi =.236, p=.000

Table 6, below reports the frequency distribution of the demographic typology. White, males of middle or upper income status comprise the largest group comprising nearly forty (38.9%) of the sample. White males of lower income status is the second largest group comprising roughly fifteen percent (14.9%) of the sample

TABLE 6. Frequency Distribution: Demographic Typology

Values	Frequency	Valid Percent
<i>White Female Higher SES</i>	41	10.7%
<i>White Female Lower SES</i>	22	5.8%
<i>African-American Female Higher SES</i>	17	4.5%
<i>African-American Female Lower SES</i>	18	4.7%
<i>White Male Higher SES</i>	148	38.7%
<i>White Male Lower SES</i>	57	14.9%
<i>African-American Male Higher SES</i>	35	9.2%
<i>African-American Male Lower SES</i>	44	11.5%
Total	382	100.0%

b. Description of the Ecological Risk Indices

Table 7, below reports frequency distributions for the Psychological and Behavioral Risk Indices. The Psychological Risk Index produced a range of scores from zero to four with a mean of .74 and a standard deviation of 1.01. The majority of the subjects (57.3%) had not been diagnosed or treated for any of the four risk items that included attention deficit disorder or attention deficit with hyperactivity, conduct disorder, oppositional defiant disorder, and depression. The remainder of the sample had from one (20.5%) to four (0.8%) diagnoses. In regard to specific items, attention deficit disorder was the most common diagnosis reported among 27% of the subjects. Depression was diagnosed among approximately eighteen percent (17.9%) with conduct disorders (16.2%) and oppositional defiant disorders (15.9%) reported among roughly sixteen percent of the subjects.

The Behavioral Risk Index produced a range of scores from zero to eleven with a mean of 4.35 and a standard deviation of 2.67. The distribution of scores is normal, (skewness =.334). The following is a report on the prevalence of behavioral risks that were included in the index. Twenty-five percent or more of the subjects presented the following behavioral risks. These included at least one police contact (67.8%), a history of risk-taking behaviors (60.0%), drug use (55.3%), alcohol use (51.8%), and drug possession (43.5%), a persistent history of stealing (37.8%), aggression (31.8%) and lying (30.8%) prior to or during the provision of BARJ services.

TABLE 7. Frequency Distributions: Psychological and Behavioral Risk Indices

Psychological Risk Index			Behavioral Risk Index		
Values	Frequency	Valid Percent	Values	Frequency	Valid Percent
0	229	57.3%	0	26	6.5%
1	82	20.5%	1	38	9.5%
2	55	13.8%	2	48	12.0%
3	31	7.8%	3	52	13.0%
4	3	0.8%	4	53	13.3%
			5	52	13.0%
			6	47	11.8%
			7	28	7.0%
			8	25	6.3%
			9	18	4.5%
			10	7	1.8%
			11	6	1.5%
<i>Total</i>	400	100.0%	<i>Total</i>	400	100.0%

Table 8, below reports frequency distributions for the Family and Academic Risk Indices. The Family Risk Index produced a range of scores from zero to thirteen with a mean of 3.59 and a standard deviation of 2.98. The distribution was slightly asymmetrical (skewness=.879) with sixty percent of the subjects presenting fewer than four risk factors. That being said, the distribution falls within the boundaries of a normal distribution. The following is a report on the prevalence of various family risks that were included in the index. Approximately twenty-five percent or more of the subjects presented the following family risk characteristics prior to during the provision of the BARJ services. These included residing in a single parent home (71.8%), parents who were either divorced, separated or never married (67.5%), a frequent pattern of parent/child verbal or physical conflicts (34.0%), a persistent pattern of inadequate parental supervision (28.0%), and a history of parental alcohol abuse (24.8%).

The Academic Risk Index also produced a range of scores from zero to thirteen with a mean of 3.96 and a standard deviation of 3.14. The distribution is slightly less asymmetrical (skewness=.659) and within an acceptable range of normality. Fifty percent of the subjects presented less than four risk factors. The following is a report on the prevalence of various academic risks that were included in the index. Twenty-five percent or more of the subjects presented the following academic risks. These included a history of receiving an out-of-school suspension (60.8%), non-participation in extracurricular activities at school (48.0%), enrollment in an alternative-education program (42.3%), a history of truancy (40%), a history of attention and/or disruptive problems in classes (38.5%), a history of threatening or assaulting other students (31.3%) and reports that the subject was not motivated to perform well in school (26.5%).

TABLE 8. Frequency Distributions: Family and Academic Risk Indices

Family Risk Index			Academic Risk Index		
Values	Frequency	Valid Percent	Values	Frequency	Valid Percent
0	54	13.5%	0	55	13.8%
1	48	12.0%	1	55	13.8%
2	89	22.3%	2	47	11.8%
3	50	12.5%	3	44	11.0%
4	29	7.3%	4	50	12.5%
5	30	7.5%	5	33	8.3%
6	25	6.3%	6	25	6.3%
7	26	6.5%	7	25	6.3%
8	18	4.5%	8	29	7.3%
9	8	2.0%	9	14	3.5%
10	12	3.0%	10	9	2.3%
11	7	1.8%	11	6	1.5%
12	3	0.8%	12	6	1.5%
13	1	0.3%	13	2	0.5%
<i>Total</i>	400	100.0%	<i>Total</i>	400	100.0%

Table 9, below reports frequency distributions for the Peer Group and Community Risk Indices. The Peer Group Risk Index produced a range of scores from zero to three with a mean of .70 and a standard deviation of .858. The distribution is positively skewed (skewness=1.00). Over fifty percent (52.3%) of the subjects presented zero risk factors. Among the subjects presenting risks, nearly forty percent were reported to have at least one friend who had been adjudicated delinquent (38.0%) while over twenty percent (22.5%) were reported to have no friends participating in extra-curricular activities at school.

The Community Risk Index produced a range of scores from zero to fifteen with a mean of 4.04 and a standard deviation of 4.59. The distribution is slightly asymmetrical (skewness=.889) with over sixty percent of the subjects (61.3%) presenting fewer than four risk factors. Nevertheless, the scores would still comprise a normal distribution. The following is a report on the prevalence of various community risks that were included in the index. Roughly twenty-five percent or more of the subjects were exposed to the following community risks. These included reports that drugs are easily obtained in their neighborhood (54.0%), that the majority of persons living in the neighborhood are on a low-income (45.0%), that the majority of homes in the neighborhood are rentals (37.5%), that crimes are common in their neighborhood (34.5%), that the majority of persons living in their neighborhood are African-Americans and/or Hispanics (30.0%), that weapons such as firearms are easily accessible in their neighborhood (28.0%), that gangs exist in their neighborhood (25.8%), that police are commonly called to their neighborhood to resolve social disorder problems such as domestic disputes or disturbing the peace (25.8%), and that a substantial number of persons living in their neighborhood actively commit crimes or are unwilling to assist the police in solving crimes (24.8%).

TABLE 9. Frequency Distributions: Peer Group and Community Risk Indices

Peer Group Index			Community Risk Index		
Value	Frequency	Valid Percent	Value	Frequency	Valid Percent
0	209	52.3%	0	127	31.8%
1	118	29.5%	1	63	15.8%
2	57	14.3%	2	31	7.8%
3	16	4.0%	3	23	5.8%
			4	12	3.0%
			5	12	3.0%
			6	16	4.0%
			7	20	5.0%
			8	11	2.8%
			9	15	3.8%
			10	8	2.0%
			11	16	4.0%
			12	15	3.8%
			13	17	4.3%
			14	12	3.0%
			15	2	0.5%
<i>Total</i>	400	100.0%	<i>Total</i>	400	100.0%

c. An Examination of Demographic Types on the Ecological Risks Indices

Since a relationship was observed between race and socio-economic status within the sample a further examination of demographic (race/gender/social class) effects on the ecological risk indices was clearly warranted to determine which type(s) (if any) presented elevated scores on the ecological predictors of recidivism. Table 10 below, reports the results of Oneway ANOVAs with Scheffe Multiple Group Comparisons on the six ecological indices that included psychological, behavioral, academic, family, peer group, and community risks. No effects were observed on the psychological, behavioral, academic, and peer group risk indices. However, white, lower class males had the highest scores on each of these indices. Effects were observed on the family ($F=4.08$, $p=.000$) and community ($F=41.33$, $p=.000$) risk indices.

Social class effects were observed on the family risk index. Results of the Scheffe Multiple Group Comparisons report that white, lower class males had significantly higher family risk scores than white males and females from middle and upper income families. These results indicate that among white youths, those residing in lower-income families experience significantly higher incidence of family dysfunction characteristics (e.g. histories of maltreatment, domestic violence, parental drug and alcohol abuse, etc.) than their middle and upper income counterparts. Social class effects were not observed among the African-American subjects, however.

Consistent race effects were observed on the community risk index. Results of the Scheffe Multiple Group Comparisons report that each of the four African-American typologies (e.g. African-American Upper-Class Females, African-American Lower-Class Females, African-American Upper-Class Males, and African-American Lower-Class Males) had significantly higher community risk scores than at least one or more of their white counterparts. African-American males and females from upper income families were exposed to significantly higher community risks (e.g. living in transient communities, limited adult supervision, exposure to drugs, gangs, and crime, etc.) than both white males and females from middle and upper income families. The results suggest that upward mobility did not prevent African-American children from being exposed to criminological risk factors in their communities.

Meanwhile, African-American males and females from lower income families had significantly higher community risk scores than both white males and females living in middle/upper and lower-class families. In addition, African-American males from lower-income families had higher community risk scores than African-American males from middle and upper-income families as well.

A similar pattern was reported among white males from lower-income families indicating the presence of social class effects as well. White males from lower-class families were exposed to significantly higher community risks than white males from middle and upper-income families. In summary, these findings indicate that demographic factors, (e.g. social class and race) are related to ecological risks that, in turn, are predictors of youth and adult offending.

TABLE 10. Oneway ANOVAS Demographic Typologies on Ecological Risk Indices

Typology	N	Psychological Risks		Behavioral Risks		Family Risks		Academic Risks		Peer Group Risk		Community Risks	
		x	sd	x	sd	x	sd	x	sd	x	sd	x	sd
White Female Higher SES	41	.71	1.12	3.98	2.30	2.90	2.68	3.44	3.05	.59	.741	2.00	3.00
White Female Lower SES	22	.64	1.00	3.73	2.35	4.27	2.43	3.09	3.44	.64	.848	4.82	4.22
AA Female Higher SES	17	.53	.943	3.82	2.53	2.59	2.03	3.12	2.34	.47	.874	7.18*	5.37
AA Female Lower SES	18	.39	.850	3.44	2.18	4.00	2.99	3.72	3.30	.78	.808	10.00*	4.28
White Male Higher SES	148	.82	.981	4.32	2.58	3.30	3.01	3.93	3.21	.64	.775	1.26	2.17
White Male Lower SES	57	1.04	1.09	4.96	2.91	5.30*	3.39	4.95	2.92	1.00	1.00	4.21*	3.81
AA Male Higher SES	35	.43	.850	4.94	2.87	3.06	2.57	4.29	3.27	.69	.963	6.17*	4.81
AA Male Lower SES	44	.70	1.03	4.93	2.77	3.61	2.60	4.32	3.16	.89	.970	9.30*	4.16
Total	382	.75	1.01	4.41	2.64	3.63	2.97	4.01	3.15	.72	.866	4.30	4.60
F Value		1.81		1.69		4.08		1.52		1.70		41.33	
p		.085		.110		.000		.159		.107		.000	

*p <.05 (Scheffe Multiple Group Comparisons)

d. Description of Delinquent History

Table 11 below, reports the descriptive results on four measures of prior offending. The subjects in the sample had limited involvement with the juvenile justice system prior to their referral that triggered the current BARJ services. The vast majority were first time offenders. Over seventy-five percent (75.5%) of the subjects had no prior referrals (mean=.41, s.d.=.894). Ninety percent (90.0%) had no prior adjudications (mean=.19, s.d.=.683) and approximately ninety-six percent (95.8%) had no prior out-of-home placements (mean=.08, s.d.=.441). The average age at initial referral was roughly 15 years of age (mean=14.97, s.d.=1.75).

TABLE 11. Frequency Distributions of Delinquent History

Variables and Values	Frequency	Valid Percent
Prior Referrals		
0	302	75.5%
1	62	15.5%
2	19	4.8%
3	9	2.3%
4	5	1.3%
5	2	0.5%
6	1	0.3%
<i>Total</i>	400	100.0%
Prior Adjudications		
0	360	90.0%
1	19	4.8%
2	11	2.8%
3	6	1.5%
4	3	0.8%
6	1	0.3%
<i>Total</i>	400	100%
Prior Placements		
0	383	95.8%
1	8	2.0%
2	5	1.3%
3	3	0.8%
5	1	0.3%
<i>Total</i>	400	100.0%
Age at Initial Referral		
10	5	1.3%
11	10	2.5%
12	23	5.8%
13	44	11.0%
14	69	17.3%
15	72	18.0%
16	79	19.8%
17	94	23.5%
18	4	1.0%
<i>Total</i>	400	100.0%

e. Description of Lead Charges That Prompted BARJ Services, Grades, Offense Gravity Scores, and Court Dispositions

The subjects in the sample were charged with 69 different lead offenses which placed them under the jurisdiction of the four juvenile courts prompting the BARJ services. Table 12 below, provides an abbreviated list of the most common lead offenses and includes eleven (11) charges with frequencies of ten or more cases (subjects). These eleven charges which included simple assault, theft of unlawful taking, misdemeanor possession of marijuana, retail theft, burglary, terroristic threats, possession of drug paraphernalia, disorderly conduct, theft receiving stolen property, possession of a weapon on school property, and aggravated assault accounted for almost two-thirds (64.25%) of all lead charges, (n=257 cases). The most common charge was simple assault (53 cases) that accounted for 13.3% of the distribution. The majority of the charges were misdemeanor level offenses. More information about the severity of the offenses is provided in Table 13.

TABLE 12. Variable Coding and Abbreviated Frequency Distribution of Lead Charges That Prompted BARJ Services

Variables and Values	PA Crimes Code Number	Frequency	Valid Percent
Current Lead Charge			
<i>Simple Assault</i>	2701	53	13.3%
<i>Theft Unlawful Taking</i>	3921	38	9.5%
<i>Poss. of Marijuana (Small Amount)</i>	9101.6	27	6.8%
<i>Retail Theft</i>	3929	25	6.3%
<i>Burglary</i>	3502	20	5.0%
<i>Terroristic Threats</i>	2706	19	4.8%
<i>Poss. Drug Paraphernalia</i>	9191	19	4.8%
<i>Disorderly Conduct</i>	5503	18	4.5%
<i>Theft Receiving Stolen Goods</i>	3925	14	3.5%
<i>Weapon on School Property</i>	0912	13	3.3%
<i>Aggravated Assault</i>	2702	11	2.8%
<i>Total</i>		257	64.25%

Table 13 below, provides frequencies on the grades of the lead charges and the offense gravity scores. The modal grade was a misdemeanor 2 offense which accounted for 26.0% of the distribution. Misdemeanor 1 offenses accounted for an additional 24.5% of the distribution. Overall, misdemeanor level offenses accounted for roughly three-fourths of all cases (74.0%). In addition, six of the lead charges were summary offenses, (1.5%) of the distribution. Felony level offenses accounted for roughly one-fourth of the distribution (24.5%).

The offense gravity scores ranged from 1 to 14 in a distribution that was positively skewed, (skewness=1.73). The positive skewness indicates that the distribution clustered around lower scores suggesting that the lead charges were less serious in nature, (mean=3.40, s.d.=2.58). An average offense gravity score of 3.40 would reflect misdemeanor 1 or 2 level offenses (e.g. simple assaults, thefts, etc.). While this level of offending is less serious in comparison to felonies, it would certainly warrant juvenile court intervention. The results also indicate that the random sample of cases selected for the study is representative of juvenile probation populations across the Commonwealth.

TABLE 13. Frequency Distributions of BARJ Lead Charge Grades and Offense Gravity Scores

Variables and Values	Frequency	Valid Percent
BARJ Lead Charge Grade		
<i>Felony 1</i>	31	7.8%
<i>Felony 2</i>	22	5.5%
<i>Felony 3</i>	33	8.3%
<i>Felony</i>	12	3.0%
<i>Misdemeanor 1</i>	98	24.5%
<i>Misdemeanor 2</i>	104	26.0%
<i>Misdemeanor 3</i>	40	10.0%
<i>Misdemeanor</i>	54	13.5%
<i>Summary</i>	6	1.5%
<i>Total</i>	400	100.0%
Offense Gravity Score		
<i>1</i>	96	24.0%
<i>2</i>	71	17.8%
<i>3</i>	111	27.8%
<i>4</i>	31	7.8%
<i>5</i>	27	6.8%
<i>6</i>	21	5.3%
<i>7</i>	13	3.3%
<i>8</i>	2	0.5%
<i>9</i>	6	1.5%
<i>10</i>	14	3.5%
<i>11</i>	3	0.8%
<i>13</i>	1	0.3%
<i>14</i>	4	1.0%
<i>Total</i>	400	100.0%

Table 14 below, provides the frequency distribution of court dispositions that triggered the BARJ services. The overwhelming majority of the subjects (90.5%) received dispositions that involved community based programs, comprised primarily of informal adjustments (24.0%), consent decrees (33.8%), and probation services (30.8%). Out of home placements accounted for less than ten percent (9.5%) of the dispositions.

TABLE 14. Frequency Distribution of Court Dispositions

Values	Frequency	Valid Percent
<i>Transferred to Another Juvenile Court</i>	1	0.3%
<i>Informal Adjustment/Extended Services</i>	96	24.0%
<i>Dismissed</i>	1	0.3%
<i>Consent Decree</i>	135	33.8%
<i>Probation</i>	117	29.3%
<i>Probation with Day Treatment</i>	6	1.5%
<i>Other Services</i>	2	0.5%
<i>Placement</i>	38	9.5%
<i>Deferred Adjudication</i>	4	1.0%
<i>Total</i>	400	100.0%

f. An Examination of Relationships between Demographic Factors, Ecological Risks, and Delinquent History

Table 15 below, provides the zero-order correlation matrix including the means and standard deviations for each variable, for the three sets of predictors of youth offending. The bivariate results indicate a substantial degree of co-morbidity within and between the three sets of predictors (e.g. the demographic factors, ecological risks, and delinquent history).

In terms of demographic factors, gender produced a significant relationship on the behavioral risk index ($r=.135$, $p<.01$) and a significant inverse relationship on the community risk index ($r=-.130$, $p<.01$). The results indicate that males had significantly more behavioral risk characteristics (e.g. histories of aggression, risk taking behaviors, etc.) than females; while females were exposed to significantly greater community risks (e.g. poor adult supervision, more crimes, etc.) than their male counterparts.

Race was significantly related to socio-economic status, psychological, and community risks. African-American subjects were significantly more likely to live in low-income families ($r=.236$, $p<.01$) and be exposed to greater community risks ($r=.575$, $p<.01$) than their White

counterparts. These relationships are also noteworthy due to the size of the Pearson-product moment coefficients. The results indicate that the race/social class relationship is moderate while the relationship of race with the community risk index scores is quite robust. Whites, on the other hand, were significantly more at risk to being diagnosed or treated for psychological disorders ($r = -.128, p < .05$) than their African-American counterparts.

Socio-economic status was also significantly related to peer group risks ($r = .144, p < .01$) (i.e. having delinquent friends, etc.), moderately related to family risks ($r = .218, p < .01$) (i.e. domestic violence, etc.), and strongly related to community risks ($r = .440, p < .01$). In summary, the subjects residing in low income families were significantly more likely to be African-Americans exposed to more family dysfunction characteristics, anti-social peer group activities, and community disorganization factors than their middle and upper income counterparts.

Socio-economic status was also related to one measure of delinquent history, prior adjudications ($r = .171, p < .01$). Low-income subjects had significantly more prior adjudications than their middle and upper income counterparts by the time they were referred to the juvenile court on the charges that triggered BARJ intervention. These findings are particularly troubling in light of current studies (see discussion in Bergseth & Bouffard, 2007; Rodriguez, 2007) reporting that poverty and prior offending significantly reduces the chance that BARJ services will mediate future offending.

Co-morbidity of criminogenic predictors was even more apparent in the relationships observed among the six ecological risk indices. The six ecological risk indices were extensively inter-correlated with significant relationships ranging from strong/robust (i.e. relationships of $r > .40$) to moderate (i.e. relationships ranging from $r > .25$ to $r < .40$) to marginal (i.e. relationships ranging from $r < .25$ to $r > .09$). The levels of associations ruled out concerns about multi-

collinearity. Moreover, each association was in the expected direction (i.e. an increase in behavioral risks was associated with an increase in academic risks, etc.). Each ecological risk was also associated with at least two measures of delinquent history and in the expected direction (e.g. an increase in family risks was inversely associated with age at initial referral to the juvenile justice system and positively associated with the number of prior referrals and adjudications). The bivariate results present a pattern of interactions among these individual and environmental risks that produced effects on the prior offending of the subjects in study.

The psychological risk index was associated with four other ecological risk indices and all (three) measures of delinquent history. The psychological risk index was moderately associated with peer group risks ($r=.246$, $p<.01$); and, strongly associated with academic risks ($r=.426$, $p<.01$), behavioral risks ($r=.440$, $p<.01$), and family risks ($r=.466$, $p<.01$). An increase in the number of mental health diagnoses (e.g. depression, conduct disorder, etc.) and treatment was associated with increased negative peer group influences (e.g. limited involvement with peers who participate in extracurricular activities, participating in group fights, etc.), greater behavioral problems (e.g. drug and alcohol use, assaults, etc.) family problems (e.g. domestic violence, parental divorces or separations, etc.), and academic problems (e.g. truancy, grade retentions, etc.). In terms of prior offending, elevated scores were inversely associated with the age of initial referral to the juvenile justice system ($r=-.202$, $p<.01$) and positively associated with the number of prior referrals ($r=.141$, $p<.01$) and the number of prior adjudications ($r=.115$, $p<.05$). Subjects with higher scores on the psychological risk index were significantly younger when initially referred to juvenile court and accrued significantly more referrals and adjudications.

The behavioral risk index was associated with all other (five) ecological risk indices and two measures of delinquent history. The behavioral risk index strongly associated with

psychological risks, family risks ($r=.497$, $p<.01$), peer group risks ($r=.497$, $p<.01$), academic risks ($r=.541$, $p<.01$), and marginally associated with community risks ($r=.099$, $p<.05$). Elevated scores on the behavioral risk index were associated with a greater array of mental health problems, family dysfunction issues, associations with delinquent peers, academic and behavioral problems in school, and community disorganization factors. It was also moderately associated with an increase in the number of prior referrals ($r=.328$, $p<.01$) as well as the number of prior adjudications ($r=.254$, $p<.01$).

The family risk index was associated four other ecological risk indices and all measures of delinquent history. The family risk index was strongly associated with psychological and behavioral risks; and, moderately associated with peer group ($r=.348$, $p<.01$) and academic risks ($r=.386$, $p<.01$). Elevated scores on the family risk index was inversely related to the age at initial referral to the juvenile justice system ($r=-.138$, $p<.01$) and positively related to the number of prior referrals ($r=.125$, $p<.05$) and prior adjudications ($r=.194$, $p<.05$). The pattern observed in the case of family risks is similar to the pattern observed with the psychological risk index. Subjects with histories of substantial family dysfunction were significantly younger at the time of initial entry into the juvenile justice system and had accrued significantly more referrals and adjudications by the time when they re-entered the system and participated in BARJ services.

The academic risk index was associated with all other ecological risk indices and all measures of delinquent history. The academic risk index was strongly associated with psychological, behavioral, and peer group risks ($r=.424$, $p<.01$), moderately associated with family risks, and marginally associated with community risks ($r=.104$, $p<.05$). An increase in academic risks (e.g. poor math and reading comprehensions, low grade point average, etc.) was inversely associated with age at initial referral ($r=-.133$, $p<.01$), moderately associated with the

number of prior referrals ($r=.220$, $p<.01$), and marginally associated with the number of prior adjudications ($r=.156$, $p<.01$). Academic risks produced the same patterns of prior youth offending as those observed in the psychological and family risk associations.

The peer group risk index was also associated with all other ecological risk indices and two measures of delinquent history. The peer group index was strongly associated with behavioral and academic risks, moderately associated with psychological and peer group risks, and marginally associated with community risks ($r=.167$, $p<.01$). Elevated scores on the peer group index was also moderately associated with the number of prior referrals ($r=.206$, $p<.01$) and marginally associated with the number of prior adjudications ($r=.141$, $p<.01$).

Whereas, the intercorrelations among the psychological, behavioral, family, academic, and peer group risk indices were extensive, the community risk index was clearly more independent. The community risk index was marginally associated with behavioral, academic, and peer group risks and was not associated with psychological and family risks. Interestingly, community risk was the only index associated with all demographic (gender, race, and socio-economic) factors. Community was also marginally associated with one measure of delinquent history, prior adjudications ($r=.129$, $p<.05$).

Table 15 also provides the zero-order correlations of the three sets of predictors on the lead charge offense gravity score (OGS) which was a measure of the severity of offending that prompted BARJ services. Lead charge OGS was marginally associated with gender ($r=.114$, $p<.05$) and approached a significant association with the remaining two demographic factors, race ($r=.095$, $p<.061$) and socio-economic status ($r=.094$, $p<.062$). Lead charge OGS was marginally associated with four of the ecological risk indices, community risks ($r=.175$, $p<.01$) family risks ($r=.148$, $p<.01$), psychological risks ($r=.133$, $p<.01$), and behavioral risks ($r=.125$,

p<.05); and, approached significance on one measure of delinquent history, prior adjudications (r=.095, p<.059).

TABLE 15 HERE

TABLE 15. Zero-Order Correlations, Means, and Standard Deviations of Demographic Factors, Ecological Risk Indices, Delinquent History Measures, and BARJ Lead Charge Offense Gravity Score

	1	2	3	4	5	6	7	8	9	10	11	12	
<i>Gender</i>	----												
<i>Race</i>	-.065	----											
<i>SES</i>	-.061	.236**	----										
<i>Psychological Risk Index</i>	.090A	-.128*	.028	----									
<i>Behavioral Risk Index</i>	.135**	.034	.063	.440**	----								
<i>Family Risk Index</i>	.029	-.055	.218**	.466**	.497**	----							
<i>Academic Risk Index</i>	.120*	.007	.076	.426**	.541**	.386**	----						
<i>Peer Group Risk Index</i>	.07	.021	.144**	.246**	.497**	.348**	.424**	----					
<i>Community Risk Index</i>	-.130**	.575**	.440**	-.027	.099*	.082	.104*	.167**	----				
<i>Age at Initial Referral</i>	-.065	-.04	-.081	-.202**	.019	-.138**	-.133**	-.029	-.08	----			
<i>Prior Referrals</i>	.056	.093A	.075	.141**	.328**	.125*	.220**	.206**	.089A	-.112*	----		
<i>Prior Adjudications</i>	.077	.086A	.171**	.115*	.254**	.194*	.156**	.141**	.129*	-.091A	.705**	----	
<i>BARJ Lead Charge OGS</i>	.114*	.095A	.094A	.133**	.125*	.148**	.009	-.013	.175**	-.056	.033	.095A	
<i>M</i>	.74	.30	.37	.74	4.35	3.59	3.96	.70	4.04	14.97	.41	.19	3.40
<i>sd</i>	.44	0.46	.48	1.01	2.67	2.98	3.14	.86	4.59	1.75	0.89	.68	2.58

**p<.01, *p<.05, ^A p<.10

g. An Examination of the Effects of Demographic Factors, Ecological Risks, and Delinquent History on the Lead Charge Offense Gravity Scores that Prompted BARJ Services

The bivariate results reported in Table 15 suggest two patterns existing among the three sets of predictors. The first and most apparent pattern is the substantial inter-correlation among five of the ecological risk indices along with a consistent set of associations between these indices and the measures of delinquent history. The second and less apparent pattern involves the community risk index. While the associations are not as robust, community risk is associated with all three sets of predictors and may be a factor that bridges the three disparate prediction

sets. Consequently, community risks could be a pivotal variable in any prediction model of youth offending that prompted BARJ services as well as later recidivism.

In order to more closely examine the effects of these predictors, multivariate models were analyzed to determine which variables, if any, produced direct effects on the youth offending that prompted BARJ services. Table 16 below, provides the results of an ordinary least squares (OLS) regression model. The model is comprised of variables (see Table 15) that were significantly associated or approached significance ($p < .10$) with the BARJ lead charge OGS, the dependent variable in the model. The variables were entered in stepwise fashion with the demographic factors (gender, race, socio-economic status) entered first in the model. This was followed in the second step by the four ecological risk indices (psychological, behavioral, family, community); and, the number of prior adjudications entered in the final step of the model.

The OLS regression model was significant ($F=3.79$, $p < .001$) and explained roughly eight percent of the variance ($R^2=.075$) in the dependent variable. Only two of the predictors, gender ($b=.785$, $S.E.=.295$, $p < .01$) and the community risk index ($b=.101$, $S.E.=.037$, $p < .01$) produced direct effects. Community risk was the strongest predictor in the model, (Beta=.183) while gender produced a standardized regression coefficient of (Beta=.136). Although the amount of explained variance was modest, the model was parsimonious and still significant. The results indicate that when controlling for the effects of relevant demographic factors, ecological risks, and prior history; two of these risks, gender and community disorganization, produce direct effects on the severity of offending that triggered juvenile court intervention. Males and youths with elevated scores on the community risk index were significantly more likely to have committed serious crimes. Since severity of the offense affects the provision and outcomes of restorative practices (see discussion in Menkel-Meadow, 2007; Strang et al., 2006) these results have substantial policy and practice

implications. Close scrutiny should to be given to the type of youths who are to participate in BARJ practices. Those who present greater risks may not suitable candidates for this type of program. There are methodological implications to consider as well. The absence of direct effects among the other ecological risks and delinquent history measures does not rule out the presence of indirect effects on BARJ-related outcomes.

TABLE 16. Ordinary Least Squares Regression Coefficients Representing Effects of Demographic Factors, Ecological Risk Indices, and Delinquent History Measures on the BARJ Lead Charge Offense Gravity Score (N=382)

Variables	b	S.E.	Beta	t	b	S.E.	Beta	t	b	S.E.	Beta	t
<i>Gender</i>	.811	.294	.140	2.76**	.800	.294	.138	2.72**	.785	.295	.136	2.66**
<i>Race</i>	.394	.289	.071	1.36	-.016	.343	-.003	-.046	-.023	.344	-.004	-.067
<i>SES</i>	.388	.273	.074	1.42	-.024	.297	-.005	-.081	-.054	.299	-.010	-.179
<i>Psychological Risk Index</i>					.231	.148	.092	1.56	.231	.148	.092	1.56
<i>Behavioral Risk Index</i>					.030	.058	.032	.525	.022	.059	.023	.373
<i>Family Risk Index</i>					.049	.053	.058	.926	.047	.053	.055	.888
<i>Community Risk Index</i>					.102	.037	.184	2.77**	.101	.037	.183	2.74**
<i>Prior Adjudications</i>									.151	.191	.042	.792
<i>Constant</i>	2.52	.286		8.81***	1.90	.340		5.61***	1.95	.344		5.66***
	R ² =.030 F=3.92** F Change=3.92**				R ² =.074 F=4.25*** F Change=4.39**				R ² =.075 F=3.79*** F Change=.627			

***p<.001, **p<.01, *p<.05, ^A p<.10

h. Description of Recursive Risk Factors

Table 17 below, provides the frequency distributions of two variables, violation of probation/failure to adjust to placement and severity of offending while under court supervision. These measures were designed to examine subjects’ compliance to court supervision while participating in BARJ services. These variables, violation of probation or failure to adjust to placement and the offense gravity score of the most serious rearrest charge occurring while receiving BARJ services, were treated as risk factors to recidivism. The presence these risks would

indicate continuation of anti-social attitudes and behaviors while participating in BARJ programs reducing the likelihood of successful outcomes.

The majority of the subjects completed court supervision without incident. Only nine percent were charged with a violation of probation or a failure to adjust to placement. Roughly nineteen percent were charged with a new offense. Of those charged with new offenses while under court supervision (n=74), the average offense gravity score on the most serious charge was four (mean=4.00, s.d.=3.33) which was roughly equivalent to a misdemeanor 1 level offense.

TABLE 17. Frequency Distributions of Violations of Probation/Failure to Adjust to Placement and Severity of Offending While Under Court Supervision

Variables and Values	Frequency	Valid Percent
Violation of Probation or Placement		
<i>No</i>	364	91.0%
<i>Yes</i>	36	9.0%
<i>Total</i>	400	100.0%
Rearrest Lead Charge OGS		
<i>0</i>	326	81.5%
<i>1</i>	16	4.0%
<i>2</i>	15	3.8%
<i>3</i>	16	4.0%
<i>4</i>	6	1.5%
<i>5</i>	4	1.0%
<i>6</i>	1	0.3%
<i>7</i>	5	1.3%
<i>8</i>	2	0.5%
<i>9</i>	1	0.3%
<i>10</i>	2	0.5%
<i>11</i>	1	0.3%
<i>12</i>	3	0.8%
<i>13</i>	2	0.5%
<i>Total</i>	400	100.0%

i. Description of Recidivism Measures

Tables 18 and 19 below provide the frequency distributions on the first set of recidivism variables which measured the total number and the prevalence rates of juvenile and adult arrests among the sample. The frequency distribution includes the total number of juvenile and adult arrests at the six, twelve, eighteen, and twenty-four month intervals after case closing. The distribution also provided data to determine the percentages of recidivists and non-recidivists at each interval. The prevalence of re-arrests among the sample was relatively low. Two years after the completion of services seventy-five percent of the sample had not been re-arrested. The recidivism rate on re-arrests was approximately ten percent (10.2%) (mean=.120, s.d.=.382) at six months and increased at a constant rate of five percent at each successive interval throughout the two year course of study. The re-arrest rate increased to fifteen percent (15.0 %) (mean=.220, s.d.=.619) after twelve months; roughly twenty percent (19.7%) (mean=.313, s.d.=.798) after eighteen months; and, twenty-five percent (25.0%) (mean=.423, s.d.=.931) after twenty-four months.

TABLE 18. Frequency Distributions of Total Number of Arrests at 6 and 12 Months

Variables and Values	Frequency	Valid Percent
Total Number of Arrests at 6 Months		
0	359	89.8%
1	35	8.8%
2	5	1.3%
3	1	0.3%
<i>Total</i>	400	100.0%
Total Number of Arrests at 12 Months		
0	340	85.0%
1	41	10.3%
2	14	3.5%
3	2	0.5%
4	2	0.5%
5	1	0.3%
<i>Total</i>	400	100.0%

TABLE 19. Frequency Distributions of Total Number of Arrests 18 and 24 Months

Variables and Values	Frequency	Valid Percent
Total Number of Arrests at 18 Months		
0	321	80.3%
1	52	13.0%
2	17	4.3%
3	7	1.8%
5	1	0.3%
6	1	0.3%
7	1	0.3%
<i>Total</i>	400	100.0%
Total Number of Arrests at 24 Months		
0	300	75.0%
1	62	15.5%
2	21	5.3%
3	9	2.3%
4	5	1.3%
5	1	0.3%
6	1	0.3%
7	1	0.3%
<i>Total</i>	400	100.0%

Tables 20 and 21 below provide the frequency distributions for the second set of recidivism variables which measured offense severity. These measures captured the highest offense gravity scores on the lead arrest charge at the six, twelve, eighteen, and twenty-four month intervals after case closing. Severity of offending increased slightly over the two year time interval of tracking recidivism. Among those arrested on or before six months (n=38), the average highest offense gravity score was 3.47 (s.d.=2.78). Among those arrested on or before twelve months (n=58), the average offense gravity score increased to 3.91 (s.d.=2.73). At eighteen months (n=79) the score increased to 4.22 (s.d.=3.02); and, at twenty-four months (n=99), the score remained constant at 4.21 (s.d.=2.97). A significant increase in the severity of

offending was verified in a comparison of mean scores among the subjects who recidivated in the first six months (n=38) after case closing.

Table 22 below, provides the results of a T-test for Dependent Groups comparing differences in mean scores at the six and twenty-four month intervals. The results indicate a significant increase in the average highest offense gravity scores ($t=-2.95$, $p<.01$) from a mean of 3.47, (s.d.=2.78) at six months to a mean of 4.37 (s.d.=2.78) at twenty four months. Even though the mean differences are statistically significant, the reader is urged to use cautious when inferring any conclusions from these results since the differences are not substantial. The average highest offense gravity scores at six through twenty-four months remained within a range of scores that reflect misdemeanor 1 offenses.

TABLE 20. Frequency Distributions of Highest Offense Gravity Score at 6 and 12 Months

Variables and Values	Frequency	Valid Percent
Highest OGS at 6 Months		
0	362	90.5%
1	14	3.5%
2	5	1.3%
3	5	1.3%
4	1	0.3%
5	2	0.5%
6	6	1.5%
7	2	0.5%
8	1	0.3%
10	1	0.3%
11	1	0.3%
<i>Total</i>	400	100.0%
Highest OGS at 12 Months		
0	342	85.5%
1	16	4.0%
2	6	1.5%
3	11	2.8%
4	1	0.3%
5	6	1.5%
6	8	2.0%
7	2	0.5%
8	5	1.3%
9	1	0.3%
10	1	0.3%
11	1	0.3%
<i>Total</i>	400	100.0%

TABLE 21. Frequency Distributions of Highest Offense Gravity Score at 18 and 24 Months

Variables and Values	Frequency	Valid Percent
Highest OGS at 18 Months		
0	321	80.3%
1	23	5.8%
2	6	1.5%
3	13	3.3%
4	3	0.8%
5	6	1.5%
6	9	2.3%
7	4	1.0%
8	7	1.8%
9	2	0.5%
10	5	1.3%
11	1	0.3%
<i>Total</i>	400	100.0%
Highest OGS at 24 Months		
0	301	75.3%
1	29	7.3%
2	7	1.8%
3	15	3.8%
4	3	0.8%
5	11	2.8%
6	12	3.0%
7	4	1.0%
8	9	2.3%
9	2	0.5%
10	5	1.3%
11	2	0.5%
<i>Total</i>	400	100.0%

TABLE 22. T-test for Dependent Groups Average Highest Offense Gravity Scores at 6 & 24 Months

Pairs	N	Mean	s.d.	S.E. Mean
<i>Highest OGS 6 Months</i>	38	3.47	2.78	.451
<i>Highest OGS 24 Months</i>	38	4.37	2.78	.452

t=-2.95
df=37
Sig. =.006

j. Explanatory Models of Recidivism

The final (and key) question in Part I of the results (*Description of the Sample*) involved the construction and testing of explanatory models of recidivism based on the list of risk factors described thus far in the sample. The risk factors were used in the final models to examine whether BARJ services reduced recidivism. In the current analyses (see Tables 23-27), four outcome variables were employed that included occurrence of arrest at six and twenty-four months and the highest offense gravity on the lead charge at six and twenty-four months. In order to construct the most parsimonious models we first examined the bivariate relationships between the risk factors and the four recidivism measures. The multivariate models presented in Tables 24-27 included only those risk factors that were significantly related to the recidivism measures or factors that approached significance (i.e. correlation coefficients with $p < .10$ values).

Table 23 below, provides the zero-order correlations between the risk factors and the four recidivism measures. Among the demographic factors, gender was the most consistently significant correlate. Gender was marginally associated to the occurrence of arrest at six months ($r = .089$, $p < .10$) but was not associated with occurrence at twenty-four months. Gender approached significance on the highest lead charge offense gravity score at six months and was marginally related to the offense gravity score at twenty-four months ($r = .157$, $p < .01$). The results indicate that males have significantly higher recidivism scores than females. A similar set of results were observed in regard to race. While no relationship was observed between race and occurrence of arrest at six months a marginal relationship was observed at twenty-four months ($r = .147$, $p < .01$). A marginal relationship was also observed on the highest offense gravity score at six months ($r = .111$, $p < .05$) with a relationship approaching a moderate association at twenty-four months ($r = .241$,

$p < .01$). The results indicate that African-Americans have significantly more likely to be arrested at twenty-four months and accrue higher offense gravity scores at six and twenty-four months than their white counterparts. Socio-economic status was not related to any of the recidivism measures.

Among the ecological risks indices, the behavioral risk index was the most consistent and robust correlate of recidivism. Behavioral risk index scores were associated with the occurrence of arrest at six months ($r = .231, p < .01$) and at twenty-four months ($r = .179, p < .01$); and higher offense gravity scores at six months ($r = .211, p < .01$) and twenty-four months ($r = .195, p < .01$). Subjects with more behavioral risks were significantly more likely to be arrested and charged with more serious crimes at each time interval. Associations between the other risk indices were less consistent. Academic risk index scores were marginally associated with occurrence of arrest at six months ($r = .112, p < .05$) but not related to arrests at twenty-four months. Academic risk approached significance on the highest offense gravity score at six months and was marginally associated with highest offense gravity score at twenty-four months ($r = .106, p < .05$). The peer group risk index scores were marginally associated with occurrence of arrest at six months ($r = .186, p < .01$), but only approached significance at twenty-four months. Peer group risk was marginally associated with the highest offense gravity score at six months ($r = .114, p < .05$) but was not related to the score at twenty-four months. While peer group influences were sustained for only a limited period of time; community risks appeared to be dynamic. Community risk index scores were not associated with the occurrence of arrest at six months; but, a marginal association was observed at twenty-four months ($r = .141, p < .01$). Community risks were only marginally associated with the highest offense gravity score at six months ($r = .100, p < .05$) but increased in strength of association at twenty-four months ($r = .208, p < .01$). No relationships were observed between the psychological and family risk index scores and the four measures of recidivism.

Two of the measures of delinquent history, prior referrals and prior adjudications, were significantly related to the same three recidivism measures. Prior referrals was static with marginal associations with occurrence of arrest at six months ($r=.141, p<.01$) and at twenty-four months ($r=.163, p<.01$); and with the highest offense gravity score at twenty-four months ($r=.161, p<.01$). Prior adjudications produced virtually the same results. Prior adjudications was moderately associated with occurrence of arrest at six months ($r=.170, p<.01$), marginally associated with arrests at twenty-four months ($r=.159, p<.01$), and marginally associated with the highest offense gravity score at twenty-four months ($r=.170, p<.01$). No associations were observed with the highest offense gravity score at six months. These results suggest some redundancy in the measures of association with recidivism. Age at initial referral was not associated with the above-mentioned measures (e.g. occurrence of arrests at six and twenty-four months and highest offense gravity score at twenty-four months) but approached significance on the highest offense gravity score at six months.

The BARJ lead charge offense gravity score (a measure of the seriousness of the lead offense that prompted BARJ services) was not related to any of the measures of recidivism although it approached significance on the highest offense gravity score at twenty-four months.

Conversely, significant associations were observed between the recursive risks and the recidivism measures. Violation of probation was associated with each recidivism measure. Violation of probation was marginally associated to occurrence of arrest at six months ($r=.182, p<.01$) and at twenty-four months ($r=.141, p<.01$) as well as the highest offense gravity score at six months ($r=.238, p<.01$) and at twenty-four months ($r=.222, p<.01$). The rearrest lead charge offense gravity score while under court supervision approached significance on occurrence of arrest at six months ($r=.096, p<.10$) and was marginally associated at twenty-four months ($r=.134, p<.01$). The rearrest

offense gravity score was also marginally associated to the highest offense gravity scores at six months ($r=.127$, $p<.05$) and twenty-four months ($r=.122$, $p<.05$).

TABLE 23 HERE

TABLE 23. Zero-Order Correlations of Demographic Factors, Ecological Risk Indices, Delinquent History Measures, Lead Charge Offense Gravity Score and Recursive Risks on Occurrence of Arrest and Highest Lead Charge Offense Gravity Scores at 6 and 24 Months

Variables	Arrest/No Arrest	Arrest/No Arrest	Highest OGS	Highest OGS
	6 Mos.	24 Mos.	6 Mos.	24 Mos.
<i>Gender</i>	.089 ^A	.082	.084 ^A	.157**
<i>Race</i>	.058	.147**	.111*	.241**
<i>SES</i>	.013	.047	-.036	.043
<i>Psychological Risks</i>	.037	.004	-.006	.004
<i>Behavioral Risks</i>	.231**	.179**	.211**	.195**
<i>Family Risks</i>	.024	.014	.010	-.010
<i>Academic Risks</i>	.112*	.076	.088 ^A	.106*
<i>Peer Group Risks</i>	.186**	.094 ^A	.114*	.074
<i>Community Risks</i>	.094 ^A	.141**	.100*	.208**
<i>Age at Initial Referral</i>	.053	-.023	.089 ^A	.020
<i>Prior Referrals</i>	.141**	.163**	.070	.161**
<i>Prior Adjudications</i>	.170**	.159**	.068	.170**
<i>BARJ Charge OGS</i>	.057	.077	.072	.086 ^A
<i>Violation of Probation</i>	.182**	.141**	.238**	.222**
<i>Rearrest Charge OGS</i>	.096 ^A	.134**	.127*	.122*

$p<.01$ **, $p<.05$ *, $p<.10$ ^A

Tables 24-27 below, present the results of two logistic and two ordinary least squares (OLS) regression models that examine the direct effects of selected risk factors on the two sets of recidivism measures. Although five risk factors produced direct effects in the multivariate models; two, violation of probation and the behavioral risk index were the most consistent and robust factors in the models.

Violation of probation was the most consistent and static risk factor producing direct effects on the occurrence of arrest at six months and approached significance at twenty-four months

Violation of probation also produced effects on the offense gravity score measures at both the six and twenty-four month intervals. Violation of probation also produced the highest beta weights in the offense gravity score models. Subjects who violated probation while receiving BARJ services were more likely to be arrested at six months and to have significantly higher offense gravity scores at both six and twenty-four months.

A similar pattern was observed in regard to the behavioral risk index. The behavioral risk index score produced direct effects on the occurrence of arrest at six months and approached significance at twenty-four months. The same pattern was observed in regard to the offense gravity scores. Behavioral risks also produced effects at six months and approached significance at twenty four months. Subjects with higher behavioral risk scores were more likely to be arrested at six months and be charged with more serious crimes than their counterparts with lower scores.

Gender did not produce effects in the logistic models on arrests. However, gender approached significance in the OLS models on offense gravity scores at six months and was a significant risk factor at twenty-four months. A similar pattern was observed in regard to race. While it did not produce effects on the occurrence of arrest it was a significant factor on severity of reoffending at twenty-four months. Both males and African-American subjects were more likely to be arrested for more serious crimes than their female and White counterparts. Finally, age at initial referral produced direct effects on the offense gravity score at six months but not in the expected direction. Subjects who were older at the time of their initial referral to juvenile court had significantly higher offense gravity at the six month interval.

Table 24 presents the results of a logistic regression model on the occurrence of arrest at six months. The full model contained nine predictors and was significant (Model Chi Square=34.95, $p < .001$). The Cox and Snell R^2 (.084) and Nagelkerke R^2 (.173) results indicated improvement in

the predictability of recidivism with the inclusion of the nine risk factors. The full model correctly predicted nearly ninety percent (89.0%) of the expected values. The -2 Log Likelihood Statistic (constant only) was 264.433 and was reduced to 229.481 in the full model with a Hosmer and Lemeshow Chi-Square value of ($X^2= 3.56$, $df=8$, $p=.894$) indicating a good fit between the expected and observed values. Two factors were identified as being significant predictors of arrest at six months. These included the behavioral risk index ($b=.200$, $S.E.=.089$, $Wald= 5.03$, $p<.05$, $Exp(B)=1.22$) and violation of probation ($b=1.24$, $S.E.=.482$, $Wald=6.46$, $p<.01$, $Exp(B)= 3.46$, 246.0%). The presence of behavioral risks increased the odds of arrest at six months by 22%. However, violation of probation was the most robust predictor. Subjects who violated probation increased their odds of arrest by 246% (3.5 times more likely to recidivate than those who had not violated probation).⁵

These results indicate that when controlling for the effects of other risk factors (e.g. demographic factors, ecological risk, and delinquent history) subjects with higher behavioral risk index scores and those who were charged with violation of probation while receiving BARJ services were significantly more likely to be arrested on or before six months after their release from court supervision.

Table 25 presents the results of the logistic regression model on the occurrence of arrest at twenty-four months. The full model contained nine predictors and was also significant (Model Chi Square=30.86, $p<.001$). The Cox and Snell R^2 (.076) and Nagelkerke R^2 (.113) results also indicated improvement in the predictability of recidivism with the inclusion of the nine risk factors. However, the twenty-four month model was not as robust as in the six month. The full model correctly predicted roughly seventy-five percent (75.5%) of the expected values. The -2 Log Likelihood Statistic (constant only) was 436.372 and was reduced to 405.512 in the full model with a Hosmer

and Lemeshow Chi-Square value of ($X^2 = 3.49$, $df=8$, $p=.900$) indicating a sufficient fit between the expected and observed values. One reason for the less robust fit was that there were no significant predictors identified in the model. However, the behavioral risk index and violation of probation approached significance. Subjects who violated probation increased their odds of arrest by 97% while those with behavioral risks elevated their odds of arrest by 10% with a one unit increase in their index score.

Table 26 presents the results of the OLS model on the highest offense gravity score at six months. The model was significant ($F=5.51$, $p<.001$) and explained roughly twelve percent of the variance ($R^2=.116$) in the dependent variable measure. Three factors were significant in the model while one other, gender, produced effects that approached significance ($b=.248$, $S.E.=.146$, $Beta=.085$, $p=.090$). Violation of probation produced the most robust effects ($b=1.04$, $S.E.=.230$, $Beta=.231$, $p<.001$). Other factors producing direct effects included the behavioral risk index ($b=.074$, $S.E.=.031$, $Beta=.151$, $p<.05$) and age at initial referral ($b=.083$, $S.E.=.036$, $Beta=.114$, $p<.05$). The results indicate that subjects who were charged with violation of probation, had higher behavioral risk scores, and were older at the age of first referral were more likely to be rearrested for serious crimes within six months of completing BARJ services. The results also suggest that males were more likely to commit more serious crimes at the six month interval.

Table 27 presents the results of the OLS model on the highest offense gravity score at twenty-four months. The model was also significant ($F=7.07$, $p<.001$) and explained roughly sixteen percent of the variance ($R^2=.158$) in the dependent variable measure. Three factors were also significant while one other, the behavioral risk index, produced effects that were essentially significant as well ($b=.103$, $S.E.=.053$, $Beta=.116$, $p=.052$). Violation of probation produced the most robust effects ($b=1.41$, $S.E.=.411$, $Beta=.174$, $p<.01$) in this model. Gender ($b=.857$, $S.E.=.262$,

Beta=.161, $p < .01$) and race ($b = .753$, $S.E. = .300$, $Beta = .147$, $p < .05$) were also significant and comparable in strength of effects. The results indicate that males and African-American subjects, those with higher behavioral risk index scores, and those who were charged violation of probation were significantly more likely to be rearrested for serious crimes within two years after completion of BARJ services

TABLE 24. Logistic Regression Coefficients Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, and Recursive Measures on Occurrence of Arrest at 6 Months (N=400)

Variables	b	S.E.	Wald	Exp(B)	%	b	S.E.	Wald	Exp(B)	%	b	S.E.	Wald	Exp(B)	%
<i>Gender</i>	.798	.457	3.04	2.22	122.0	.626	.475	1.74	1.87	87.0	.641	.484	1.76	1.90	90.0
<i>Behavioral Risk Index</i>						.253	.084	8.96**	1.29	29.0	.200	.089	5.03*	1.22	22.0
<i>Academic Risk Index</i>						-.052	.065	.635	.950	-5.0	-.092	.072	.66	.912	-8.8
<i>Peer Group Risk Index</i>						.239	.216	1.22	1.27	27.0	.355	.227	2.45	1.43	43.0
<i>Community Risk Index</i>						.055	.037	2.12	1.06	6.0	.026	.039	.456	1.03	3.0
<i>Prior Referrals</i>											-.038	.264	.020	.963	-3.7
<i>Prior Adjudications</i>											.306	.298	1.05	1.36	36.0
<i>Violation of Probation</i>											1.24	.482	6.64**	3.46	246.0
<i>Rearrest Charge OGS</i>											.034	.065	.276	1.04	4.0
<i>Constant</i>	-2.80	.420	44.46***	.061		-4.20	.579	52.52***	.015		-4.02	.582	47.69	.018	
	-2 Log Likelihood=260.883 Model Chi Square=3.55 df=1 Cox & Snell $R^2 = .009$ Nagelkerke $R^2 = .018$ Hosmer-Lemeshow Sig.=.000 % Correct=89.8%					-2 Log Likelihood=237.610 Model Chi Square=26.82*** df=5 Cox & Snell $R^2 = .065$ Nagelkerke $R^2 = .134$ Hosmer-Lemeshow Sig.=.783 % Correct=89.8%					-2 Log Likelihood=229.481 Model Chi Square=34.95*** df=9 Cox & Snell $R^2 = .084$ Nagelkerke $R^2 = .173$ Hosmer-Lemeshow Sig.=.894 % Correct=89.8%				

Note: b =log odds; Exp(B) =odds ratio; % =percent change in simple odds, (calculated as Exp(B) -1).

*** $p < .001$, ** $p < .01$, * $p < .05$, ^A $p < .10$

TABLE 25. Logistic Regression Coefficients Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, and Recursive Measures on Occurrence of Arrest at 24 Months (N=388)

Variables	b	S.E.	Wald	Exp(B)	%	b	S.E.	Wald	Exp(B)	%	b	S.E.	Wald	Exp(B)	%
Gender	.542	.292	3.46 ^A	1.72	72.0	.455	.300	2.29	1.58	58.0	.442	.304	2.11	1.56	56.0
Race	.743	.248	8.94**	2.10	110.0	.448	.314	2.04	1.57	57.0	.353	.324	1.19	1.42	42.0
Behavioral Risk Index						.147	.053	7.59**	1.16	16.0	.098	.057	2.92 ^A	1.10	10.0
Peer Group Risk Index						-.030	.158	.037	.970	-3.0	-.022	.160	.019	.978	-2.2
Community Risk Index						.048	.032	2.20	1.05	5.0	.037	.033	1.21	1.04	4.0
Prior Referrals											.145	.183	.632	1.16	16.0
Prior Adjudications											.138	.229	.360	1.15	15.0
Violation of Probation											.677	.395	2.94 ^A	1.97	97.0
Rearrest Charge OGS											.044	.054	.666	1.05	5.0
Constant	-1.76	.281	39.24***	.172		-2.46	.356	47.87***	.085		-2.36	.360	42.89	.095	
	-2 Log Likelihood=424.673 Model Chi Square=11.70** df=2					-2 Log Likelihood=411.838 Model Chi Square=24.53*** df=5					-2 Log Likelihood=405.512 Model Chi Square=30.86*** df=9				
	Cox & Snell R ² =.030 Nagelkerke R ² =.040 Hosmer-Lemeshow Sig.=.040 % Correct=75.0%					Cox & Snell R ² =.061 Nagelkerke R ² =.091 Hosmer-Lemeshow Sig.=.201 % Correct=76.0%					Cox & Snell R ² =.076 Nagelkerke R ² =.113 Hosmer-Lemeshow Sig.=.900 % Correct=75.5%				

Note: b =log odds; Exp(B) =odds ratio; % =percent change in simple odds, (calculated as Exp(B) -1).

***p<.001, **p<.01, *p<.05, ^Ap<.10

TABLE 26. Ordinary Least Squares Regression Coefficients Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, and Recursive Measures on the Highest Offense Gravity Score at 6 Months (N=388)

Variables	b	S.E.	Beta	t	b	S.E.	Beta	t	b	S.E.	Beta	t
Gender	.254	.148	.087	1.71 ^A	.187	.149	.064	1.26	.248	.146	.085	1.70 ^A
Race	.328	.142	.117	2.31*	.249	.172	.088	1.45	.155	.169	.055	.919
Behavioral Risk Index					.097	.031	.199	3.15**	.074	.031	.151	2.40*
Academic Risk Index					-.017	.025	-.042	-.698	-.024	.025	-.060	-.987
Peer Group Risk Index					.030	.088	.020	.346	.063	.086	.042	.731
Community Risk Index					.010	.018	.034	.546	.006	.017	.022	.359
Age at Initial Referral									.083	.036	.114	2.30*
Violation of Probation									1.04	.230	.231	4.51***
Rearrest Lead Charge OGS									-.004	.031	-.007	-.136
Constant	.035	.136		.256	-.308	.168		-1.84 ^A	-1.53	.574		-2.67**
	R ² =.020 F=3.88* F Change=3.88*				R ² =.057 F=3.83** F Change=3.75**				R ² =.116 F=5.51*** F Change=8.41***			

***p<.001, **p<.01, *p<.05, ^Ap<.10

TABLE 27. Ordinary Least Squares Regression Coefficients Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, and Recursive Measures on the Highest Offense Gravity Score at 24 Months (N=388)

Variables	b	S.E.	Beta	t	b	S.E.	Beta	t	b	S.E.	Beta	t
<i>Gender</i>	.902	.260	.170	3.48**	.835	.261	.157	3.20**	.857	.262	.161	3.27**
<i>Race</i>	1.29	.250	.252	5.16***	.910	.300	.178	3.03**	.753	.300	.147	2.51*
<i>Behavioral Risk Index</i>					.143	.051	.162	2.82**	.103	.053	.116	1.95 ^A
<i>Academic Risk Index</i>					-.010	.043	-.013	-.233	-.032	.043	-.043	-.747
<i>Community Risk Index</i>					.060	.030	.117	1.97*	.049	.031	.096	1.59
<i>Prior Referrals</i>									.077	.179	.030	.430
<i>Prior Adjudications</i>									.286	.229	.085	1.25
<i>BARJ Lead Charge OGS</i>									.003	.045	.003	.060
<i>Violation of Probation</i>									1.41	.411	.174	3.44**
<i>Rearrest Lead Charge OGS</i>									-.010	.056	-.009	-.187
<i>Constant</i>	-.010	.239		-.043	-.676	.294		-2.30*	-.553	.310		-1.78 ^A
	R ² =.087				R ² =.122				R ² =.158			
	F=18.25***				F=10.64***				F=7.07***			
	F Change=18.25***				F Change=5.17**				F Change=3.20**			

***p<.001, **p<.01, *p<.05, ^Ap<.10

II. Description of BARJ Services

a. Description and Examination of the Length of BARJ Services on Recidivism

Conventional wisdom suggests that length of intervention should contribute to mediating adverse outcomes such as drug and alcohol relapse or criminal reoffending. Longer lengths of services should promote more successful and sustained outcomes. However, there is empirical literature in the field of clinical studies and particularly in the area of delinquency research (see discussion in Lemmon, 2006) indicating that length of services is embedded with a variety of criminogenic risks (e.g. serious psychological diagnoses, ongoing incidents of child maltreatment, parental resistance to services, failure to comply to probation, etc.) that can easily distort the outcomes. The first measure of BARJ services examined the relationship between length of the intervention and the recidivism measures to determine the association and directionality.

Table 28 below, provides an aggregated distribution of cases collapsed into categories at six month service intervals. Length of services ranged from 4 to 128 months. Five outlier cases, cases

with greater than 72 months of service, were removed from the analysis to provide a more accurate measure of central tendency and dispersion. With the outliers removed, the average length of service was slightly over thirteen months (mean=13.37, s.d.=12.51). Even with removal of the outlier cases the distribution was considerably skewed (skewness=2.22). Approximately forty-two percent of the subjects (41.8%) received BARJ services from four to six months. The vast majority of these cases were informal adjustments, extended services, or consent decrees. Over seventy percent (71.1%) of the subjects received no more than twelve months of service. The remainder of the cases were under court supervision from one to six years. The distribution formed into three roughly equivalent categories; subjects receiving four to six months of BARJ services, subjects receiving seven to twelve months of services, and subjects receiving more than twelve months of services. The shape of the distribution allowed us to construct a categorical measure of length of BARJ services which aided in the examination of the bivariate relationships with measures of recidivism.

TABLE 28. Frequency Distribution of Total Months of BARJ Services

Values	Frequency	Valid Percent
<i>4 to 6 Months</i>	167	41.8%
<i>7 to 12 Months</i>	117	29.3%
<i>13 to 18 Months</i>	31	7.8%
<i>19 to 24 Months</i>	25	6.3%
<i>Over 24 Months</i>	60	15.0%
<i>Total</i>	400	100.0%

Table 29 below, provides the zero-order correlations on the total months of BARJ services, deleting outlier cases greater than 72 months (n=394), on the occurrence of arrests and the highest offense gravity score at 6, 12, 18, and 24 months after the completion of services. A consistent pattern of *positive* relationships were observed for both sets of recidivism measures. Total months

of BARJ services was marginally associated to the occurrence of arrest at 6 months ($r=.125, p<.05$) at 12 months ($r=.184, p<.001$), 18 months ($r=.130, p<.01$), and 24 months ($r=.177, p<.001$). Total months of BARJ services was marginally related to the highest offense gravity score at 6 months ($r=.114, p<.05$), 12 months ($r=.167, p<.01$), 18 months ($r=.108, p<.05$) and 24 months ($r=.165, p<.01$). Significant correlations were observed between the length of BARJ services and the recidivism measures but not in the expected directions. What the bivariate results suggest is that the longer the duration of services the greater the likelihood that subjects will be arrested and charged with more serious crimes. However, the converse of this statement is also true; meaning that short term services reduce the likelihood of being arrested and charged with more serious crimes.

TABLE 29. Zero-Order Correlations Total Months of BARJ Services on the Occurrence of Arrest and Highest Offense Gravity Scores at 6, 12, 18, and 24 Months

Values	Total Months of BARJ Services
<i>Occurrence of Arrest at 6 Mos.</i>	.125*
<i>Occurrence of Arrest at 12 Mos.</i>	.184***
<i>Occurrence of Arrest at 18 Mos.</i>	.130**
<i>Occurrence of Arrest at 24 Mos.</i>	.177***
<i>Highest OGS at 6 Mos.</i>	.114*
<i>Highest OGS at 12 Mos.</i>	.167**
<i>Highest OGS at 18 Mos.</i>	.108*
<i>Highest OGS at 24 Mos.</i>	.165**

$p<.001$ ***, $p<.01$ ** $p<.05$ *, $p<.10$ ^A

A further examination of these incongruent results was clearly in order. We expected length of services to produce an inverse relationship with recidivism, (i.e. longer services associated with less recidivism); but in fact, we observed the exact opposite. To start this line of inquiry we elaborated a set of trivariate models partialling out the effects of the total months of BARJ services on the 24 month recidivism measures (the most robust service/recidivism relationships) by

controlling on the most significant risk factor (violation of probation) for recidivism. The logic behind this analytical plan was that the length of BARJ services may be embedded with risk factors that reflect *both* the length of services *and* the presence of serious risk factors. In other words, subjects who received longer services presented more serious problems (i.e. violating probation, etc.) placing them a greater risk to recidivate. If the relationship between total months of BARJ services and the recidivism measures was eliminated or reversed its sign (from positive to negative) when controlling for violation of probation we would have evidence indicating that length of service was in fact tied to the presence of at least one of these criminogenic risks.

Partialling the length of BARJ services on recidivism relationships on a robust risk factor allowed us to consider three possible explanations. One, if the relationship was reversed (from positive to negative) we would have evidence to suggest that risk factors, like violation of probation, were embedded in the services we were trying to measure and that these risk factors distort the actual relationship. One implication of these findings would be that length of services is not as valid a measure of BARJ as we had originally assumed. Two, if the relationship disappeared when controlling for violation of probation (referred to as interpretation), we would have evidence that this intervening variable (violation of probation), mediates the actual relationship which is spurious. The implication in this case would be that our measure of BARJ services is valid; but that length of services has no effect on recidivism. Three, if the relationship remains the same, positive and significant (referred to as replication), then we would have cursory evidence indicating that subjects receiving short term services (i.e. four months, etc.) benefited from BARJ interventions in reducing the occurrence of arrests and the serious of offending twenty-four months after completion of services. Likewise, the opposite would be true. Longer-terms of services *are associated* with being arrested and committing more serious crimes. A possible explanation for this type of relationship

has been reported in a number of prominent studies on the effects of correctional (see discussion in Martinson, 1974) and social work practice (see also Fischer, 1973). These studies have indicated that unreliable and ineffective services will exacerbate offending, especially among higher risk offenders.

Table 30 below, presents the results of the partial correlation model examining total months of BARJ services on the occurrence of arrest at 24 months controlling for violation of probation. In this case, the bivariate relationship between length of BARJ services and occurrence of arrest at 24 months ($r=.177, p<.001$) was replicated (remained unchanged) when controlling for the effects of violation of probation ($r=.148, p<.01$). These trivariate results suggest that the relationship between length of BARJ services and occurrence of arrest is positive. Short term services reduced the likelihood of arrest at twenty-four months while long-term services increased the likelihood.

Table 31 below, presents the results of the partial correlation model examining total months of BARJ services on the highest offense gravity score at 24 months controlling for violation of probation. The same type of relationship was observed in this case as well. The bivariate relationship between length of BARJ services and the highest offense gravity score at 24 months ($r=.165, p<.01$) was replicated when controlling for the effects of violation of probation ($r=.115, p<.05$). The trivariate results suggest that this relationship is positive as well. Short term services reduced seriousness of offending at twenty-four months while long-term services increased the seriousness of offending.

TABLE 30. Partial Correlation Total Months of BARJ Services on the Occurrence of Arrest at 24 Months Controlling For Violation of Probation

Zero-Order Coefficients	1	2	3
<i>1 Occurrence of Arrest at 24 Mos.</i>	----		
<i>2 Total Mos. BARJ Services</i>	.177***	----	
<i>3 Violation of Probation</i>	.125*	.294***	----
Partial Coefficient			
<i>Violation of Probation</i>			
<i>1 Occurrence of Arrest at 24 Mos.</i>	----		
<i>2 Total Mos. BARJ Services</i>	.148**	----	

p<.001***, p<.01**, p<.05*, p<.10^A

TABLE 31. Partial Correlations Total Months of BARJ Services on Highest Offense Gravity Score at 24 Months Controlling For Violation of Probation

Zero-Order Coefficients	1	2	3
<i>1 Highest OGS at 24 Mos.</i>	----		
<i>2 Total Mos. BARJ Services</i>	.165**	----	
<i>3 Violation of Probation</i>	.193***	.294***	----
Partial Coefficient			
<i>Violation of Probation</i>			
<i>1 Highest OGS at 24 Mos.</i>	----		
<i>2 Total Mos. BARJ Services</i>	.115*	----	

p<.001***, p<.01**, p<.05*, p<.10^A

b. Description of BARJ Programs and Construction of the BARJ Program Index

Table 32 below, provides the frequency distributions and the recoded distributions of twenty-two BARJ programs in which the subjects completed or the victims and communities

participated in. The most commonly used programs with the highest percentage of subject completion and victim participation were curfew (93.5%), community service and random drug testing (81.2%), and victim notification services (69.9%). Three other programs had completion rates higher than fifty percent. This included victim awareness programs (54.5%), the victim restitution fund and school-based probation (53.4%). Three other programs reported moderate usage and included the use of victim impact statements (44.1%), completion of offender apology letters (35.1%), payment of restitution (33.8%), and other victim services (i.e. counseling, etc.) beyond notification (33.3%). The remaining programs had completion rates of less than twenty-five percent (e.g. victim offender mediation, 8.8%, youth aid panels, 5.8%, etc.). Some programs were not available to a substantial percentage of the subjects. For instance, youth aid panels were not available to roughly one-third (31.0%) of the subjects while victim offender mediation was not available to (27.8%) of the subjects. Consequently, less than ten percent of the sample completed these programs. Five other programs were not available to more than one-quarter of the subjects. Restitution programs were not available to nearly forty percent (39.3%) of the sample, youth aid panels to over thirty percent (31.1%), while victim offender mediation (27.8%) and intensive probation (26.6%) were not available to over twenty-five percent of the sample. The results indicate that there was a good deal of variation in the usage of BARJ programs. While some programs were used fairly extensively others were used infrequently or not available to a substantial percentage of the subjects. The low completion rates among a substantial number of BARJ programs (e.g. youth aid panels, victim offender mediation, intensive probation, electronic monitoring, non-traditional services, etc.) suggest inconsistencies in the implementation of the BARJ initiative.

Table 33 below, shows the variable loadings for the four BARJ program factors. Factor analysis identified four components of BARJ program. These included components for youth

accountability that included victim awareness (V117), restitution (V118), the victim restitution fund (V119), community service (V120), and residential placement (V131); non-traditional practices that included non-traditional partnerships (V133) and non-traditional services (V134); victim involvement that included victim notification (V114), victim services beyond notification (V115) and victim impact statements (V123); and, community protection that included electronic monitoring (V127) and house arrest (V128). A thirteenth variable, random drug testing (V126) was also included in the index but did not load on any of the four components. Eigenvalues for youth accountability (2.82), non-traditional practices (1.90), victim involvement (1.83), and community protection (1.39) components provided 66.1% of the explained variance on the extracted loadings.

TABLE 32. Frequency Distribution and Recodes of BARJ Program Variables

	Original Codes				Recoded			
	No	Yes	Omit	D/K	No	%	Yes	%
BARJ Programs								
<i>Youth Aid Panels</i>	251	23	124	1	376	94.2%	23	5.8%
<i>Victim Notification</i>	79	279	38	3	120	30.1%	279	69.9%
<i>Victim Services beyond Notification</i>	172	133	87	7	266	66.6%	133	33.3%
<i>Victim Offender Mediation</i>	252	35	111	1	364	91.2%	35	8.8%
<i>Victim Awareness</i>	158	217	21	2	181	45.5%	217	54.5%
<i>Restitution</i>	105	135	157	2	264	66.1%	135	33.8%
<i>Victim Restitution Fund</i>	86	213	94	6	186	46.6%	213	53.4%
<i>Community Service</i>	63	324	12	0	75	18.8%	324	81.2%
<i>School-Based Probation</i>	99	213	86	1	186	46.6%	213	53.4%
<i>CISP</i>	180	15	204	0	384	96.2%	15	3.8%
<i>Victim Impact Statements</i>	156	176	63	4	223	55.9%	176	44.1%
<i>Offender Apologies</i>	173	140	81	5	259	64.9%	140	35.1%
<i>Curfew</i>	18	373	8	0	26	6.5%	373	93.5%
<i>Random Drug Testing</i>	66	324	7	2	75	18.8%	324	81.2%
<i>Electronic Monitoring</i>	251	76	70	2	323	80.9%	76	19.0%
<i>House Arrest</i>	250	86	61	2	313	78.4%	86	21.6%
<i>Intensive Probation</i>	258	33	106	1	365	91.7%	33	8.3%
<i>Community-Based Placement</i>	267	40	91	1	359	89.9%	40	10.0%
<i>Residential Placement</i>	246	82	70	1	317	79.4%	82	20.6%
<i>Mental Health Placement</i>	280	20	97	1	378	95.0%	20	5.0%
<i>Non-Traditional Partnerships</i>	251	45	100	2	353	88.7%	45	11.3%
<i>Non-Traditional Services</i>	244	54	99	2	345	86.5%	54	13.5%

TABLE 33. Factor Analysis on BARJ Program Items

BARJ Program Components & Factors	Loadings
Component 1 (Youth Accountability)	
<i>Victim Restitution Fund</i>	.636
<i>Victim Awareness</i>	.632
<i>Residential Placement</i>	.556
<i>Restitution</i>	.530
<i>Community Service</i>	.481
Component 2 (Non-Traditional Practices)	
<i>Non-Traditional Partnerships</i>	.884
<i>Non-Traditional Services</i>	.863
Component 3 (Victim Involvement)	
<i>Victim Services beyond Notification</i>	.723
<i>Victim Notification</i>	.711
<i>Victim Impact Statements</i>	.653
Component 3 (Community Corrections)	
<i>House Arrest</i>	.560
<i>Electronic Monitoring</i>	.557
Cronbach's Alpha	.705

Removed *Random Drug Testing* for low loading <.4

c. Description of the Six Competency Development Dimensions and Construction of the Pro-Social/Moral and Life Skills Competencies Indices

Table 34 below, provides the frequency distributions of the six competency development dimensions. The dimensions with the highest successful completion rates were other treatment (67.5%) and academic skills (66.2%) programs. In fact, these were the only dimensions in which more than one-half of the subjects successfully completed at least one program. Furthermore, the other treatment program dimension was unspecified and likely included an array of correctional interventions that included any and all of the competency development dimensions as well as programs unrelated to competency development. Pro-social skills produced a successful completion rate of nearly fifty percent (46.5%). Still, less than one-half of the sample successfully completed a

program that featured pro-social skills development. Meanwhile, completion rates among the remaining three dimensions were exceptionally low. The program completion rates for the workforce development skills dimension was only twenty percent (20.0%), moral reasoning skills was (18.8%), and independent living skills was (11.0%). The uneven pattern of service completion is similar to the pattern of service completion observed among the BARJ programs. The descriptive results indicate that only one competency development dimension, academic skills, has been implemented in a fairly consistent manner while three of the dimensions, work force development, moral reasoning, and independent living have been decidedly under implemented.

Table 35 below, presents the variable loadings for the competency development factors. Factor analysis identified two specific components among the six competency development dimensions. These included a pro-social skills/moral development component and a life skills component. The first component consisted of pro-social and moral reasoning skills which had an Eigenvalue of 1.88 (hereon referred to as *Pro-Social/Moral Competency*). The second component included the variables academic skills, workforce development skills, independent living skills, and other treatment program services with an Eigenvalue of 1.05 (hereon referred to as *Life Skills Competency*). Both components accounted for 48.8% of the explained variance on the extracted loadings. These factors were created by varimax rotation in order to obtain a clearer pattern of the loading and simplify the interpretation.

TABLE 34. Frequency Distribution of the Six Competency Development Dimensions

Competency Development Dimensions	No	%	Yes	%
<i>Pro-Social Skills</i>	214	53.5%	186	46.5%
<i>Moral Reasoning Skills</i>	325	81.2%	75	18.8%
<i>Academic Skills</i>	135	33.8%	265	66.2%
<i>Work Force Development Skills</i>	320	80.0%	80	20.0%
<i>Independent Living Skills</i>	356	89.0%	44	11.0%
<i>Other Treatment Programs</i>	130	32.5%	270	67.5%

TABLE 35. Factor Analysis on Competency Development Dimensions

Competency Development Components & Factors	Loadings
Component 1 (Pro-Social/Moral Competency)	
<i>Pro-Social Skills</i>	.677
<i>Moral Reasoning Skills</i>	.752
Component 2 (Life Skills Competency)	
<i>Academic Skills</i>	.728
<i>Work Force Development Skills</i>	.570
<i>Independent Living Skills</i>	.533
<i>Other Treatment Programs</i>	.639
Cronbach's Alpha	.534

d. Description of BARJ Service Outcomes

Table 36 below, presents the frequency distributions of the productive, connected, and law abiding outcome items. The BARJ service outcomes that measured productivity among the sample varied in terms of success. Not all BARJ outcomes were measurable for the entire sample of 400 subjects. There were instances in which some outcomes were just not known for juveniles and there were some instances in which outcomes are not relevant to a juvenile because the court did not order such services as part of the disposition (i.e. restitution). The majority of the subjects in the sample were not living independently (96.8%), in fact only twelve (3.2%) of the juveniles in this study were living on their own. In comparison, most of subjects in the sample (96.4%) were currently attending school, an alternative education program, a GED program, or had earned a diploma or GED. Few of the juveniles in our sample (8.1%) had been accepted to or were currently attending a post-secondary vocational training program or an institution of higher learning. Full-time or part-time employment was also not common among the sample (29.3%).

Reparations were not ordered by the court for many juveniles in this study, as reflected by the valid numbers of no and yes responses for the BARJ service outcomes of community service hours completed, restitution paid in full, and fees or fines paid in full. For example, community service was ordered by the court for 332 of the 399 valid cases in the sample. Almost all of these juveniles, 326 (98.2%), completed their court ordered community service. Community services was not ordered in (n=66) cases. Approximately one-half of the sample (n=199) were not ordered to pay restitution. However in Allegheny County, fees and fines were ordered in lieu of restitution and 67 subjects paid the full amount of their fees and fines. Approximately three-quarters of the 200 juveniles (75.5%) who were ordered to pay restitution paid the full amount. As previously mentioned, fees and fines were only ordered by Allegheny County Juvenile Court. Of the (n=78) valid cases in which fees and fines were ordered, (85.9%) of the subjects paid in full. Fees and fines were not ordered in (n=21) cases.

Patterns of connectivity also varied among the subjects in this study. Only a few juveniles (11.1%) were found to be engaged with a mentor at the end of their court supervision. A total of 104 juveniles in the sample (28.1%) were identified as being involved in either clubs or extra-curricular activities at school. Involvement in clubs or other community groups was identified for 358 of the 400 subjects in the study. Ninety-one of these juveniles (25.1%) were involved with clubs or other community groups at the end of their court supervision. Involvement with non-delinquent peer groups was determined for 354 out of 400 juveniles in this study. Almost two-thirds of these 354 juveniles (62.7%) were involved with a positive peer group in the community. The outcome of being connected to church services was known for 322 juveniles in the study. Involvement with church groups (14.0%) was not commonplace among the sample. However, most subjects were reported to have a positive and supportive home

environment (85.3%), or had positive relationships with teachers, employers, and other community members (83.0%) at termination of court services.

Of the three categories of BARJ service outcomes, law abiding behaviors were the most prevalent among this group of juveniles. This supports the findings reported in the regression models in which there were very few significant relationships explaining recidivism among this sample of juvenile delinquents. In effect, these were not youths that were plagued with chronic delinquent behavior. Most of these juveniles did not recidivate during the last six months of court supervision (91.0%), in fact, most did not recidivate at all while under court supervision during the study period (77.7%). Moreover, the majority of the juveniles in this study did not violate probation while under court supervision (72.6%). Almost all of the sample remained drug free during the last three months of court supervision (95.8%) and successfully completed court supervision (92.0%). Approximately half of the sample successfully completed at least one clinical program while under court supervision (50.3%). What was noteworthy among the law abiding BARJ service outcomes was how few of the juveniles in the sample successfully completed one the Blueprints for Violence Prevention Programs (4.5%).

TABLE 36. Frequency Distributions of the Productive, Connected, and Law Abiding Outcomes

BARJ Service Outcomes	No	%	Yes	%	Total	Not Ordered
Productive Outcomes						
<i>Living Independently</i>	365	96.8%	12	3.2%	377	
<i>Attending /Graduated High School</i>	14	3.6%	379	96.4%	393	
<i>Attending College/Trade School</i>	340	91.9%	30	8.1%	370	
<i>Employed</i>	270	70.7%	112	29.3%	382	
<i>Community Services Hours Completed</i>	6	1.8%	326	98.2%	332	66
<i>Restitution Paid in Full</i>	49	24.5%	151	75.5%	200	199
<i>Fees and Fines Paid in Full*</i>	11	14.1%	67	85.9%	78	21
Connected Outcomes						
<i>Mentoring</i>	344	88.9%	43	11.1%	387	
<i>School Extra-Curriculars or Clubs</i>	266	71.9%	104	28.1%	370	
<i>Community Clubs</i>	268	74.9%	90	25.1%	358	
<i>Non-Delinquent Peer Group</i>	132	37.3%	222	62.7%	354	
<i>Church Groups</i>	277	86.0%	45	14.0%	322	
<i>Positive Home Environment</i>	58	14.7%	336	85.3%	394	
<i>Positive Relations with Teachers, etc.</i>	65	17.0%	318	83.0%	383	
Law Abiding Outcomes						
<i>Never Arrested</i>	89	22.3%	310	77.7%	399	
<i>Not Arrested in Last 6 Months</i>	36	9.0%	362	91.0%	398	
<i>Never Charged with VOP</i>	109	27.4%	289	72.6%	398	
<i>Drug Free Screening in Last 3 Months</i>	16	4.2%	369	95.8%	385	
<i>Completed a Blueprint Program</i>	364	95.5%	17	4.5%	381	
<i>Completed a Clinical Program</i>	194	49.7%	196	50.3%	390	
<i>Successfully Completed Supervision</i>	32	8.0%	367	92.0%	399	

* Allegheny County only

III. Examination of the Effects of BARJ Services on Recidivism

Examination of the effects of BARJ services on recidivism consisted of two sets of regression analyses. These included two logistic models that examined occurrence of rearrest (arrest/no arrest) for a juvenile or an adult offense at six and twenty-four months after case closing; and, two ordinary least squares (OLS) models that examined the most serious arrest offense as

measured by the offense gravity score at the six and twenty-four month intervals. Each model included specific control variables drawn from the lists of demographic factors, ecological risks, prior delinquent history items, the seriousness of the offense that prompted BARJ services, and recursive risk items. The control variables included in the models were either significantly correlated with the recidivism measures or approached significant with p values less than .10. Each model also included the 13 item BARJ Program Index, the Pro-Social/Moral Competency Factor, and the Life Skills Competency Factor that served as the independent variables in the study.

Logistic Regression Models Explaining Occurrence of Rearrest

Tables 37 and 38 below, present the results of the two logistic regression models that examine the direct effects of selected risk factors and BARJ services on whether or not the juveniles recidivated once they were no longer under court ordered supervision. These logistic models analyze the effects of risk factors and BARJ services recidivism at 6 months and 24 months from release of court supervision.

Table 37 presents the results of the logistic regression model on whether or not juveniles recidivated at six months. The full model contained twelve predictors and was statistically significant (Model $X^2 = 39.870$, $p < .001$). The Cox and Snell R^2 (.095) and Nagelkerke R^2 (.196) results indicated improvement in the predictability of recidivism with six months with the inclusion of the twelve predictors. The full model correctly predicted approximately ninety percent (90.3%) of the expected values. The -2 Log Likelihood Statistic (constant only was 264.433 and was reduced to 224.564 in the full model with a Hosmer and Lemeshow X^2 value of 5.693 (df=8, $p = .682$) indicating a good fit between the expected and observed values. Three variables were identified as being significant predictors of arrest at six months and one variable

approached statistical significance as a predictor. The behavioral risk index was a significant factor that predicted recidivism at six months ($b=.218$, $S.E.=.096$, $Wald=5.15$, $p<.05$, $Exp(B)=1.24$), such that the presence of behavioral risks increased the odds of a new arrest by 24.4%. The index for peer group risks approached statistical significance ($b=.434$, $S.E.=.233$, $Wald=3.46$, $p<.10$, $Exp(B)=1.54$). The presence of peer group risks increased the odds of recidivism by 54.4%. Violation of probation was the most robust predictor, in subjects who violated probation while under court supervision had odds of a new arrest that were almost 4 times more likely than subjects who did not violate probation ($b=1.342$, $S.E.=.520$, $Wald=6.66$, $p<.01$, $Exp(B)=3.83$). In this logistic model, the competency development strategies of pro-social skills and moral reasoning were found to significantly reduce the odds of a new arrest ($b=-.395$, $S.E.=.200$, $Wald=3.88$, $p<.05$, $Exp(B)=0.67$). Subjects who received the combination of pro-social and moral reasoning skills had an odds of rearrest that were 32.7% less than subjects who did not receive these services. However, the BARJ Program and Life-Skills Competency Indices did not produce significant direct effects.

Table 38 presents the results of the logistic regression model explaining recidivism at twenty-four months. We found that none of the predictors were significant factors in explaining re-arrest. It appears that the effects of BARJ services on the occurrence of arrest dissipate over time.

TABLE 37. Full Logistic Regression Model Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, Recursive Measures and BARJ Services on Occurrence of Rearrest at 6 Months (N=400)

Variables	b	S.E.	Wald	Exp(B)	%
<i>Gender</i>	0.684	0.490	1.96	1.98	98.2
<i>Behavioral Risks</i>	0.218	0.096	5.15*	1.24	24.4
<i>Academic Risks</i>	-0.112	0.074	2.25	0.89	-10.6
<i>Peer Group Risks</i>	0.434	0.233	3.46 ^A	1.54	54.4
<i>Community Risks</i>	0.044	0.040	1.17	1.05	4.5
<i>Prior Referrals</i>	-0.098	0.268	0.00	0.91	-9.3
<i>Prior Adjudications</i>	0.355	0.302	1.37	1.43	42.6
<i>Violation of Probation</i>	1.342	0.520	6.66**	3.83	282.8
<i>Rearrest Charge OGS</i>	0.056	0.068	0.67	1.51	50.7
<i>BARJ Program Index</i>	0.068	0.083	0.67	1.07	7.0
<i>Life Skills Index</i>	-0.183	0.219	0.71	0.83	-16.8
<i>Pro-Social/Moral Index</i>	-0.395	0.200	3.88*	0.67	-32.7
<i>Constant</i>	-4.612	0.715	41.64***	0.01	

-2 Log Likelihood =224.564
Model Chi Square =39.870
df =12
Cox & Snell R²=.095
Nagelkerke R²=.196
Hosmer-Lemeshow Sig.=.682
% Correct=90.3

Note: b =log odds; Exp(B) =odds ratio;

% =percent change in simple odds, (calculated as Exp(B) -1).

***p<.001, **p<.01, *p<.05*, ^Ap<.10

TABLE 38. Full Logistic Regression Model Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, Recursive Measures and BARJ Services on Occurrence of Rearrest at 24 Months (N=400)

Variables	b	S.E.	Wald	Exp(B)	%
<i>Race</i>	0.349	0.327	1.14	1.42	41.8
<i>Behavioral Risks</i>	0.084	0.062	1.85	1.09	8.7
<i>Peer Group Risks</i>	-0.053	0.162	0.11	0.95	-5.2
<i>Community Risks</i>	0.023	0.034	0.45	1.02	2.3
<i>Prior Referrals</i>	0.159	0.181	0.77	1.17	17.3
<i>Prior Adjudications</i>	0.144	0.228	0.40	1.15	15.4
<i>Violation of Probation</i>	0.426	0.403	1.12	1.53	53.1
<i>Rearrest Charge OGS</i>	0.021	0.056	0.14	1.02	2.1
<i>BARJ Program Index</i>	0.092	0.058	2.50	1.10	9.6
<i>Life Skills Index</i>	-0.052	0.146	0.12	0.95	-5.1
<i>Pro-Social/Moral Index</i>	0.203	0.127	2.53	1.22	22.5
<i>Constant</i>	-2.368	0.405	34.26***	0.09	
-2 Log Likelihood =401.741					
Model Chi Square =34.361					
df =8					
Cox & Snell R ² =.085					
Nagelkerke R ² =.126					
Hosmer-Lemeshow Sig.=.860					
% Correct=76.0					

Note: b =log odds; Exp(B) =odds ratio;

% =percent change in simple odds, (calculated as Exp(B) -1).

***p<.001, **p<.01, *p<.05*, ^Ap<.10

OLS Regression Models Explaining Seriousness of Rerrrest

Multivariate models were also estimated on the seriousness of rearrest, which was measured by the offense gravity score of the post-BARJ services lead arrest charge. Tables 39 and 40 below, provide the results of the ordinary least squares regression models that examined these effects. The variables in these models were not entered in stepwise fashion, but simply the full model was estimated on the highest offense gravity scores for arrests at six and twenty-four months.

Table 39 presents the results of the OLS model predicting seriousness of the offense that a subject was arrested for within six months of release from court supervision. The OLS regression model was significant ($F=4.43$, $p<.001$) and explained roughly twelve percent of the variance ($R^2=.124$) in the dependent variable. Three predictors including violation of probation, the behavior risk index, and age at initial referral produced direct effects. Violation of probation was the strongest predictor of seriousness of an arrest within six months ($b = 1.05$, $S.E.=.238$, $Beta=.23$, $p<.001$), with individuals who violated probation while under court supervision being significantly more likely to be rearrested within six months for an offense with a higher offense gravity score. The behavioral risk index also predicted more serious arrest charges ($b=.074$, $S.E.=.033$, $Beta=.15$, $p<.05$). As behavioral risk scores increased, so did the likelihood of being arrested for a more serious offense within six months of release from court supervision. Age at initial referral significantly influenced the likelihood for an arrest on a more serious charge ($b=.085$, $S.E.=.037$, $Beta=0.12$, $p<.05$) as well, such that older subjects arrested within six months were charged with more serious offenses. Gender ($b=.251$, $S.E.=.146$, $Beta=.09$, $p<.10$), approached significance as a predictor of the seriousness of arrest charges with males being more likely to be arrested within six months for an offense with a higher OGS. The Pro-Social/Moral Reasoning Competency Index ($b=-0.117$, $S.E.=.067$, $Beta=-.09$, $p<.10$) approached significance suggesting that subjects who successfully completed pro-social and moral reasoning skills programs were less likely to be charged with a serious offense at six months in spite of the presence of these and other risk factors. However, the other BARJ service indicators (e.g. the BARJ Program and Life Skills Competency Indices) did not significantly mediate these effects.

Table 40 presents the results of the final model that analyzed the seriousness of the offense for an arrest at twenty-four months. The OLS regression model was significant ($F=5.679$,

p<.001) and explained approximately seventeen percent of the variance ($R^2=.165$) in the dependent variable. Three predictors were significant in the model and included violation of probation, gender, and race. These three risk factors, violation of probation ($b=1.267$, $S.E.=.422$, $Beta=.16$, $p<.01$) gender ($b=.867$, $S.E.=.262$, $Beta=.16$, $p<.01$), and race ($b=.754$, $S.E.=.302$, $Beta=.15$, $p<.01$) were comparable in strength. African-Americans, males, and violators were more likely to be arrested for more serious crimes than Whites, females and non-violators respectively. None of the BARJ service indices were significant in mediating the effects of these risks on the seriousness of the offense at twenty-four months.

TABLE 39. Full Ordinary Least Squares Regression Model Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, Recursive Measures and BARJ Services on Highest Offense Gravity Score at 6 Months (N=388)

Variables	b	S.E.	Beta	t
<i>Gender</i>	0.251	0.146	0.09	1.72 ^A
<i>Race</i>	0.128	0.170	0.05	0.75
<i>Behavioral Risks</i>	0.074	0.033	0.15	2.24*
<i>Academic Risks</i>	-0.027	0.025	-0.07	-1.08
<i>Peer Group Risks</i>	0.077	0.087	0.05	0.89
<i>Community Risks</i>	0.013	0.018	0.05	0.72
<i>Age at Initial Referral</i>	0.085	0.037	0.12	2.30*
<i>Violation of Probation</i>	1.050	0.238	0.23	4.41***
<i>Rearrest Charge OGS</i>	-0.001	0.032	0.00	-0.03
<i>BARJ Program Index</i>	0.027	0.029	0.06	0.93
<i>Life Skills Index</i>	-0.048	0.075	-0.04	-0.64
<i>Pro-Social/Moral Index</i>	-0.117	0.067	-0.09	-1.75 ^A
<i>Constant</i>	-1.728	0.628		-2.76*
	$R^2 = .124$			
	$F = 4.433***$			

***p<.001, **p<.01, *p<.05*, ^Ap<.10

TABLE 40. Full Ordinary Least Squares Regression Model Representing Effects of Selected Demographic Factors, Ecological Risk Indices, Delinquent History, Recursive Measures and BARJ Services on Highest Offense Gravity Score at 24 Months (N=388)

Variables	b	S.E.	Beta	t
<i>Gender</i>	0.867	0.262	0.16	3.31**
<i>Race</i>	0.754	0.302	0.15	2.50**
<i>Behavioral Risks</i>	0.080	0.057	0.09	1.39
<i>Academic Risks</i>	-0.025	0.043	-0.03	-0.59
<i>Community Risks</i>	0.042	0.031	0.08	1.35
<i>Prior Referrals</i>	0.086	0.180	0.03	0.48
<i>Prior Adjudications</i>	0.278	0.231	0.08	1.21
<i>BARJ Lead Charge OGS</i>	-0.015	0.046	-0.02	-0.33
<i>Violation of Probation</i>	1.267	0.422	0.16	3.00**
<i>Rearrest Charge OGS</i>	-0.030	0.057	-0.03	-0.53
<i>BARJ Program Index</i>	0.053	0.053	0.06	1.00
<i>Life Skills Index</i>	-0.018	0.133	-0.01	-0.13
<i>Pro-Social/Moral Index</i>	0.170	0.120	0.07	1.42
<i>Constant</i>	-0.658	0.386		-1.71 ^A
	R ² =.165			
	F =5.679***			

***p<.001, **p<.01, *p<.05*, ^Ap<.10

CONCLUSIONS

The current study addressed three research questions which included:

1. Who are the at-risk youths that receive BARJ services in Pennsylvania?
2. What are the actual BARJ services that these at-risk youths received?
3. How effective are BARJ services in mediating the effects of demographic, ecological risks, prior delinquent history, and compliance with court supervision on recidivism?

In addressing the first research question – who are the at-risk youth that receive BARJ services – we conducted a descriptive analysis of the study sample. The juveniles that received BARJ services were predominantly male (74%), white (68%), non-Hispanic (93%), and middle/upper income (62%). This is an atypical sample of what would be expected for juvenile offenders in Pennsylvania. For instance, whites comprised 56.7% of all juvenile dispositions in Pennsylvania for 2007, while in the current study whites comprised 68.4% of the sample (See JCJC Dispositional Report, 2008). In regard to ecological risks, the study sample overall exhibited less than expected psychological, behavioral, family, academic, peer group, and community risks. For instance, the majority of subjects had not been diagnosed or treated for one of the four identified mental health diagnoses. In terms of behavioral risk, over half (54.3%) of the subjects exhibited four or fewer risk taking behaviors (out of eleven possible risk factors). Family risk factors were also low for this sample, in that approximately sixty percent of the subjects were exposed to only three or fewer family risks (out of a possible thirteen family risk factors). Almost two-thirds (62.9%) of the at-risk youth experienced four or fewer academic risk factors with a possibility of experiencing a total of thirteen academic risk factors. More than half of the sample presented no (zero) peer group risks. There was a possibility for juveniles to be

exposed to fifteen different community risk factors; however, almost two-thirds of the sample (64.2%) was exposed to no more than four risks at the community level.

Juveniles in the study typically did not have extensive delinquent histories, for instance, approximately 75% of the subjects had no prior referrals. In addition, 90% of these at-risk youth had no prior adjudications, and almost 96% had no prior placements. Furthermore, the modal age of initial referral was seventeen, indicating that the majority of these youths were delinquency-free through most of their adolescence. In terms of seriousness of the lead charge over 76% of the sample was charged with only misdemeanor-level offenses. The most common offense categories among these juveniles included simple assault, theft by unlawful taking, possession of a small amount of marijuana, and retail theft. The most common dispositions were informal adjustments, consent decrees, and probation. The vast majority of the subjects did not violate probation (91%) or were rearrested (82%) while under court supervision.

The recidivism rate for the sample was low, with over 75% of the juveniles remaining crime free after twenty-four months. Relative to other states in the country, this two-year recidivism rate is remarkably low. Studies from other states reported higher twelve-month rearrest rates than our sample of juvenile offenders at twenty-four months. Twelve month rearrest rates for juveniles were reported as much higher by other states - South Carolina 46.6%, Virginia 49.4%, Texas 54.9%, New York 57.0%, Florida 60.0%, Delaware 69.0%, and Hawaii 77.7% (Virginia Department of Juvenile Justice, 2005).⁶ The extent that these other states utilize restorative justice practices is uncertain. However, in Maine where their juvenile justice system also employs restorative practices, a cohort study reported a two-year adjudication rate ranging from 24% to 31% (Maine Department of Corrections, Division of Juvenile Services, 2007). The

Maine study restricted recidivism to adjudications for only juvenile delinquency, while our study measured recidivism as rearrest for both juvenile delinquency and adult offending.

The second research question focused on identifying the BARJ services provided to the at-risk youths in the study. We found that many BARJ programs were not implemented in a consistent manner, while others were. For example, only 5.8% of the subjects successfully completed youth aid panels, 8.8% completed victim offender mediation, whereas 81.2% completed community service. The inconsistency in provision of services became more evident in our review of competency development programs. For example, less than half of the subjects (46.5%) successfully completed a pro-social skills program, while only 18.8% of the sample completed a moral reasoning skills program. This lack of consistency made it difficult to discern significant relationships that may actually exist between these programs and recidivism. It is unlikely that we can determine effects in any program where less than half of the subjects completed services. An acceptable standard for establishing the reliability of services would be a seventy percent completion rate or better. Since there is a lack of reliability in the provision of services measurement of these constructs remains elusive.

The third question involved an examination of BARJ programs' ability to reduce the risk of reoffending. Logistic regression analysis was conducted on whether or not subjects recidivated following court supervision and the reception of BARJ services. Two separate models were estimated – one for occurrence of rearrest within six months and one for occurrence of rearrest at twenty four months. At six months, factors that were found to have a significant impact on recidivism included behavioral risk factors, violation of probation while receiving BARJ services, and the BARJ services of pro-social and moral reasoning skills. Both behavioral risk factors and violating probation while under supervision significantly increased the odds of

recidivism within six months, while receiving the BARJ services of pro-social and moral reasoning skills significantly decreased the odds of recidivism. These factors only had short-term effects on our sample, in that none of these variables had a significant effect on recidivism at twenty-four months. These findings are consistent with other studies reported Nugent's (2003) meta-analysis who also reported an absence of sustained effects. Restorative practices appear to reduce recidivism initially but group differences disappear over time.

Further regression analysis (OLS) was conducted on recidivism at both six and twenty-four months, but this analysis focused on the seriousness of the offense as measured through the offense gravity score for the rearrest offense. At six months, behavioral risk factors, age at initial referral, and violation of probation all were significantly related to the seriousness of the rearrest offense. Subjects who displayed behavioral risks, were older, and violated probation while under court supervision were more likely to commit a more serious offense within six months. Pro-social and moral reasoning skills approached statistical significance, indicating that these BARJ services reduced the severity of a new offense within six months of release from court supervision. At twenty-four months, only males, non-whites, and juveniles who violated probation while under court supervision were more likely to be rearrested for a more serious offense.

Additional analysis was conducted that compared juveniles who recidivated after receiving BARJ services to juveniles who did not recidivate. The purpose of this analysis was to determine if these two groups significantly differed from each other based on demographic factors, ecological risks, prior delinquency, seriousness of offending, and recursive risks. The results found that recidivists were more likely to be African-American, experience greater behavioral and community risks, have more prior referrals and adjudications, have violated

probation while under court supervision, and had been rearrested for an offense with a higher offense gravity score. Moreover, additional comparisons on BARJ services indicate that recidivists received significantly longer services and more services. In terms of competency development services, a significantly greater percentage of recidivists completed pro-social, moral reasoning, academic, and other treatment programs. These results suggest that more risk factors were embedded in the treatment programs that were offered. Namely, the recidivists were more at risk to committing crime and as a result received more services.

TABLE 41. Comparisons of Non-Recidivist and Recidivist Groups on Percentages and Means on Demographic Factors, Ecological Risks, Prior Delinquency, Seriousness of Offending, and Recursive Risks

Variables & Values	Non-Recidivists	Recidivists
Demographic Factors		
<i>Males</i>	71.7%	80.0%
<i>African-Americans</i>	25.8%	41.2%***
<i>Low Income</i>	35.8%	41.0%
Ecological Risks		
<i>Psychological Risks</i>	0.74 (1.04) ^b	0.75 (.925)
<i>Behavioral Risks</i>	4.07 (2.66)	5.17 (2.54)***
<i>Family Risks</i>	3.57 (2.97)	3.66 (3.02)
<i>Academic Risks</i>	3.82 (3.12)	4.37 (3.19)
<i>Peer Group Risks</i>	0.65 (.834)	0.84 (.918) ^A
<i>Community Risks</i>	3.67 (4.37)	5.16 (5.05)**
Prior Delinquency		
<i>Age at Initial Referral</i>	14.99 (1.73)	14.90 (1.83)
<i>Prior Referrals</i>	0.32 (.805)	0.66 (1.09)**
<i>Prior Adjudications</i>	0.13 (.536)	0.38 (.982)*
BARJ Referral Information		
<i>BARJ Lead Charge OGS</i>	3.28 (2.58)	3.74 (2.58)
Recursive Risks		
<i>Violation of Probation</i>	6.7%	16.0%**
<i>Rearrest Charge OGS</i>	0.58 (1.90)	1.23 (2.58)*

***p<.001, **p<.01, *p<.05*, ^Ap<.10

^b (standard deviation)

TABLE 42. Comparisons of Non-Recidivist and Recidivist Groups on Length of BARJ Services and BARJ Program Index Score Means and Percentages of Successful Completions on the Six Competency Development Dimensions

Variables & Values	Non-Recidivists	Recidivists
<i>Length of BARJ Services in Months</i>	12.10 (11.17)	17.24 (15.35)**
<i>BARJ Program Index Score</i>	5.05 (2.61) ^b	6.33 (2.45)***
<i>Pro-Social Skills</i>	41.3%	62.0%***
<i>Moral Reasoning Skills</i>	15.7%	28.0%**
<i>Academic Skills</i>	63.0%	76.0%*
<i>Work Force Development Skills</i>	19.3%	22.0%
<i>Independent Living Skills</i>	9.7%	15.0%
<i>Other Treatment Programs</i>	64.7%	76.0%*

***p<.001, **p<.01, *p<.05*, ^Ap<.10

^b (standard deviation)

RECOMMENDATIONS

Based on the results of the study we have submitted seven (7) recommendations for your consideration. These recommendations include:

1. Employ experiments or quasi-experiments along with other design features in future studies of program effects.

The purpose of the current study was to explore the conditions under which BARJ services mediated the effects of risk factors on recidivism. This was a question with a specific conceptual and methodological intent. A meaningful examination of Pennsylvania's BARJ Model (or any program for that matter) cannot be reduced to an either/or inquiry determining whether the programs have been effective or not; but, rather as contextual one that explores the conditions under which programs are more (or less) likely to be effective. For this reason we included sets of control variables such as demographics, ecological risks, prior delinquent history, serious of the offense, and recursive factors to study the effects of BARJ services in the context of these risks.

The spike in serious juvenile crime in the late 1980s that extended into the mid 1990s prompted passage of the ACT 33 legislation establishing what has become know as the Balanced Approach Restorative Justice (BARJ) Initiative. Implemented as part of 1996 the ACT 33 legislation, which was essentially a retributive law, BARJ emphasized a community-based approach to juvenile services. However, passage and statewide implementation of ACT 33 precluded the possibility of employing an experimental design that would have offered a more straightforward answer to questions regarding effectiveness of the BARJ initiative. Confounding this key research design problem, the restorative justice model is a sufficiently vague idea that even now continues to develop in a diverse and inductive fashion. The very nature of restorative

practices invites serious reliability and construct validity problems that beleaguer efforts to provide definitive answers about program effectiveness. The conceptual and methodological issues mentioned here have much to do in explaining the paucity of outcome-based studies on restorative justice practices. For this reason, the current study was exploratory in nature and serves as a guide for future inquiry on this topic.

To offset the built-in limitations in doing an ex-post facto evaluation we included three key design features in this study. First, we employed a multi-stage cluster sampling strategy in which we identified and selected the four counties judged to be providing a comprehensive array of BARJ services. Using a purposive method in the first stage of sampling improved our chances of identifying a set of reliable services. The second stage of sampling employed the stratified random sampling of (n=100) cases from each of the four participating counties with the requirement that each case had received an ample length of services to fairly examine the effectiveness of the interventions. The samples were randomly selected from the population of all closed cases from each of the selected counties in the 2007 Pennsylvania Juvenile Court Dispositional data base located at the Center for Juvenile Justice Training and Research at Shippensburg University. This strategy eliminated any possibility of selection bias.

A second feature of the design involved the collection of data on individual (psychological and behavioral) and environmental risk factors that were used as control variables in each of the explanatory models of offending. By operationalizing these variables as dichotomous (yes/no) measures we created an efficient and valid way to collect and construct the six ecological risk indices. These indices provided consistent explanations of the key risks associated with subjects' delinquent and criminal behaviors. This type of data is consistent with

the evidence-based practice approach that is quantifying the youths' level of risk on these same dimensions (e.g. psychological, behavioral, family, academic, peer group, and community).

The findings in the current study indicated that certain demographic factors including race and gender, ecological risks particularly higher behavioral index scores, and violation of probation produced direct effects on post-service recidivism. There was additional evidence to suggest that demographic factors including race and social class are associated with higher community risk scores that may likely produce indirect effects on recidivism as well. This design feature is supported by a number of current studies (see discussion in Bergseth & Bouffard, 2007; De Beus & Rodriguez, 2007; Maxwell & Morris, 2001) reporting the effects of individual and environmental risk factors on restorative service outcomes. We recommend that data on ecological risks continue to be included in future research designs.

The third design feature involved the use of probation officers from the participating counties as our data collectors. Since the county probation officers were very familiar with the cases and agency records we vastly improved our chances of collecting comprehensive information on each case. This was extremely important since our survey included over two hundred variables per case. More importantly, most of our data collectors are graduates of the JCJC Weekend Masters Program. These graduates were extremely knowledgeable of research methods based on their course work and practicum studies. They were an invaluable resource in providing feedback on design issues and in the collection of a vast amount of data in a very timely fashion. The Juvenile Court Judges' Commission's investment in the education of the Weekend Masters graduates paid major dividends in the successful completion of this study. Policymakers are urged to include JCJC Weekend Masters graduates and students to participate (e.g. consulting on design issues, collecting and analyzing data, etc.) in future studies.

Nevertheless, our inability to employ an experimental design limited our capacity to draw any definitive conclusions about the effects of the BARJ services on youth recidivism.

Interestingly, higher program effect sizes have been reported (Bergseth & Bouffard, 2007; Bonta et al., 2002; Bradshaw & Roseborough, 2005; Nugent, et al., 2003) in restorative evaluations that have employed stronger methodological safeguards, particularly studies employing experimental and quasi-experimental designs; while smaller effect sizes have been reported in studies employing weaker methodologies.

We recommend that when policymakers consider implementing other statewide initiatives an experimental or quasi-experimental research design be built in at the onset. Cases can be selected at random and services implemented in a staggered fashion using time-series designs. Using this type of approach, comparison groups can be provided the services at a later date and then serve as the experimental groups in the next study. This type of approach can address some internal and external validity issues evident in the current study.

2. Perform county specific evaluations to address reliability issues.

One of the limitations in statewide evaluations is the tendency to examine the system as a whole while overlooking specific county programs. While we attempted to address this problem by collecting data on sixty-nine specific competency development programs run in the four counties we have yet to analyze this data in detail. Even though the four counties (Allegheny, Cumberland, Lancaster, and Mercer) were selected because of common features, particularly the comprehensive array of BARJ services that each provided there was enough variation between the counties to effectively reduce effects that might have existed. The solution is to further analyze the data on each county department which can effectively isolate specific programs (i.e.

Aggression Replacement Therapy in Allegheny County, etc.). If effects can be identified from the data we further recommend that more in-depth evaluations be performed.

3. Examine other BARJ service outcomes.

In this study, we captured descriptive data on three domains of BARJ services including productive, connected, and law abiding outcomes (see Table 36). This data suggests that BARJ services may have a positive association with school attendance, family, peer group, and school relations along with reducing deviancy. These results are promising and warrant further examination on these and other outcome measures (i.e. victim satisfaction, etc.) that were not addressed in the current study.

4. Identify a limited set of BARJ programs and implement them in comprehensive manner.

There needs to be greater precision in the implementation of services. The data indicates that many of these programs were not being used consistently enough to warrant an evaluation. In terms of research design, the inclusion of the low-use programs reduces the chance of finding effects that may, in fact, exist. It is recommended that county administrators exclude programs (e.g. intensive probation, community-based placements, etc.) with low rates of implementation from their BARJ compendium of programs. These programs can certainly be used on a cases-by-case basis. Administrators can then identify sets of programs with high referrals rates and emphasize those programs as the core of their county's BARJ initiative. This is currently being done in select manner with programs like community service (with an 81.2% completion rate) or victim notification (with a 69.9% rate), even restitution (with a 33.8% rate) which may likely be employed with certain types of youths (i.e. property offenders) while excluding others (i.e. drug offenders). Our hunch is that departments have a good intuitive knowledge about programs that are effective. Departments simply need to insure that these programs are provided to larger

numbers of the youths. We now have empirical support that competency development programs featuring pro-social and moral reasoning skills produced short-term effects. Programs that feature these domains should definitely be included in compendium of BARJ services.

5. Target BARJ services to specific youth offender populations.

The findings of the study indicate that low-risk, first time offenders are particularly aided by pro-social and moral reasoning skills programs. The non-recidivists in the study experienced fewer ecological risks, had less prior delinquency, and made a better adjustment to court supervision. These findings are consistent with Rodriguez's (2007) quasi-experimental study reporting that first-time offenders in restorative programs were less likely to reoffend than chronic offenders in restorative programs even though the effects were mediated by other risk factors.

The data further suggests that they needed shorter lengths of service. This was confirmed in our partial correlation analyses (see Tables 30 and 31) that replicated the relationship between length of BARJ services and both measures of recidivism partialling on violation of probation, the most robust risk factor. This cursory evidence indicates that short term BARJ services for low-risk, first-time offenders is an effective strategy in reducing recidivism.

The key finding in the study is that competency development programs that featured pro-social and moral reasoning skills significantly mediated the effects of risk factors on the occurrence of rearrest at six months. Interestingly, programs like aggression replacement therapy (Goldstein, Glick, & Gibbs, 1998) provide a precise model that includes both of these competency development skills. Pro-social skills programs are generally based on cognitive-behavioral models. We recommend that all low-risk, first time offenders be placed in programs that feature skills building training (Ellis,1988; Beck, 1995; Wubbolding, 2000).

For youths who present more maladaptive behaviors, including those experiencing attachment disorders, we suggest more clinically-oriented cognitive-behavioral approaches such as schema-focused therapy. Schema-focused therapy (Young, 1999) offers an intensive and contextual approach that focuses on the effects of traumatic past experiences that obscures the client's ability to recognize painful and irrational schemas. The client's inability to recognize schemas such as attachment deficits, incompetence, or narcissism reduces the effectiveness of traditional cognitive-behavioral treatments. Young (1999) has reported that the schema-focused approach was particularly useful in treating clients with personality disorders.

The competency development programs may likely benefit youths with significantly higher risks and prior histories as well. There is ample evidence (Catalano & Hawkins, 1996; Farrington, 1986; Garbarino, 1999; Loeber & Farrington, 2001) supporting the evidence-based practice of targeting competency development interventions at high-risk offenders. Since there are questions as to the reliability of services there is a distinct chance that these programs will work with higher-risk youths as well, if implemented in a consistent manner. It is recommended that all high-risk youths receive the pro-social and moral development skills services.

6. Examine the effects of BARJ services on specific delinquent typologies.

The current study has begun this line of inquiry by identifying the effects of pro-social and moral reasoning skills training on low-risk, first time offenders. We are just as likely to discover other variations in service provisions and outcomes when we isolate on specific typologies of delinquents, such as violent or drug offenders. One of the interesting discoveries in our current study was the relatively low percentage of subjects (33.8%) who successfully completed their restitution. This result seemed to be an anomaly since restitution is such an important element in BARJ model. However, upon further consideration it was speculated that

restitution programs may not have been offered to drug offenders. This may have been the case since restitution services were not provided to approximately forty percent of the sample. Types and effects of BARJ services can be easily explored using various process and outcome evaluations.

7. Replicate the findings and analyses at other county probation sites.

One benefit of the statewide implementation of the BARJ Initiative is that it affords us an opportunity to examine programs in other counties to test the external validity of the current study. Continuing this program of research will be much less expensive and time consuming since the design has already been developed and validated. The only tasks associated with continuing the study at other sites would be drawing the sample, collecting, and analyzing the data. Moreover, the current design also allows researchers to test path models which can be used to examine indirect and recursive effects on outcome measures. These results would provide a wealth of information about the dynamics in the provision of BARJ services to at-risk youths across the Commonwealth.

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APPENDIX A

BARJ RESEARCH STUDY SURVEY

BARJ RESEARCH STUDY SURVEY

V0a. JID Number: _____

V0b. County: Allegheny (1) Cumberland (2) Lancaster (3) Mercer (4) _____

V0c. Zip Code: _____

Exogenous Variables:

Demographic Factors:

V1. Gender: Female (0) Male (1) _____

V2. Ethnicity: Non-Hispanic (0) Hispanic (1) _____

V3. Race: White (0) African-American (1) Asian-American (2) Native-American (3)
Multi-Racial (4) Other (5) _____

V4. Socio-economic Status: (0) Middle or Upper Income (1) Low-Income _____

Code Each Risk Factors as either No (0), Yes (1), or (9) I don't know.

Behavioral Risks:

V5. Subject has been diagnosed as ADD or ADHD. _____

V6. Subject has been diagnosed as having Reactive Attachment Disorder (RAD). _____

V7. Subject has been diagnosed with PTSD. _____

V8a. Subject has been diagnosed with a Conduct Disorder. _____

V8b. Subject has been diagnosed with an Oppositional Defiant Disorder. _____

V9a. Subject has been diagnosed with Depression or other type of Mood Disorder. _____

V9b. Subject has been diagnosed with Bi-Polar Disorder. _____

V9c. Subject has been diagnosed with Asperger's Disorder. _____

V9d. Subject has been diagnosed with Autistic Disorder. _____

V10. Subject has suffered a serious head injury. _____

- V11. Subject has a history of aggression. _____
- V12. Subject has a history of lying. _____
- V13. Subject engages in risk taking or impulsive behaviors. _____
- V14. Subject has used drugs. _____
- V15. Subject has used alcohol. _____
- V16. Subject has taken something without paying. _____
- V17. Subject has entered a building when they were not supposed to be there. _____
- V18. Subject has hurt someone badly enough that the victim needed medical attention. _____
- V19. Subject has been taken to the police station. _____
- V20. Subject has used a weapon to get something from another person. _____
- V21. Subject has set fire to his own or someone else's property. _____
- V22. Subject has taken a car without the owner's permission. _____
- V23. Subject has bought drugs. _____
- V24. Subject has sold drugs. _____
- V25. Subject has carried a hidden weapon. _____
- V26. Subject has been in a driving accident after drinking alcohol. _____
- V27. Subject has been in a driving accident after using other drugs. _____

Family Risks:

- V28. Subject has been the victim of physical abuse. _____
- V29. Subject has been the victim of sexual abuse. _____
- V30. Subject has been the victim of neglect. _____
- V31. Siblings have been victims of abuse and/or neglect. _____
- V32. Parents abuse alcohol. _____

- V33. Parents abuse prescription drugs and/or street drugs. _____
- V34. There have one or more incidents of domestic violence in the family. _____
- V35. Parents are divorced or separated. _____
- V36. Has subject has ever lived in a single-parent home? _____
- V37. There is a lack of parental supervision in the household. _____
- V38. Subject was born to teenage parents. _____
- V39. There is a large amount of parent/child conflict. _____
- V40. Subject's parents have a history of mental health disorders. _____
- V41. There are more than 4 siblings living in the home. _____
- V42. Subject has threatened or hit a parent. _____
- V43. Subject has threatened or hit a sibling. _____
- V44. Subject has run away from home. _____
- V45. Subject was born prematurely. _____
- V46. Subject is punished inconsistently for similar behaviors. _____
- V47. Subject is a parent or an expectant parent. _____
- Academic Risks:**
- V48. Subject is at least two years behind in his/her reading skills. _____
- V49. Subject was retained at least one year in elementary or middle school. _____
- V50. Subject has a history of truancy. _____
- V51. Subject is not engaged in school activities. _____
- V52. Subject's QPA is less than 1.50. _____
- V53. Subject has difficulty paying attention at school. _____
- V54. Subject has no future educational aspirations. _____

V55. Subject shows no motivation to do well in school. _____

V56. Subject has damaged school property. _____

V57. Subject has threatened or hit a teacher. _____

V58. Subject has threatened or hit another student. _____

V59. Subject was determined to be at least two years behind in math skills and reading comprehension. _____

V60. Subject has an IQ under 85. _____

V61. Subject did not attend Pre-School, Head Start, or Day Care before entering elementary school. _____

V62. Subject has been suspended from school. _____

V63. Subject has been expelled from school. _____

V64. Subject has been enrolled in an Alternative Education Program. _____

Peer Group Risks:

V65. Subject has been a member of a gang. _____

V66. Subject has been a gang affiliate. _____

V67. Subject has at least one friend who belongs to a gang. _____

V68. Subject has at least one friend who has been adjudicated delinquent. _____

V69. Subject's friends do not participate in school or extra-curricular activities. _____

V70. Subject has participated in a group fight. _____

V71. Subject has not had a boy/girlfriend. _____

V72. Subject has no friends. _____

Community Risks:

V73. Subject resides in low-income neighborhood. _____

V74. In the community the majority of homes are rented. _____

- V75. The community is made up mostly of minorities. _____
- V76. The majority of persons living in the community have lived there less than three years.

- V77. Subject's family has moved to a different residence at least once a year for the last three years. _____
- V78. The police are commonly called to resolve non-crime related problems. _____
- V79. Drugs are easily accessible in the neighborhood. _____
- V80. Gangs exist in the neighborhood. _____
- V81. Crime goes unnoticed in the community. _____
- V82. People in the community do not intervene when crimes occur. _____
- V83. Adults rarely supervise children in the community. _____
- V84. The neighborhood favors norms related to crime. _____
- V85. Weapons are easily accessible in the neighborhood. _____
- V86. Crime is a common occurrence in the neighborhood. _____
- V87. Subject has been the victim of a felony-level violent crime. _____
- V88. A parent, sibling, or friend has been the victim of a felony-level violent crime. _____
- V89. Subject has witnessed a felony-level violent crime. _____

Endogenous Variables:

Delinquent History:

- V90. Age at Initial Referral _____
- V91. Number of Prior Juvenile Court Referrals _____
- V92. Number of Prior Adjudications _____
- V93. Number of Prior Placements _____

Charge(s) That Initiated Current BARJ Services:

V94. Date Case was Opened on Current Charge(s) _____

V95. Lead Charge on the Current Referral _____

V96-V98. Charge Code _____ and Grading (e.g. Felony 1, Misdemeanor 3) _____
OGS _____

V98a. BARJ Disposition _____

V99-V110. Delinquency and VOP Referrals While Under Current Supervision

Date	Charge Code & Grading	Disposition
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

V111. Date of Case Closing _____

V111a. Total Months of BARJ Services _____

V112. Status at Closing _____

- 0. Successful Completion of Probation
- 1. Unsuccessful Completion: Tier 1 Statutory Exclusion
- 2. Unsuccessful Completion: Tier 2 Statutory Exclusion
- 3. Unsuccessful Completion: Certified to Criminal Court
- 4. Unsuccessful Completion: New Juvenile Charges
- 5. Unsuccessful Completion: Other (specify) _____

BARJ Services and Service Outcomes:

Code each of the BARJ Services as follows: (0) No, the subject, the victim, or the community did not receive the service.

(1) Yes, the subject participated in the service or the service was provided (e.g. victim notification, restitution fund, or victim impact statements) to the victim or the community.

(2) Omit, the service was not applicable to the subject, the victim, or the community.

(9) I don't know.

1. BARJ Services

V113. Youth Aid Panel, Accountability Boards, or Community Justice Panels _____

V114. Victim Notification _____

V115. Victim Services beyond Notification _____

V116. Victim Offender Mediation _____

V117. Victim Awareness or Impact Training _____

V118. Restitution Program _____

V119. Victim Restitution Fund _____

V120. Community Service Program _____

V121. School-Based Probation Services _____

V122. Community Intensive Supervision Program (CISP) _____

V123. Victim Impact Statements _____

V124. Juvenile Offender Apology _____

V125. Curfew _____

V126. Random Drug Testing _____

V127. Electronic Monitoring or Tracking _____

V128. House Arrest _____

V129. Intensive Probation Program _____

V130. Out-of-Home Community-Based Placement _____ Placement Name _____

V131. Out-of-Home Residential Placement _____ Placement Name _____

V132. Out-of-Home Voluntary Mental Health Placement _____ Placement Name _____

V133. Non-Traditional Partnerships _____ Name _____

V134. Non-Traditional Services _____ Name _____

2. Competency Development Services

V135. Pro-Social Skills Services

V135a. Abraxas NRT Program (Cumberland) _____

V135b. Aggression Replacement Therapy (Allegheny) _____

V135c. Anger Management Classes (Allegheny, Lancaster, & Mercer) _____

V135d. Center for Family Excellence (Allegheny) _____

V135e. Communication Skills Development (Mercer) _____

V135f. Conflict Resolution Classes (Allegheny, Lancaster, & Mercer) _____

V135g. Decision Making Classes (Allegheny, Lancaster & Mercer) _____

V135h. Experiential Education Program (Mercer) _____

V135i. George Junior Republic Preventative Aftercare (Cumberland) _____

V135j. Keep Yourself Alive (Allegheny) _____

V135k. Positive Self Talk (Mercer) _____

V135x. Other Pro-Social Skills Service _____ Specify _____

V135y. Other Pro-Social Skills Service _____ Specify _____

V135z. Other Pro-Social Skills Service _____ Specify _____

V136. Moral Reasoning Skills Services

- V136a. CHOICES Program (Lancaster) _____
- V136b. HIV/AIDS Education (Allegheny) _____
- V136c. Maleness to Manhood (Allegheny) _____
- V136d. Refusal Skills (ACE) (Mercer) _____
- V136e. Samenow's Thinking Errors Program (Allegheny) _____
- V136x. Other Moral Reasoning Skills Service _____ Specify _____
- V136y. Other Moral Reasoning Skills Service _____ Specify _____
- V136z. Other Moral Reasoning Skills Service _____ Specify _____
- V137. Academic Skills Services
- V137a. Academy Summer School (Allegheny) _____
- V137b. Allegheny Intermediate Unit @ CISP (Allegheny) _____
- V137c. Alternative School (Allegheny, Cumberland, Lancaster, & Mercer) _____
- V137d. Sylvan Learning Center (Mercer) _____
- V137e. Boys & Girls Club Project Learn (Allegheny & Lancaster) _____
- V137f. Career Academy (Lancaster) _____
- V137g. Charter School (Allegheny, Lancaster, & Mercer) _____
- V137h. Cyber School (Mercer) _____
- V137i. Day Treatment (Allegheny, Cumberland) _____
- V137j. Educational Mentoring/Tutoring (Allegheny, Lancaster, & Mercer) _____
- V137k. GED Program (Allegheny, Cumberland, Lancaster, & Mercer) _____
- V137l. Mall School (Lancaster) _____
- V137m. Night School (Mercer) _____
- V137x. Other Academic Skills Service _____ Specify _____

V137y. Other Academic Skills Service _____ Specify _____

V137z. Other Academic Skills Service _____ Specify _____

V138. Workforce Development Skills Services

V138a. Abraxas Workbridge Employment Initiative (Allegheny) _____

V138b. The Achieve Program (Mercer) _____

V138c. Goodwill Industries (Allegheny & Lancaster) _____

V138d. Job Corps Services (Allegheny, Cumberland, Lancaster, & Mercer) _____

V138e. Job Readiness Classes (Allegheny, Lancaster, & Mercer) _____

V138f. NFTE Entrepreneurial Program (Allegheny) _____

V138g. Pennsylvania Career Link (Allegheny, Lancaster, & Mercer) _____

V138h. Youth Build (Allegheny & Lancaster) _____

V138i. Youthworks Job Skills (Allegheny) _____

V138j. Office Vocational Rehabilitation (OVR) (Mercer) _____

V138x. Other Workforce Development Skills Service _____ Specify _____

V138y. Other Workforce Development Skills Service _____ Specify _____

V138z. Other Workforce Development Skills Service _____ Specify _____

V139. Independent Living Skills Services

V139a. Father's Initiative @ Hill House (Allegheny) _____

V139b. Health and Fitness Classes (Allegheny) _____

V139c. Independent Living Classes at CYA (Lancaster) _____

V139d. Urban League (Black Monday) (Allegheny & Mercer) _____

V139e. Youth Employment For Success (Mercer) _____

V139x. Other Independent Living Skills Service _____ Specify _____

- V139y. Other Independent Living Skills Service _____ Specify _____
- V139z. Other Independent Living Skills Service _____ Specify _____
- V140. Other Treatment Programs
- V140a. Aftercare (Allegheny, Cumberland, Lancaster Mercer) _____
- V140b. Accountability Through Employment (Mercer) _____
- V140c. Alternatives to Violence (Mercer) _____
- V140d. The Fathers' Workshop (Mercer) _____
- V140e. Behavioral Health Rehabilitation Services (Lancaster & Mercer) _____
- V140f. Drug & Alcohol Treatment (Allegheny, Cumberland, Lancaster, & Mercer) _____
- V140g. Effective Family Changes Program (Mercer) _____
- V140h. Family Group Decision Making (FGDM) (Mercer) _____
- V140i. Jails, Institutions, Death (Allegheny) _____
- V140j. Multisystemic Therapy (MST) (Mercer) _____
- V140k. Multidimensional Family Therapy (MDFT) (Mercer) _____
- V140l. Neighborhood Based Family Intervention Center (Mercer) _____
- V140m. Parent Support Group (Mercer) _____
- V140n. Parental Skills Training (Allegheny) _____
- V140o. Partial Hospitalization (Allegheny, Cumberland, Lancaster, Mercer) _____
- V140p. One-on-One Counseling (Allegheny, Lancaster, & Mercer) _____
- V140q. Reality Tour (Mercer) _____
- V140r. SAVE Program (Mercer) _____
- V140s. Self-Awareness & Self-Esteem Programs (Allegheny) _____
- V140t. Sex Offender Treatment (Allegheny, Cumberland, Lancaster, & Mercer) _____

V140u. Summer Enrichment Program (Mercer) _____

V140v. Special Offenders Treatment (Lancaster) _____

V140w. Teen Parenting (Mercer) _____

V140ww. Weekend Warrior Program (Mercer) _____

V140www. Woman's Journey (Mercer) _____

V140x. Other Treatment Programs _____ Specify _____

V140y. Other Treatment Programs _____ Specify _____

V140z. Other Treatment Programs _____ Specify _____

V141. Competency Development Services Index Score _____

3. BARJ Service Outcomes

a. Productive Outcomes

V142. Subject is currently living independently. _____

V143. Subject is currently attending school, or an alternative educational program, or attending a GED program and maintaining passing grades; or earned his diploma or passed his GED test.

V144. Subject was accepted to or currently attending a post-secondary vocational training program or an institution of higher learning. _____

V145. Subject is currently employed full time or part-time while attending school. _____

V146. The percentage of court-ordered community service hours completed. _____%

V147a. The percentage of restitution paid. _____%

V147b. The percentage of fees and fines paid. _____%

b. Connected Outcomes

V148. Subject is currently engaged with a mentor. _____

V149. Subject is currently involved in clubs and/or extra-curricular activities at school. _____

V150. Subject is currently involved with clubs and other community groups. _____

V151. Subject is currently involved with a positive peer group in the community. _____

V152. Subject is currently involved with church groups. _____

V153. Subject has a positive and supportive home environment. _____

V154. Subject has a positive relationship with teachers, employers, and other community members. _____

c. Law Biding Outcomes

V155. Subject did not recidivate while under court supervision. _____

V156. Subject did not recidivate in the last six months of court supervision. _____

V157. Subject did not violate probation while under court supervision. _____

V158. Subject was drug free during the last three months of court supervision. _____

V159. Subject successfully completed one of the Blueprints for Violence Prevention Programs.

V160. Subject successfully completed at least one clinical program while under court supervision. _____

V161. Subject successfully completed court supervision. _____

Endogenous Variable:

Juvenile and Adult Recidivism:

V162. Number of post-service juvenile court referrals _____

V163-V174.

1. Referral #1 Lead Charge _____ OGS _____ Referral Date _____
2. Referral #2 Lead Charge _____ OGS _____ Referral Date _____
3. Referral #3 Lead Charge _____ OGS _____ Referral Date _____
4. Referral #4 Lead Charge _____ OGS _____ Referral Date _____

V175. Number of post-service placements _____

V176. Number of post-service adult arrests _____

V177-V188.

1. Arrest #1 Lead Charge _____ OGS _____ Arrest Date _____
2. Arrest #2 Lead Charge _____ OGS _____ Arrest Date _____
3. Arrest #3 Lead Charge _____ OGS _____ Arrest Date _____
4. Arrest #4 Lead Charge _____ OGS _____ Arrest Date _____

V189. Number of post-service jail incarcerations _____
(include only post-disposition jail incarcerations)

V190. Number of post-service prison incarcerations _____

APPENDIX B
BARJ RESEARCH CODEBOOK

BARJ RESEARCH CODEBOOK

Instructions: Code these variables based on the subject's status or subject's family's peers' and community's characteristics at the time of the current referral (i.e. September 29, 2005).

V0a. JID: Record the subject's JID number.

V0b. COUNTY: Record the County Probation department as **Allegheny (1)**, **Cumberland (2)**, **Lancaster (3)**, or **Mercer (4)**.

V0c. ZIPCODE: List the subject's home zip code at the time of the current referral

Demographic Factors:

V1. GENDER: Code **Female (0)** and **Male (1)**.

V2. ETHNICITY: Code as **Hispanic (1)** if the subject is a member of any of the following ethnic groups Mexican, Central American (i.e. Honduran), South American (i.e. Columbian), Puerto Rican, Cuban, or the Dominican Republic. All other ethnic groups should be coded as **Non-Hispanic (0)**.

V3. RACE: Code **White (0)**, **African-American (1)**, **Asian-American (2)**, and **Native-American (3)**. Code bi-racial subjects (i.e. White and African-American) as **Multi-Racial (4)**. Code all other racial groups as **Other (5)**.

V4. SES: Code as **Low-Income (1)** if the family's primary source of income was from unemployment compensation, federal and/or state income assistance (e.g. Federal Social Security or Supplemental Security Income, state public assistance), or from part-time employment only. Code as **Middle or Upper Income (0)** if the family's primary source of income was from permanent (at least six months), full-time employment.

Ecological Risks Factors: Please code the following variables as either **no (0)**, **yes (1)**, or **I don't know (9)**. For **Variables 5 thru 89**, code **yes (1)** if there is any information in the record or from the probation officer's report that either (a) the symptom or condition existed prior to the Date the Case was Opened for BARJ Services on the Current Charges; or, (B) the symptom or condition existed during the time the case was opened for BARJ Services.

Behavioral Risks:

V5. ADHD: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated with Attention Deficit Disorder (ADD) or Attention Deficit Disorder (ADHD). Evidence may include medical treatment by a physician or the presence of ongoing symptoms that may include impairment in the ability to pay attention, (e.g. unable to follow rules, to become easily distracted, to experience difficulty organizing tasks and activities, or to listen when spoken to directly and to follow through on instructions), hyperactivity (e.g. often fidgets with hands and feet, to leave seat in classroom or other situations in which remaining

seated is expected, to run or climb about in situations in which it is inappropriate, to experience chronic restlessness, or to talk excessively, and/or impulsivity (e.g. inability to control their behavior, to wait one's turn, to interrupt or intrude on others or to act inappropriately in social situations).

V6. RAD: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for Reactive Attachment Disorder (RAD). Symptoms may include a persistent failure to initiate and to respond to most social interactions in a developmentally appropriate manner, a pattern of hyper-vigilance and ambivalent responses to others, or a lack of selectivity in the choice of attachment figures, i.e. excessive familiarity with strangers, or a resistance to be comforted by others, especially adults.

V7. PTSD: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for Post Traumatic Stress Disorder (PTSD). Symptoms of PTSD may include the inability to pay attention, insomnia, history of depression, or flashbacks related to traumatic events including maltreatment episodes, crime victimization, accidents, or natural disasters.

V8a. CONDUCT: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for a Conduct Disorder. Symptoms of a Conduct Disorder may include aggression or cruelty to people or animals that includes bullying, intimidating others, or initiating fights; destruction of property, deceitfulness, thefts, serious violations of rules including truancy, disobedience to parents, and violation of curfews.

V8b. ODD: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for an Oppositional Defiant Disorder. Characteristics of Oppositional Defiant Disorder include consistent patterns of negative, hostile, and defiant behavior. Symptoms may include consistent loss of temper, consistent arguing with adults, refusing to comply with adult requests or rules, deliberately annoying other people, blaming others for his/her mistakes, being easily annoyed, resentful, or vindictive.

V9a. DEPRESS: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for Depression or any other mood disorder except Bi-Polar Disorder. Characteristics of Depressive Disorders include persistence of two or more of the following symptoms: feelings of sadness, diminished interest or pleasure in activities that were at one time of interest or pleasurable to the subject (e.g. playing football, going to dances, etc.), psychomotor agitation or retardation as observed by feelings of restlessness or being slowed down, poor appetite or overeating, insomnia or hypersomnia (over-sleeping), low energy or fatigue, low self-esteem, feelings of worthlessness, excessive or inappropriate guilt, poor concentration or difficulty in making decisions, feelings of anxiety or hopelessness, and or recurrent thoughts of death, recurrent suicidal ideations, or suicide attempts.

V9b. BIPOLAR: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for Bi-Polar Disorder. Characteristics of Bi-Polar Disorder include any of the depressive symptoms (see **V9a Depress**) interspersed with manic episodes in which there is an abnormally or persistently elevated, expansive, or irritable mood that includes at least three of

the following symptoms: inflated self-esteem or grandiosity, decreased need for sleep, pressure of speech, flight of ideas, or distractibility; or, increased involvement in goal-directed activities or psychomotor agitation; or excessive involvement in pleasurable activities with a high potential for painful consequences. These symptoms would not reflect a Bi-Polar Disorder if they are the result of the physiological effects of medication, drug abuse, or a general medical condition (i.e. brain tumor).

V9c. ASPERGER: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for Asperger's Disorder. Characteristics of Asperger's Disorder include: (1) qualitative impairment in social interactions characterized by at least two of the following symptoms: impairment in the use of non-verbal behaviors such as eye-to-eye contacts, facial expressions, body postures, and gestures to regulate social interactions; or failure to develop peer relationships appropriate to one's developmental level; or a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, or the lack of social or emotional reciprocity; and, (2) restricted and stereotyped patterns of behavior, interests, and activities manifested in at least one of the following symptoms: preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal in intensity or focus; or, inflexible adherence to specific nonfunctional routines or rituals.; or, stereotyped and repetitive mannerisms (e.g. hand or finger twisting, etc.); or, persistent preoccupation with parts of objects.

V9d. AUTISM: Code **yes (1)** if there is any evidence from the record only, that the subject was diagnosed or treated for an Autistic Disorder. Characteristics of Autism include symptoms in three areas of social functioning including: (1) qualitative impairment in social interaction as manifested by at least two of the following symptoms: impairment in the use of non-verbal behaviors such as eye-to-eye contacts, facial expressions, body postures, and gestures to regulate social interactions; or failure to develop peer relationships appropriate to one's developmental level; or a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, or the lack of social or emotional reciprocity; (2) restricted and stereotyped patterns of behavior, interests, and activities manifested in at least one of the following symptoms: preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal in intensity or focus; or, inflexible adherence to specific nonfunctional routines or rituals.; or, stereotyped and repetitive mannerisms (e.g. hand or finger twisting, etc.); or, persistent preoccupation with parts of objects (these are the same characteristics as Asperger's Disorder, see **V9c Asperger**); and, (3) qualitative impairment in communication manifested by at least one of the following symptoms: a delay or total lack of development language skills; in individuals with adequate speech there is marked impairment in the ability to initiate or sustain a conversation with others; the use of stereotyped and repetitive language or idiosyncratic language; or, the lack of varied, spontaneous make-believe play or social imitative play appropriate to one's developmental level; and (3)

V10. HEAD: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was treated or hospitalized for a serious head injury.

V11. AGGRESSION: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had a persistent pattern of aggressive behavior such as reports of

bullying classmates, peers, or siblings, intimidating others, or participating in fighting (i.e. at least three fights over a six month period).

V12. LIE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had a persistent pattern of lying.

V13. RISK: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had a persistent pattern risk taking (i.e. exposing themselves or others to danger such as jumping from roof to roof) or impulsive (i.e. acting before thinking through the possible consequences) behaviors.

V14. DRUGS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had a persistent pattern of drug use including prescriptions (i.e. cough medicines) or controlled substances (i.e. marijuana) that has impaired their functioning at home, school and in the community.

V15. ALCOHOL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had a persistent pattern of drinking of beer, wine, or liquors that has impaired their functioning at home, school and in the community.

V16. THEFT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had a persistent pattern of stealing including theft of property from family members, neighbors, or at school, or reports of retail thefts.

V17. TRESPASS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was involved in one or more incidents of trespassing into buildings or other enclosed premises (e.g. garages, sheds, etc...) without permission.

V18. INJURY: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject injured another person badly enough that the victim required medical attention (i.e. the victim was treated by a physician for the injuries, etc.).

V19. POLICE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was taken into custody by the police for dependency (e.g. being the victim of abuse or neglect, running away from home, curfew violations, incorrigibility, truancy) or delinquency (e.g. being charged with summary, misdemeanor, or felony charges) incidents occurring prior to current charges. If subject had a prior history of juvenile court referrals code as **yes (1)**.

V20. WEAPON: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports used a weapon to intimidate or take property from another person.

V21. FIRE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if the subject has a history of fire play (i.e. playing with matches), minor fire setting (i.e. setting fires in garbage cans) or arson (i.e. setting fire to buildings or other enclosed premises like sheds, or movable property such as cars).

V22. CAR: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had ever made unauthorized use of a motor vehicle (i.e. used parents' motor vehicle without permission) or had stolen a motor vehicle.

V23. DRUGPOSS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has purchased prescriptions (i.e. cough medicines) or controlled substances (i.e. marijuana). Code as **yes (1)** if the answer to (**V14 DRUGS** is yes).

V24. DRUGSALE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has sold prescription medications or controlled substances.

V25. WEAPON: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has carried a concealed weapon (e.g. knife, firearm, black jack, etc...) on his person.

V26. ACCIDENT1: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was the driver in a motor vehicle accident while under the influence of alcohol.

V27. ACCIDENT2: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was the driver in a motor vehicle accident while under the influence of drugs.

Family Risks:

V28. PHYSICAL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was named as the victim of an indicated or founded physical abuse report.

V29. SEXUAL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject was named as the victim of an indicated or founded sexual abuse report related to pornography, sexual assault, rape, or involuntary deviant sexual intercourse.

V30. NEGLECT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject received protective services from a County CYS agency or affiliate agency for neglect that may include confirmed incident(s) in which parents or caregivers failed to provide adequate supervision, medical care, nutrition, hygiene, appropriate or clean clothing, sanitation and safety in the home, or compliance with school attendance codes.

V31. SIBLING: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that sibling(s) residing in the home with the subject had received child protective services as the result of a substantiated or founded report of abuse or received general protective services for neglect. Code **yes (1)** if the perpetrator of the abuse or neglect was the subject's natural parent (mother or father) or if the subject ever resided with caregiver (e.g. stepfather, mother's paramour) who was named as a perpetrator in the abuse or neglect of a sibling.

V32. PALCOHOL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's parents or primary caregivers have abused alcohol. Indicators of alcohol abuse may include impairment in the performance of family, child care, or work responsibilities from the after effects of drinking or from actual intoxication at home or at work; neglecting of child care responsibilities, alcohol-related absences from work or family activities, using alcohol in physically a hazardous situations including operating a motor vehicle while under the influence of alcohol or while intoxicated; or experiencing legal difficulties related to alcohol consumption. Finally, the person with alcohol abuse will continue to consume alcohol despite knowing that continued consumption will pose significant social and interpersonal problems for them. When these problems are combined with evidence of tolerance, withdrawal, or compulsive behaviors related to alcohol use, the individual may be diagnosed with alcohol dependence.

V33. PDRUGS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's parents or primary caregivers have abused prescription drugs or controlled substances. Indicators of drug abuse may include impairment in the performance of family, child care, or work responsibilities from the after effects of drugs or from actual influence of drugs at home or at work; neglecting of child care responsibilities, alcohol-related absences from work or family activities, using drugs in physically a hazardous situations including operating a motor vehicle while under the influence; or experiencing legal difficulties related to drug usage. Finally, the person with drug abuse will continue to consume drugs despite knowing that continued consumption will pose significant social and interpersonal problems for them. When these problems are combined with evidence of tolerance, withdrawal, or compulsive behaviors related to drug use, the individual may be diagnosed with drug dependence.

V34. DOMVIOL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that a parent or primary caregiver within the home has been a victim of domestic violence. Victimization may include inflicting minor to serious physical injuries, threatening to do harm to the victim, children, or pets, destruction of personal property (e.g. destroying clothing or cherished valuables) belonging to the victim, or continually degrading or humiliating the victim.

V35. DIVORCE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's parents were ever separated, divorced, or never married.

V36. SINGPAR: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had ever lived in a single parent home.

V37. SUPER: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that parents or caregivers failed to provide adequate supervision to the children in the home. Indicators of lack of parental supervision may include indicated reports of supervisory neglect with County CYS agency or affiliate agency, or incidents of truancy, incorrigibility including violations of curfew, failure to obey parental rules, promiscuity, or delinquent behaviors which the parents either ignored or dealt with ineffectively.

V38. TEENAGE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that subject's mother or father was under the age of 18 at the time the subject was born.

V39. CONFLICT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject and his/her parents or primary caregivers engaged in frequent verbal and/or physical conflicts. Indicators may include reports of the subject's habitual disobedience and/or violation of parental rules, or parent-child interactions frequently characterized by verbal confrontations, threats to use violence, or actual violence.

V40. PMENTAL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's parents or primary caregivers had a history of mental health disorders. Indicators may include a diagnosis from the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition* (DSM-IV-TR) of an Axis I Clinical Disorders or Axis II Personality Disorders or Mental Retardation. Code **yes (1)** if there is evidence that a parent or a primary caregiver has been diagnosed with mental retardation, or treated for a clinical or personality disorder.

V41. FOUR: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that there were more than four (4) siblings living in the home at the time of the current referral.

V42. HIT1: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that subject had ever threatened to hit or hit a parent or primary caregiver.

V43. HIT2: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that subject had ever threatened to hit or hit a sibling.

V44. RUNAWAY: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that subject had ever runaway from home and was absent for more than three (3) hours.

V45. PREMATURE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that subject was born prior to the 37th week mother's pregnancy.

V46. INCONSIST: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that there was a pattern of inconsistent discipline. For example, the parents or primary caregivers might employ harsh physical punishment for disrespectful behaviors on one occasion then overlook the same behaviors on another. Generally, inconsistency in parental discipline is characterized by patterns of over-reacting and under-reacting to the same behaviors.

V47. PARENT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that subject had parented a child or is expecting to parent a child prior to the age of 18.

Academic Risks:

V48. READING: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has been identified as being at least two years behind in reading skills.

V49. RETENT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject repeated one grade in elementary or middle school.

V50. TRUANCY: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has had a history of truant behavior in school. Truancy can be defined as having three (3) or more illegal absences from school in any given school year.

V51. EXTRA: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has not participated in any school related extracurricular activities (e.g. sports, band, clubs, etc...) in the last year.

V52. QPA: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's quality (grade) point average is currently 1.50 or less on a 4.00 QPA range.

V53. ATTEND: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has displayed a difficulty paying attention in school. This may consist of reports of sleeping in class, being disruptive in class, or failing to pay attention to the teachers' lectures and instructions.

V54. ASPIRE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has indicated no future educational goals. For example, the subject has indicated that he/she no desire to graduate from high school, earn a GED, and receive any post-secondary education (e.g. attending a two-year or four-year college) or technical training (e.g. attending trade school or joining the military).

V55. MOTIVATE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has illustrated no motivation to do well in school. For example, the subject has shown a pattern of failing to complete homework assignments, failing tests as result of a lack of preparation or study time, cutting classes, not paying attention in classes, or has indicated that he/she is not interested in learning the materials.

V56. SCHOOLDAMAGE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has damaged school property.

V57. THREATTEACHER: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has ever threatened or assaulted a teacher.

V58. THREATSTUDENT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has ever threatened or assaulted another student.

V59. MATH: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has been identified as being at least two years behind in math skills.

V60. IQ: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's overall IQ score is less than 85.

V61. PRESCHOOL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject did not attend a Pre-School, Head Start, or Day Care program prior to entering elementary school.

V62. SUSPEND: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had ever received an out-of-school suspension.

V63. EXPELL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had ever been formally expelled from school.

V64. ALTED: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject is currently enrolled or has been enrolled in an alternative education program either through the school district or a provider agency.

Peer Group Risks:

V65. GANG: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject is currently a gang member or has been a gang member.

V66. AFFILIATE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject is currently affiliated or has been affiliated with a gang.

V67. GANGFRIEND Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has a least one friend who belongs to a gang.

V68. DELINFRIEND: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has a least one friend who has been adjudicated delinquent or was under Juvenile Court jurisdiction for a delinquent offense (e.g. consent degree, informal adjustment, etc...).

V69. EXTRAFRIEND: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that none of the subject's friends participated in any school related extracurricular activities (e.g. sports, band, clubs, etc...) in the last year.

V70. GROUPEFIGHT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has participated in a group fight (i.e. gang fight) at school or in the community.

V71. NOBOYGIRL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject has never had a steady boy friend or girl friend.

V72. NOFRIEND: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject does not have any friends.

Community Risks:

V73. LOWINCOME: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the majority (50% or more) of people living in the neighborhood are on a low-income which may include being unemployed, or on some form of public assistance.

V74. RENT: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if fifty percent or more of the residences in the neighborhood are rentals.

V75. MINORITY: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if at least half (50%) of the people living in the neighborhood are African-American and/or Hispanic.

V76. THREEYEARS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that at least half (50%) of the people living in the neighborhood have resided there for less than three (3) years.

V77. DIFFRES: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if the subject's family had moved to different residences at least three times in the last three years.

V78. POLICECALL: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the police are commonly called to the neighborhood to resolve non-crime related problems such as domestic disturbances, violation of ordinances, disturbing the peace, curfew violations.

V79. DRUGACCESS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that drugs are easily assessable in the neighborhood.

V80. COMMGANGS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that gangs exist in the neighborhood.

V81. MINORCRIME: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that crimes of public disorder such as drug sales, drug use, public intoxication, or prostitution and less serious property crimes such as vandalism, spray painting of graffiti and gang symbols, and petty thefts go largely unreported to the police.

V82. INTERVENE: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the people in the neighborhood will generally not intervene to prevent crimes from occurring or cooperate with the police to solve crimes that have occurred.

V83. NOSUPER: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if the children in the neighborhood are largely left unsupervised by the adults. Indications of the lack of adult supervision may include regular occurrences of curfew violations, delinquent behavior committed by children in the neighborhood, or children being the victims of crime.

V84. NORMS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if a substantial number of the people in the neighborhood maintain a favorable attitude about crime. Examples of this may include people in the neighborhood actively committing crimes (e.g. selling or using drugs, prostitution, thefts); or are unwilling to assist the police in solving crimes.

V85. WEAPONS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if weapons such as firearms or knives are easily accessible in the neighborhood.

V86. COMMCRIME: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if crimes are a common occurrence in the neighborhood.

V87. VIOLENT1: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject had been the victim of felony-level violent crime such as a robbery, aggravated assault, or a sexual assault.

V88. VIOLENT2: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject's parent, sibling or friend had been the victim of felony-level violent crime including homicide, robbery, aggravated assault, or sexual assault.

V89. WITNESS: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports if the subject has been the witness of felony-level violent crime including a homicide, robbery, aggravated assault, or a sexual assault.

Delinquent History:

V90. DelAge: Code as the subject's age in years, (i.e. 15) at the time of the first referral to the juvenile court.

V91. PriorRef: Code as the number of prior juvenile court referrals excluding the current referral.

V92. PriorAdj: Code as the number of prior adjudications of delinquency.

V93. PriorPlace: Code as the number of prior out-of-home placements, including foster care, group homes, and general child care facilities. Do not include placements in detention, diagnostic facilities (e.g. 30 day mental health or drug and alcohol assessment programs) or weekend placements (i.e. Diakon Wilderness Center).

Charge(s) That Initiated Current BARJ Services:

V94. OpenDate: List the date (mm/dd/yyyy, ex.05/03/2006) that the department began BARJ services on the current charge. The opening date depends on whether a delinquency or a dependency petition was filed or not. In cases in which no petition was filed (i.e. informal adjustments handled by the intake department) the Opening Date will be the Date of the First Intake Conference. In the following example, the date of the referral was September 24, 2006 but the first intake conference was not held until October 7, 2006. In this case, we will assume that services began on October 7, 2006.

When a delinquency or dependency (i.e. in cases of status offenses) petition is filed the Opening Date will be the Date the Case was Disposed in Court. For example, intake receives a police report on February 26, 2006 on a burglary charge. The youth denies his involvement and on the advice of his lawyer there is no further contact until the case goes to court. The case is eventually heard before the court on May 3, 2006 at which time the subject is adjudicated delinquent and placed on probation. The opening date in this petitioned case would be May 3, 2006.

V95. LeadCharge: If there is more than one charge identify the most serious one (i.e. Burglary) presented in the current petition. A ranking of the crimes listed in the Pennsylvania Crimes Code can be located in **the OGS Excel file**. The crimes are rank ordered from most severe (1) Murder Intentional, Felony 1, OGS=14 to least severe (7517) Township Ordinance, Summary Offense, OGS=1.

V96. Code: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge. A four-digit code for each crime is located in **the OGS Excel file**.

V97. Grade: List the level of the crime using the codes for the seven levels of severity as follows:

- | | |
|--------------------------------|-------|
| Felony 1 | (F1) |
| Felony 2 | (F2) |
| Felony 3 | (F3) |
| Misdemeanor 1 | (M1) |
| Misdemeanor 2 | (M2) |
| Misdemeanor 3 | (M3) |
| Summary | (S) |
| Violation of Probation | (VOP) |
| Failure to Adjust to Placement | (FAP) |

V98. OGS: List the Offense Gravity Score for the lead charge. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V98a. BARJ Disposition: List the disposition on the charge(s) that initiated the Current BARJ Services. The list of dispositions is as follows:

1. Transferred to other Juvenile Court
2. Complaint Withdrawn
3. Warned, Counseled, Case Closed
4. Informal Adjustment or Extended Services
5. Fined and/or Costs Ordered
6. Dismissed Not Substantiated
7. Referred to Another Agency/Individual
8. Consent Decree
9. Probation
10. Probation with Day Treatment
11. Transferred to Criminal Court
12. Other: _____
13. Placement
14. Statutorily Excluded via Act 33 of 1996
15. Protective Supervision (Dependent Child)
16. Continuation of Previous Disposition
24. Deferred Adjudication
44. Deferred Placement

V99. CurrDate1: List the date (mm/dd/yyyy, ex: 04/17/2006) of the first delinquency incident that occurred while under current BARJ supervision.

V100. CurrCode1: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the first delinquency incident while under current BARJ supervision.

V101. CurrGrade1: List the level of the crime for the lead charge the first delinquency incident while under current BARJ supervision. Use the level of severity codes outlined in **V97**.

V102. CurrDispo1: List the disposition for the first delinquency incident while under current BARJ supervision. Use the disposition codes outlined in **V98a**.

V103. CurrDate2: List the date (mm/dd/yyyy, ex: 07/16/2006) of the second delinquency incident that occurred while under current BARJ supervision.

V104. CurrCode2: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the second delinquency incident while under current BARJ supervision.

V105. CurrGrade2: List the level of the crime for the lead charge the second delinquency incident while under current BARJ supervision. Use the level of severity codes outlined in **V97**.

V106. CurrDispo2: List the disposition for the second delinquency incident while under current BARJ supervision. Use the disposition codes outlined in **V98a**.

V107. CurrDate3: List the date (mm/dd/yyyy, ex: 02/20/2007) of the third delinquency incident that occurred while under current BARJ supervision.

V108. CurrCode3: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the third delinquency incident while under current BARJ supervision.

V109. CurrGrade3: List the level of the crime for the lead charge the third delinquency incident while under current BARJ supervision. Use the level of severity codes outlined in **V97**.

V110. CurrDispo3: List the disposition for the third delinquency incident while under current BARJ supervision. Use the disposition codes outlined in **V98a**.

V111. CloseDate: List the date (mm/dd/yyyy, ex: 10/30/2007) that the current case was closed.

V111a. Months: List the total months of BARJ services from Opening Date to Closing Date in 2007. In cases, in which no delinquency or dependency petition was filed, the Opening Date will be the Date of Referral. In cases, in which a delinquency or dependency petition was filed, the Opening Date will be the date in which the case was disposed in court, such as in cases of consent decrees, probations, and/or placements.

V112. CloseStatus: List the subject's status at the time of case closing using the codes listed below.

0. Successful Completion of Probation
1. Unsuccessful Completion: Tier 1 Statutory Exclusion
2. Unsuccessful Completion: Tier 2 Statutory Exclusion
3. Unsuccessful Completion: Certified to Criminal Court
4. Unsuccessful Completion: New Juvenile Charges
5. Unsuccessful Completion: Other (specify) _____

BARJ Services and Service Outcomes:

With the **BARJ Services Variables (V113 thru V140z)** we are doing what researchers refer to as a *Process Evaluation*. In this process evaluation segment we will examine *whether* the services were provided. It's based on the idea that if the services were *not reliably provided* then the intervention could *not produce* an effect on the subjects (i.e. effects that may exist are most likely the result of random chance). When reviewing these services select one of the four answers.

Code **(0) no** if the service was not provided to the subject, victim, or the community member. A **no** answer assumes that the service could have been provided but was not for some discretionary reason, (e.g. subject refused to cooperate, lack of funds, an arbitrary decision made by the probation officer, etc.)

Code **(1) yes** if the subject (i.e. the subject wrote an apology letter to the victim regardless of its content, or completed his/her community service hours), or (the victim(s), or community members) completed the program during the time subject was under court supervision for the

charge(s) that initiated the *Current BARJ Services* in your county. Remember, you can code **(1) yes** for the service regardless of how well or how poorly subject performed.

Code **(2) omit** the service was not applicable to the subject, the victim, or the community. An **omit** assumes that the service was not applicable. For example, a program designed for male offenders would not be applicable for female offenders, or a program designed for treating sex offenders would not apply to other types of offenders, or a program run in southern end of the county would not be available to residents in the northern end of the county.

Code **(9)** for **I don't know**.

V113. BARJ1: Youth Aid Panels/Accountability Boards/Community Justice Panels: A form of restorative conferencing in which volunteers on community panels are charged with designing informal sanctions which often require that young offenders make restitution to their victims, complete community service projects, provide service to the victim or in some cases meet with or apologize to the victim.

V114. BARJ2: Victim Notification: A right of victims wherein the juvenile court staff inform victims of juvenile crime of dispositional reviews, home passes, and release hearings for youth involved in their cases.

V115. BARJ3: Victim Services Beyond Notification: Services, other than notification, provided by the juvenile court (or victim's service provider) to victims of juvenile crime (e.g., victim apology letter, counseling for victims of crime, notification of victim's rights, victim/offender conferencing).

V116. BARJ4: Victim/Offender Mediation: A victim focused program that brings juvenile offenders and their victims together for the purpose of discussing with a trained mediator, the delinquent incident and reaching a restorative solution to the incident.

V117. BARJ5: Victim Awareness or Impact Training: Training designed to increase the juvenile offender's awareness of the impact of his or her offense and to lead the offender to acknowledge the impact of the crime on the victim and the community.

V118. BARJ6: Restitution Program: This is financial restoration of the victim. It is intended to pay crime victims for out-of-pocket losses directly resulting from the crime, including lost or damaged property, and is a visible sign of the juvenile justice system's responsiveness to victims' needs. In addition to addressing the financial losses of victims, restitution validates and vindicates crime victims' experiences by implicitly acknowledging that the offender, not the victim, was responsible for the losses.

V119. BARJ7: Victim Restitution Fund: This is a fund established by the president judge of a court of common pleas under section 6352(a)(5) of the Juvenile Act (relating to disposition of delinquent child), from which disbursements are made at the discretion of the president judge pursuant to written guidelines promulgated by the president judge and the limitations of the Juvenile Act, and used to reimburse crime victims for financial losses resulting from delinquent acts.

V120. BARJ8: Community Service Program: A requirement (either mediated or court ordered) that delinquent offenders make reparation to their victim or the community through valued community service projects.

V121. BARJ9: School-Based Probation: A form of community-based probation in which the schools are the primary work site for probation officers, allowing intensive supervision of probationers on a daily basis.

V122. BARJ10: Community Intensive Supervision Programs (CISP): A community based program for serious or chronic delinquent offenders – many of whom may be at-risk of institutional placement. CISP programs are characterized by intensive supervision in the youth's neighborhood, day/evening reporting activity centers, utilization of community-based resources, including program staff, accentuated competency development efforts, and accountability through community services/restitution.

V123. BARJ11: Victim Impact Statements: Victim impact statements personalize the effects of crime and highlight information that may not be obvious to juvenile offenders. Additionally, making a connection between the victim impact statement and the disposition makes the disposition more concrete.

V124. BARJ12: Juvenile Offender Apology: Juvenile offenders can take action to repair the harm by writing a letter of apology to the crime victim. Since many victims do desire an apology, the Pennsylvania Commission on Crime and Delinquency issued standards on victim-sensitive apologies that include the following elements:

- (1) Declaration of personal responsibility for the offense
- (2) Understanding of the harm done to the victim and community
- (3) A commitment not to repeat the offending behavior
- (4) A commitment to be a productive citizen.

V125. BARJ13: Curfew: a requirement that the juvenile be off the streets or public places at a stated hour. These requirements may require that a parent, guardian or other suitable adult accompany the juvenile while in public after the specified hour.

V126. BARJ14: Random Drug Testing: a requirement that the juvenile participate in urinalysis screenings for specific drugs. According to standards specified by the Juvenile Court Judges Commission, urinalysis screening policies must, at a minimum, detail the circumstances under which screenings may occur, the types of offenders who may be tested, who may conduct the tests, procedures governing a chain of custody of urine samples which will ensure confidentiality, and certainty of specimen ownership; the provision of results, both positive and negative, to the person being tested; the forewarning to offenders being tested of the possible sanctions for and ramifications of positive results; and a method for confirming a positive test result in cases where a juvenile denies drug use. Random drug testing is outlined in each juvenile probation department policy and requires that each offender to participate arbitrary drug screens throughout their supervision. The frequency of testing and the specific substances being tested for can be standardized or determined on a case-by-case basis, including discontinuation of drug testing for a specific offender.

V127. BARJ15: Electronic Monitoring: the use of electronic devices designed to verify that a juvenile is at a given location during specified times, to ensure compliance with sanctions or restrictions such as house arrest or curfew.

V128. BARJ16: House Arrest: a status created by court order as an alternative to secure detention or other restrictive placement. (also know as home detention) Typically this status requires a juvenile to remain at home subject to curfew and other liberty restrictions while continuing to work or attend school.

V129. BARJ17: Intensive Probation: is a community based alternative to residential placement. Intensive probation is an enhancement of traditional probation services where a juvenile receives traditional probation services augmented by more frequent face-to-face interactions with the probation officer, closer monitoring of the youth's activities outside of these contacts (including home, school, and employment), and more frequent evaluations of the youth's progress.

V130. BARJ18: Out-of-Home Community-Based Placement: a type of disposition involving the out-of-home placement of a delinquent or dependent child in the home of a relative, foster care, group home, or general child-care facility located within the child's community.

V130a. Placement Name: enter the type of family placement (e.g. relative or foster care) or the name of the group home (i.e. Adelphoi Village, etc.) or a general child care facility (i.e. Auberle House, etc.) or a Youth Development Center (i.e. YDC-Loysville, etc.) here.

V131. BARJ19: Out-of-Home Residential Placement: a type of disposition involving the out-of-home placement of a delinquent or dependent child in an open or secure facility for delinquent offenders or a general child-care facility for delinquent or dependent children.

V131a. Placement Name: enter the name of the open or secure facility (i.e. Youth Development Center at Loysville) or General Child Care Facility (i.e. Glen Mills School) here.

V132. BARJ20: Out-of-Home Voluntary Mental Health Placement: a private arrangement made directly by the parents or guardians or in cooperation with a mental health or drug and alcohol agency to place their child for the purpose of diagnostic and/or treatment services for a mental health disorder or a drug and alcohol problem.

V132a. Placement Name: enter the name of the mental health (i.e. Western Psychiatric Institute and Clinic) or drug and alcohol (i.e. White Deer Run) facility here.

V133. BARJ21: Non-Traditional Partnerships: involves any service-oriented relationships with organizations, agencies, and/or individuals that would directly or indirectly provide restorative services to the offender, victim, and/or the community. An example of a non-traditional partnership might be a probation officer/police ride-along patrol program in a particular community that would ensure that the juveniles living in that community are being held accountable to their curfews. The key is that juvenile probation is partnered with another agency, and that the service cannot be provided without such a partnership.

Non-traditional partnerships involve any services provided to juveniles and/or families that are performed in coordination with other service agencies. These services can include, but are not limited to: police/probation fieldwork partnerships; warrant units; task forces; and specialty courts designed to address drug or mental health issues.

V133a. Name of the Partnership: enter the name(s) of the non-traditional partnership(s) (i.e. Allegheny County Juvenile Probation/Penn Hills Township Police Department Night Time Ride-Along Program) here.

V134. BARJ22: Non-Traditional Services: Any services provided to juveniles and/or families by the probation department outside of traditional office hours (8 am–5pm). These services can be required of all probation officers or selected officers/units per departmental policy, or performed regularly at the discretion of probation officers. These services include but are not limited to *after-hours services* such as: client appointments; fieldwork and/or home visits; home visits to placement clients while on home pass; parent groups/training; any other groups or community service not previously covered in this survey. Non-traditional services can also be any BARJ related services provided through the non-traditional partnerships.

V134a. Name of the Service: enter the name(s) of the BARJ-related service(s) (i.e. Allegheny County Juvenile Probation/Penn Hills Township Police Department Night Time Ride-Along Program) that served the juvenile, his/her victim and/or community here.

V135a-z. BARJ23a: Pro-Social Skills Services: These services are designed to help adolescents increase their number of pro-social attitudes and behaviors. This dimension of competency development includes teaching skills in human interaction, problem solving, anger management, conflict resolution, and impulse control. The following programs (or services) teach pro-social skills as part of their treatment modality or teaching curriculum. The following programs (or services) were identified by the Chief Juvenile Probation Officers of the participating counties in the study. These programs (or services) were available to youths under juvenile court jurisdiction in their counties during the time period of study (circa 2000-2007). The programs (or services) are listed in alphabetical order. The counties that provided the service are listed in parentheses.

Code **(1) yes** beside *any* program (or service) the subject completed during the time he/she was under court supervision for the charge(s) that initiated the *Current BARJ Services* in your county. Remember, the subject may have completed more than one program or received more than one of these services. Code **(1) yes** to *all* that apply. If the subject completed a Pro-Social Skills Service not covered in the listing, code it as a **(1)** under ‘Other Pro-Social Skills Services’ (V135x-z.) and specify the program or service. Code **(0) no** if the subject did not participate in or complete the program or receive the service; or **(9) I don’t know**. A non-exhaustive list of Pro-Social Skills Programs or Services are included below with variables **V135a-k**. Use variables **V135x-z** to list any other pro-social skills programs and services not included in this listing. Please specify how these services addressed the subject’s pro-social skills needs.

- V135a. Abraxas NRT Program (Cumberland) _____
- V135b. Aggression Replacement Therapy (Allegheny) _____
- V135c. Anger Management Classes (Allegheny, Lancaster, & Mercer) _____
- V135d. Center for Family Excellence (Allegheny) _____
- V135e. Communication Skills Development (Mercer) _____
- V135f. Conflict Resolution Classes (Allegheny, Lancaster, & Mercer) _____
- V135g. Decision Making Classes (Allegheny, Lancaster, & Mercer) _____
- V135h. Experiential Education Program (Mercer) _____
- V135i. George Junior Republic Preventative Aftercare (Cumberland) _____
- V135j. Keep Yourself Alive (Allegheny) _____
- V135k. Positive Self Talk (Mercer) _____
- V135x. Other Pro-Social Skills Service _____ Specify _____
- V135y. Other Pro-Social Skills Service _____ Specify _____
- V135z. Other Pro-Social Skills Service _____ Specify _____

V136a-z. BARJ23b. Moral Reasoning Skills Services: These services are designed to replace antisocial thoughts, attitudes, values, and behaviors with moral ones. Moral reasoning skills help children recognize the cognitions (e.g. thoughts, judgments, decisions, etc.) that prompt anti-social behaviors and provide alternative cognitions, attitudes, and values that lead to psychologically healthy and productive behaviors. The following programs (or services) teach moral reasoning skills as part of their treatment modality or teaching curriculum. The following programs (or services) were identified by the Chief Juvenile Probation Officers of the participating counties in the study. These programs (or services) were available to youths under juvenile court jurisdiction in their counties during the time period of study (circa 2000-2007). The programs (or services) are listed in alphabetical order. The counties that provided the service are listed in parentheses.

Code **(1) yes** beside *any* program (or service) the subject completed during the time he/she was under court supervision for the charge(s) that initiated the *Current BARJ Services* in your county. Remember, the subject may have completed more than one program or received more than one of these services. Code **(1) yes** to *all* that apply. If the subject completed a Moral Reasoning Skills Service not covered in the listing, code it as a **(1)** under 'Other Moral Reasoning Skills Services' (V136x-z.) and specify the program or service. Code **(0) no** if the subject did not

participate in or complete the program or receive the service; or **(9) I don't know**. A non-exhaustive list of Moral Reasoning Skills Programs or Services are included below with variables **V136a-e**. Use variables **V136x-z** to list any other moral reasoning skills programs and services not included in this listing. Please specify how these services addressed the subject's moral reasoning skills needs.

V136a. CHOICES Program (Lancaster) _____

V136b. HIV/AIDS Education (Allegheny) _____

V136c. Maleness to Manhood (Allegheny) _____

V136d. Refusal Skills (ACE) (Mercer) _____

V136e. Samenow's Thinking Errors Program (Allegheny) _____

V136x. Other Moral Reasoning Skills Service _____ **Specify** _____

V136y. Other Moral Reasoning Skills Service _____ **Specify** _____

V136z. Other Moral Reasoning Skills Service _____ **Specify** _____

V137a-z. BARJ23c. Academic Skills Services: These services are designed to improve academic performance and social behavior in school. The services are designed to improve study and learning skills especially in the areas of reading, writing, and math. The following programs (or services) were identified by the Chief Juvenile Probation Officers of the participating counties in the study. These programs (or services) were available to youths under juvenile court jurisdiction in their counties during the time period of study (circa 2000-2007). The programs (or services) are listed in alphabetical order. The counties that provided the service are listed in parentheses.

Code **(1) yes** beside *any* program (or service) the subject completed during the time he/she was under court supervision for the charge(s) that initiated the *Current BARJ Services* in your county. Remember, the subject may have completed more than one program or received more than one of these services. Code **(1) yes** to *all* that apply. If the subject completed an Academic Skills Service not covered in the listing, code it as a **(1)** under 'Other Academic Skills Services' (V137x-z.) and specify the program or service. Code **(0) no** if the subject did not participate in or complete the program or receive the service; or **(9) I don't know**. A non-exhaustive list of Academic Skills Programs or Services are included below with variables **V137a-m**. Use variables **V137x-z** to list any other academic skills programs and services not included in this listing. Please specify how these services addressed the subject's moral reasoning skills needs.

V137a. Academy Summer School (Allegheny) _____

V137b. Allegheny Intermediate Unit @ CISP (Allegheny) _____

V137c. Alternative School (Allegheny, Cumberland, Lancaster, & Mercer) _____

V137d. ARISE Learning Strategies and Time Management (Mercer) _____

V137e. Boys & Girls Club Project Learn (Allegheny & Lancaster) _____

V137f. Career Academy (Lancaster) _____

V137g. Charter School (Allegheny, Lancaster, & Mercer) _____

V137h. Cyber School (Mercer) _____

V137i. Day Treatment (Allegheny, Cumberland) _____

V137j. Educational Mentoring/Tutoring (Allegheny, Lancaster, & Mercer) _____

V137k. GED Program (Allegheny, Cumberland, Lancaster, & Mercer) _____

V137l. Mall School (Lancaster) _____

V137m. Night School (Mercer) _____

V137x. Other Academic Skills Service _____ Specify _____

V137y. Other Academic Skills Service _____ Specify _____

V137z. Other Academic Skills Service _____ Specify _____

V138a-z. BARJ23d. Workforce Development Skills Services: These services are designed to help youths improve their chances of being economically self-sufficient after high school. The workforce development skill sets can include getting a job, keeping a job, achieving promotions, as well as developing specific computer, other technological skills or job training skills. The following programs (or services) were identified by the Chief Juvenile Probation Officers of the participating counties in the study. These programs (or services) were available to youths under juvenile court jurisdiction in their counties during the time period of study (circa 2000-2007). The programs (or services) are listed in alphabetical order. The counties that provided the service are listed in parentheses.

Code **(1) yes** beside *any* program (or service) the subject completed during the time he/she was under court supervision for the charge(s) that initiated the *Current BARJ Services* in your county. Remember, the subject may have completed more than one program or received more than one of these services. Code **(1) yes** to *all* that apply. If the subject completed a Workforce Development Skills Service not covered in the listing, code it as a **(1)** under 'Other Workforce Development Skills Services' (V138x-z.) and specify the program or service. Code **(0) no** if the subject did not participate in or complete the program or receive the service; or **(9) I don't know**. A non-exhaustive list of Workforce Development Skills Programs or Services are

included below with variables **V138a-j**. Use variables **V138x-z** to list any other workforce development skills programs and services not included in this listing. Please specify how these services addressed the subject's workforce development skills needs.

V138a. Abraxas Workbridge Employment Initiative (Allegheny) _____

V138b. The Achieve Program (Mercer) _____

V138c. Goodwill Industries (Allegheny & Lancaster) _____

V138d. Job Corps Services (Allegheny, Cumberland, Lancaster, & Mercer) _____

V138e. Job Readiness Classes (Allegheny, Lancaster, & Mercer) _____

V138f. NFTE Entrepreneurial Program (Allegheny) _____

V138g. Pennsylvania Career Link (Allegheny, Lancaster, & Mercer) _____

V138h. Youth Build (Allegheny & Lancaster) _____

V138i. Youthworks Job Skills (Allegheny) _____

V138j. Office Vocational Rehabilitation (OVR) (Mercer) _____

V138x. Other Workforce Development Skills Service _____ **Specify** _____

V138y. Other Workforce Development Skills Service _____ **Specify** _____

V138z. Other Workforce Development Skills Service _____ **Specify** _____

V139a-z. BARJ23e. Independent Living Skills Services: These services are designed to help older adolescents, particularly those coming out of placement or foster care who are unable to return home, to live sufficiently on their own. The independent living skills sets related to daily living can include money management and budgeting, educational and career planning, acquiring financial aid, housing assistance, and medical insurance. The following programs (or services) were identified by the Chief Juvenile Probation Officers of the participating counties in the study. These programs (or services) were available to youths under juvenile court jurisdiction in their counties during the time period of study (circa 2000-2007). The programs (or services) are listed in alphabetical order. The counties that provided the service are listed in parentheses.

Code **(1)** **yes** beside *any* program (or service) the subject completed during the time he/she was under court supervision for the charge(s) that initiated the *Current BARJ Services* in your county. Remember, the subject may have completed more than one program or received more than one of these services. Code **(1)** **yes** to *all* that apply. If the subject completed an Independent Living Skills Service not covered in the listing, code it as a **(1)** under 'Other Independent Living Skills

Services' (V139x-z.) and specify the program or service. Code **(0) no** if the subject did not participate in or complete the program or receive the service; or **(9) I don't know**. A non-exhaustive list of Independent Living Skills Programs or Services are included below with variables **V139a-e**. Use variables **V139x-z** to list any other independent living skills programs and services not included in this listing. Please specify how these services addressed the subject's Independent living skills needs.

V139a. Father's Initiative @ Hill House (Allegheny) _____

V139b. Health and Fitness Classes (Allegheny) _____

V139c. Independent Living Classes at CYA (Lancaster) _____

V139d. Urban League (Black Monday) (Allegheny & Mercer) _____

V139e. Youth Employment For Success (Mercer) _____

V139x. Other Independent Living Skills Service _____ **Specify** _____

V139y. Other Independent Living Skills Service _____ **Specify** _____

V139z. Other Independent Living Skills Service _____ **Specify** _____

V140a-z. BARJ23f. Other Treatment Programs: These programs teach competency development skills as part of their clinical interventions or educational curriculums. The following programs were identified by the Chief Juvenile Probation Officers of the participating counties in the study. These programs were available to youths under juvenile court jurisdiction in their counties during the time period of study (circa 2000-2007). The programs are listed in alphabetical order. The counties that provided the service are listed in parentheses.

Code **(1) yes** beside *any* program the subject completed during the time he/she was under court supervision for the charge(s) that initiated the *Current BARJ Services* in your county. Remember, the subject may have completed more than one program. Code **(1) yes** to *all* that apply. If the subject completed a treatment program not covered in the listing, code it as a **(1)** under 'Other Treatment Programs' (V140x-z.) and specify the program or service. Code **(0) no** if the subject did not participate in or complete the program; or **(9) I don't know**. A non-exhaustive list of Other Treatment Programs are included below with variables **V140a-www**. Use variables **V140x-z** to list any other treatment programs not included in this listing. Please specify how these services addressed the subject's competency development needs.

V140a. Aftercare (Allegheny, Cumberland, Lancaster Mercer) _____

V140b. Accountability Through Employment (Mercer) _____

V140c. Alternatives to Violence (Mercer) _____

- V140d. The Fathers' Workshop (Mercer) _____**
- V140e. Behavioral Health Rehabilitation Services (Lancaster & Mercer) _____**
- V140f. Drug & Alcohol Treatment (Allegheny, Cumberland, Lancaster, & Mercer) _____**
- V140g. Effective Family Changes Program (Mercer) _____**
- V140h. Family Group Decision Making (FGDM) (Mercer) _____**
- V140i. Jails, Institutions, Death (Allegheny) _____**
- V140j. Multisystemic Therapy (MST) (Mercer) _____**
- V140k. Multidimensional Family Therapy (MDFT) (Mercer) _____**
- V140l. Neighborhood Based Family Intervention Center (Mercer) _____**
- V140m. Parent Support Group (Mercer) _____**
- V140n. Parental Skills Training (Allegheny) _____**
- V140o. Partial Hospitalization (Allegheny, Cumberland, Lancaster, Mercer) _____**
- V140p. One-on-One Counseling (Allegheny, Lancaster, & Mercer) _____**
- V140q. Reality Tour (Mercer) _____**
- V140r. SAVE Program (Mercer) _____**
- V140s. Self-Awareness & Self-Esteem Programs (Allegheny) _____**
- V140t. Sex Offender Treatment (Allegheny, Cumberland, Lancaster, & Mercer) _____**
- V140u. Summer Enrichment Program (Mercer) _____**
- V140v. Special Offenders Treatment (Lancaster) _____**
- V140w. Teen Parenting (Mercer) _____**
- V140ww. Weekend Warrior Program (Mercer) _____**
- V140www. Woman's Journey (Mercer) _____**
- V140x. Other Treatment Programs _____ Specify _____**

V140y. Other Treatment Programs _____ **Specify** _____

V140z. Other Treatment Programs _____ **Specify** _____

V141. BARJ23g: Competency Development Services Index Score: include the services through which juvenile offenders acquire the knowledge and skills that make it possible for them to become productive, connected, and law abiding members of their communities and are comprised of six (6) competency domains (e.g. Pro-Social Skills, Moral Reasoning Skills, Academic Skills, Workforce Development Skills, Independent Living Skills, and Other Treatment Services). The Competency Development Services Index Score Variable (**BARJ23g**) will be operationalized as an index score based on the number of domains from which the subject received services. If the subject completed at least one program within a specific domain (i.e. The Academy Summer School (Allegheny) in the Academic Skills Domain) give a score of **1**. Scores can range from **0 (No programs completed in any of the domains)** to **6 (At least one program completed in each of the six domains)**.

The Competency Development Index Score will reflect a *Process Measure*. This type of measure is designed to answer the question whether the service(s) was reliably or (consistently) provided and *not* whether the service(s) was effective. We will answer the effectiveness of services question in the next section that examines (**BARJ Services Outcomes Variables**).

With the **BARJ Services Outcome Variables (V142 thru V161)** we are doing what researchers refer to as an *Impact or Outcome-Based Evaluation*. In this segment, we will examine whether the subjects *successfully* completed the program. Code **(1) yes** if there is evidence that the subject successfully completed the productive, connected, or law bidding outcomes. Assessment of **BARJ Services Variables (V113 thru V141z)** measures and the **BARJ Services Outcome Variables (V142 thru V161)** measures will provide us with evidence concerning the *reliability and validity* of the BARJ Intervention in our study.

V142. Productive1: Code **yes (1)** if subject was living independently at the time the case was closed for services.

V143. Productive2: Code **yes (1)** if subject was attending school, or an alternative educational program, or attending a GED program and maintaining passing grades; or had earned his high-school diploma or general equivalency diploma (i.e. passed the GED test) at the time the case was closed for services.

V144. Productive3: Code **yes (1)** if subject was accepted to or attending a post-secondary vocational training program (e.g. schools for computer technology, auto mechanics, carpentry, etc.) or an institution of higher learning (e.g. junior-college or college) at the time the case was closed for services.

V145. Productive4: Code **yes (1)** if the subject was employed full time or (part-time while still attending school) at the time the case was closed for services.

V146. Productive5: Code as a **percentage** based on the formula (Number of Community Service Hours Performed)/(Number of Community Services Hours Ordered) at the time the case

was closed for services. For example: (95 hours of community services performed)/(100 community services hour ordered)= 95%. If the subject performed more than the court-ordered number of community services hours, code as 100%.

V147a. Productive 6a: Code as a **percentage** based on the formula (Amount of Paid Restitution)/(Amount of Court-Ordered Restitution) at the time the case was closed for services. For example: (\$700 of paid restitution)/(\$1,000 of court-ordered restitution)= 70%. If the subject paid more than the court-ordered restitution amount, code as 100%.

V147b. Productive 6b: Code as a **percentage** based on the formula (Amount of Paid Fees and Fines)/(Amount of Court-Ordered Fees and Fines) at the time the case was closed for services. For example: (\$700 of paid fees and fines)/(\$1,000 of court-ordered fees and fines)= 70%. If the subject paid more than the court-ordered fees and fines, code as 100%.

V148. Connected1: Code **yes (1)** if the subject participated in a mentoring program (i.e. Big Brothers & Big Sisters, etc.) while under current court supervision.

V149. Connected2: Code **yes (1)** if the subject regularly participated in a school club (e.g. band, orchestra, newspaper staff, drama, Spanish, etc.) for at least one semester and/or completed an extra-curricular activity at school (i.e. a member of the track team for at least one full season) while under the current court supervision.

V150. Connected3: Code **yes (1)** if the subject if the subject regularly participated (attended programs at least once a week over a three month period) in a community club (e.g. the Boys Club, the Police Athletic League, scouting, the YMCA, etc.) while under current court supervision.

V151. Connected4: Code **yes (1)** if the subject was involved with a non-delinquent peer group in his/her community while under current court supervision.

V152. Connected5: Code **yes (1)** if the subject regularly attended church services (at least twice a month) or regularly participated with church groups and activities (e.g. Catholic Youth Organization, Food Bank, etc) while under current court supervision.

V153. Connected6: Code **yes (1)** if the subject's parents and/or adult caretakers provided a positive and supportive home environment (e.g. parents provided adequate supervision, child relationships were non-threatening and non-violent, parent supported juvenile court and school services, etc.) while the subject was under current court supervision.

V154. Connected7: Code **yes (1)** if the subject had a friendly and cooperative relationship with his/her teachers, employers, and other community members while under current court supervision.

V155. LawBiding1: Code **yes (1)** if the subject was *never arrested* for a summary, misdemeanor, or felony graded offense while under current court supervision.

V156. LawBiding2: Code **yes (1)** if the subject was *not arrested* for a summary, misdemeanor, or felony graded offense during the last six (6) months of current court supervision.

V157. LawBiding3: Code **yes (1)** if the subject was *never charged* with a violation of probation while under current court supervision.

V158. LawBiding4: Code **yes (1)** if all negative drug screenings were negative or the subject was considered to be drug free during the last three (3) months of current court supervision.

V159. LawBiding5: Code **yes (1)** if reported from the clinician(s) or the treatment program that the subject successfully completed one of the Blueprints for Violence Prevention Programs (e.g. Multisystemic Therapy, Functional Family Therapy, etc.) while under current court supervision.

V160. LawBiding6: Code **yes (1)** if reported from the clinician(s) or the treatment program that the subject successfully completed any other clinical program (e.g. Aggression Replacement Therapy, Cognitive-Behavioral Therapy, Victim Offender Mediation, etc.) while under current court supervision.

V161. LawBiding7: Code **yes (1)** if there is any evidence in the record or from the probation officers' reports that the subject successfully completed the current period of court supervision.

Juvenile and Adult Recidivism:

V162. PostRef: Code as the number of juvenile court referrals occurring after case closing.

V163. JRecd1: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the first juvenile recidivism incident that occurred after the case closing date.

V164. JOGS1: List the Offense Gravity Score for the lead charge of the first juvenile recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V165. JDate1: List the arrest or referral date for the lead charge of the first juvenile recidivism incident.

V166. JRecd2: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the second juvenile recidivism incident that occurred after the case closing date.

V167. JOGS2: List the Offense Gravity Score for the lead charge of the second juvenile recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V168. JDate2: List the arrest or referral date for the lead charge of the second juvenile recidivism incident.

V169. JRecd3: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the third juvenile recidivism incident that occurred after the case closing date.

V170. JOGS3: List the Offense Gravity Score for the lead charge of the third juvenile recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V171. JDate3: List the arrest or referral date for the lead charge of the third juvenile recidivism incident.

V172. JRecd4: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the fourth juvenile recidivism incident that occurred after the case closing date.

V173. JOGS4: List the Offense Gravity Score for the lead charge of the fourth juvenile recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V174. JDate4: List the arrest or referral date for the lead charge of the fourth juvenile recidivism incident.

V175. PostPlace: Code as the number of out-of-home placements, including foster care, group homes, and general child care facilities, that occurred after case closing. Do not include placements in detention, diagnostic facilities (e.g. 30 day mental health or drug and alcohol assessment programs) or weekend placements (i.e. Diakon Wilderness Center).

V176. PostArrest: Code as the number of adult arrest incidents occurring after case closing.

V177. ARecd1: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the first adult recidivism incident that occurred after the case closing date.

V178. AOGS1: List the Offense Gravity Score for the lead charge of the first adult recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V179. ADate1: List the arrest date for the lead charge of the first adult recidivism incident.

V180. ARecd2: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the second adult recidivism incident that occurred after the case closing date.

V181. AOGS2: List the Offense Gravity Score for the lead charge of the second adult recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V182. ADate2: List the arrest date for the lead charge of the second adult recidivism incident.

V183. ARecd3: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the third adult recidivism incident that occurred after the case closing date.

V184. AOGS3: List the Offense Gravity Score for the lead charge of the third adult recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V185. ADate3: List the arrest date for the lead charge of the third adult recidivism incident.

V186. ARecd4: List the four-digit crime code number (i.e. 3502 for Burglary) for the lead charge of the fourth adult recidivism incident that occurred after the case closing date.

V187. AOGS4: List the Offense Gravity Score for the lead charge of the fourth adult recidivism incident. A list of offense gravity scores developed by the Pennsylvania Sentencing Commission can also be located in **the OGS Excel file**.

V188. ADate4: List the arrest date for the lead charge of the fourth adult recidivism incident.

V189. Jail: Code as the number of jail incarcerations occurring after case closing.

V190. Prison: Code as the number of prison incarcerations occurring after case closing.

APPENDIX C
2008 BARJ SURVEY

**2008 Survey of County Juvenile Probation Departments on
Balanced and Restorative Justice**

1. Introduction

Dear Colleagues,

Thank you in advance for your assistance in completing this very important survey.

The purpose of this survey is to gather information on the implementation of balanced and restorative justice initiatives at the county level throughout Pennsylvania. We will compare the results of this survey with the survey completed in 2002. We have kept the surveys similar to enhance the results and make it as easy as possible to complete.

Documenting the progress of our efforts is critical for the provision of research, ongoing training and technical assistance, and funding of the Balanced and Restorative Justice Grant which supports this work. We expect the aggregated results to be compiled by the beginning of 2009. The results will display the progress in our implementation efforts. We will share those results with each of you and the Pennsylvania Commission on Crime and Delinquency. Perhaps we can also obtain some positive media coverage as well.

This survey is designed to be completed by you or your designee. Brett Shockloss, an intern through Shippensburg University is working with us on this project. He has assisted in several endeavors here and will be available to assist you with completing the survey if necessary.

Please respond to this survey by November 26th, 2008.

If you have any questions please contact Susan Blackburn at 717-477-1411 or sblackburn@state.pa.us.

2. General Information

1. What is your name?

2. What is your position?

3. What county do you work in?

3. Balanced and Restorative Justice Survey

1. Does your department have a Mission statement that reflects the principles of Balanced and Restorative Justice?

MAILING ADDRESS –

**Center for Juvenile Justice Training and Research
Shippensburg University, 1871 Old Main Drive
Shippensburg, PA 17257.**

FAX NUMBER - 814 477 1236

EMAIL - sblackburn@pa.gov OR bs0294@ship.edu

*Yes, If yes could you please mail/fax/email a copy to us, or type it the space below?

No

Mission currently under revision

Mission Statement:

2. Are any of your staff providing training on any aspect of Balanced and Restorative Justice?

Yes

No

If Yes, please explain

3. Do you have a formal planning group that facilitates the continued advancement of Balanced and Restorative Justice within your community and/or department?

Yes

No

If Yes, how often does this group meet and when was the last meeting?

4. What agencies or individuals are represented on the Balanced and Restorative Justice planning group?

	Yes	No
Juvenile Probation:	___	___
Youth/Families	___	___
Juvenile Court Judges	___	___
Service Providers	___	___
Prosecutor/District Attorney	___	___
Victim's Organizations	___	___
Defense Attorney	___	___
Public Defenders	___	___
Children & Youth Services	___	___
City Government Officials	___	___
Business	___	___
Law Enforcement	___	___
County Government Officials	___	___
Public Education	___	___
Faith Community	___	___
Community Members	___	___
Victims	___	___
Offenders	___	___
VOJO Advocate (DA/PD)	___	___
Others	___	___
Other (please specify)	___	___

5. What policies or procedures to incorporate the values and principles of Balanced and Restorative Justice have been developed within your jurisdiction?

	Yes	No
Restorative diversion programs developed & implemented.	___	___
Intake decisions reflect Balanced and Restorative Justice decision criteria.	___	___
Case supervision plans explicitly reflect accountability, competency development, and community protection.	___	___
Probation staff is required to engage in community outreach (attend meetings, etc.).	___	___
Probation staff receives victim impact statements.	___	___
Service providers required to demonstrate Balanced and Restorative Justice goals & progress.	___	___
Crime Victims' Compensation Fee is collected on every consent decree and adjudication.	___	___
Case closings address Balanced and Restorative Justice goals.	___	___

6. Have you/Chief incorporated other changes in policies or procedures to implement Balanced and Restorative Justice?

- ___ Yes
- ___ No

If Yes, what are they (list):

7. Do you have staff positions that have been created to assist in Balanced and Restorative Justice initiatives?

- ___ Yes
- ___ No

8. If you answered Yes to question 7, which of the following apply?

	Yes	No
Balanced & Restorative Justice Coordinator	___	___
Victim's Services Coordinator	___	___
Community Service Coordinator	___	___
Community Liaison	___	___
Restitution Manager	___	___
Victim/Offender Mediator	___	___
Other	___	___
Other (please specify)		

9. JCJC would also like to know if any of the following activities or programs are operating in your county. Please respond with either a Yes, No, Desired, In Planning Stage, or Not Planned.

Programs as listed below:

	Yes	No	Desired	In Planning Stage	Not Planned
Teen Courts/Peer Juries	___	___	___	___	___
Youth Aid Panels	___	___	___	___	___
Accountability Boards	___	___	___	___	___
Community Justice Panels	___	___	___	___	___
Agency Newsletter	___	___	___	___	___
Victim Impact Statements to impress upon youth the impact of their behavior	___	___	___	___	___
Victim Notification	___	___	___	___	___
Family Group Decision Making	___	___	___	___	___
Restorative Group Conferencing	___	___	___	___	___
Written or verbal apology to victims and other affected persons	___	___	___	___	___
Victims or Community Impact Panels	___	___	___	___	___

	Yes	No	Desired	In Planning Stage	Not Planned
Community or Neighborhood Impact Statements	—	—	—	—	—
Circle Sentencing/Peacemaking/Healing Victim/Offender Conferencing/Mediation	—	—	—	—	—
Victim Awareness Training (PA Curriculum on Victim/Community Awareness for Juveniles)	—	—	—	—	—
Restitution Program	—	—	—	—	—
Restitution Fund	—	—	—	—	—
Community Service	—	—	—	—	—
Crime Repair Crew	—	—	—	—	—
School Based probation	—	—	—	—	—
Intensive Supervision in Community	—	—	—	—	—
Competency Development Activities	—	—	—	—	—
Communities That Care	—	—	—	—	—
Use of Volunteers	—	—	—	—	—
Programs for Parents of Offenders	—	—	—	—	—
Collaboration with Community groups to work on issues like Communities That Care, Violence Prevention Activities	—	—	—	—	—
Videos/Booklets/Brochures that explain Balanced & Restorative Justice	—	—	—	—	—
Other (please specify)					

4. Competency Development

JCJC would like to know if your county is providing competency development activities related to the following domains, and if so could you please explain in the text box?

1. Pro-Social Skills?

Yes

No

If Yes, please describe

2. Moral Reasoning Skills?

Yes

No

If Yes, please describe

3. Academic Skills?

Yes

No

If Yes, please describe

4. Workforce Development Skills?

Yes

No

If Yes, please describe

5. Independent Living Skills?

Yes

No

If Yes, please describe

6. Are you/your Chief interested in any other additional training or assistance?

Yes

No

If yes, please list

APPENDIX D

COMPETENCY DEVELOPMENT SERVICES SURVEY

Competency Development Services Survey

Pro-Social Skills

- Aggression Replacement Training (ART) ()
- ARISE Anger Management Lessons ()
- Crossroads Anger Management ()
- Crossroads Cognitive Life Skills ()
- Thinking for a Change (T4C) ()
- Anger Management Classes ()
- Decision Making classes ()
- Conflict Resolution classes ()
- Other _____ ()
- Other _____ ()
- Other _____ ()

Moral Reasoning Skills

- Corrective Actions Journal System ()
- COURAGE To Take Action:
- A Cognitive-Behavioral System for Youthful Offenders ()
- The Facts of Life Seminar ()
- Moral Reconciliation Therapy (MRT) ()
- Victim Awareness Classes ()
- Other _____ ()
- Other _____ ()
- Other _____ ()

Academic Skills

ARISE Learning Strategies and Time Management ()

Boys & Girls Club Project Learn ()

Career Academy ()

Charter School ()

Communities in Schools (CIS)

Services Provided, Facilitated, or Brokered at Pennsylvania CIS Sites ()

Upward Bound ()

Alternative School ()

GED Program ()

Educational Mentoring /Tutoring ()

Other _____ ()

Other _____ ()

Other _____ ()

Workforce Development Skills

Crossroads JOBTEC ()

Goodwill Industries International, Inc. ()

Job Corps

Job Corps Admissions: Evaluating Applicant Behavior and Court History ()

Pennsylvania CareerLink ()

Pennsylvania Conservation Corps ()

YouthBuild ()

Job Readiness Classes ()

Other _____ ()

Other _____ ()

Other _____ ()

Independent Living Skills

ARISE Independent Living Curriculum ()

Casey Life Skills Tools ()

Curriculum and Lessons for Attaining Self-Sufficiency (CLASS) ()

I Can Do It! Micropedia of Living on Your Own/I'm Getting Ready ()

Kids + Kash ()

Preparing Adolescents for Young Adulthood (PAYA) ()

The Rent Event ()

Other _____ ()

Other _____ ()

Other _____ ()

Treatment Programs

Sex-Offender Treatment ()

Drug and Alcohol Treatment ()

Partial Hospitalization ()

One on One Counseling ()

Other _____ ()

Other _____ ()

Other _____ ()

Other _____ ()

¹ Survey results can be accessed through the Center for Juvenile Justice Training & Research.

² With passage of Act 33 of 1995, all county juvenile probation departments in Pennsylvania were mandated to offer balanced and restorative justice services. Consequently, there was no opportunity to select control or comparison groups within the Commonwealth's juvenile justice system.

³ The sample included (n=101) cases from Mercer County. The 101st case was excluded from the analyses.

⁴ Percentages may not equal 100% due to missing data.

⁵ Due to the difficulty in understanding the interpretation of log odds (the odds coefficient) and the odds ratio (the exponentiated odds coefficient), the results of the logistic regression models can be interpreted in terms of the percent change in the odds of the dependent variable. The log odds can be transformed to the percentage change in the odds of the dependent variable by subtracting 1 from the exponentiated coefficient and then multiplying that value by 100 (Long & Freese, 2001, pp. 135-136).

$$\text{Formula: } 100 * [\text{Exp}(B) - 1]$$

In the second step of Table 24 the ecological risk indices were introduced into the logistic regression model. The behavioral risk index has a statistically significant relationship with the occurrence of arrest within six months of release from court supervision. The log odds (b) are 0.253 and the odds ratio (Exp(B)) is 1.29. Using the above equation, these coefficients can be transformed in the percent change in the odds of experiencing a new arrest within six months of release from court-ordered supervision. Now, this relationship can simply be interpreted as the presence of behavioral risk factors increases the odds of a new arrest in six months by twenty-nine percent. This is a much simpler method of interpreting the results of a logistic regression model.

If we move to the third step in Table 24, delinquent history and recursive measures have been added. Here the effect of the behavioral risk index on arrest at six months continues to be statistically significant. The introduction of these additional variables has decreased the magnitude of this relationship only slightly. The presence of behavioral risk factors increases the odds of a new arrest at six months by twenty-two percent. This section of Table 24 also shows that violation of probation has a statistically significant influence on a new arrest at six months. Because the magnitude of this relationship is so strong, the percent change in odds interpretation method loses some substantive utility. This relationship may still be interpreted as having violated probation while under court supervision increases the odds of a new arrest within six months of being released from court-ordered supervision by two-hundred and forty-six percent. It is perhaps easier to interpret this relationship in term of the odds ratio, by stating that if a subject had violated probation while under court supervision the odds of recidivating within six months of release from supervision is approximately 3.5 times greater than for subjects who did not violate probation while under court supervision.

Moving on to Table 25, the relationship between selected demographic factors, ecological risk indices, delinquent history, and recursive measures on the occurrence of arrest at twenty-four months is analyzed. In the first stage of this model, only the relationships between demographic factors and recidivism were studied. Race had a statistically significant effect on recidivism within twenty-four months, in that the odds of African-Americans being rearrested were more than twice as great (110%) as for whites. The relationship between gender and recidivism approached statistical significance, and males had an odds of recidivism at twenty-four months that were seventy-two percent greater than females.

Both of these demographic effects disappeared with the introduction of ecological risk indices into the logistic regression model. Now only the behavioral risk index was statistically significant. This coincides with the results that were found in the model explaining recidivism at six months (See Table 24). A subject who experiences behavior risks has an odds of rearrest within twenty-four months of release from court supervision that is sixteen percent greater than a subject who does not exhibit these risks.

⁶ Hawaii's rearrest rate was for twenty-four months.