Contemporary Journal of Anthropology and Sociology

The Moderating Effects of Victim Offender Mediation among a "diverted" Population of Juveniles[1]

Holli R. Drummond Ph.D.[2]
Western Kentucky University

Abstract: While implementation of juvenile restorative justice (RJ) programs increased in the U.S. during the 1990s, quality evaluations examining reductions in recidivism remain limited. A lack of diverse RJ evaluations restricts our understanding of "how and why" these interventions reduce juvenile re-offending. The present study makes several contributions to our understanding of the effect of Victim Offender Mediation (VOM) on juvenile recidivism. First, the sample used in this evaluation is unique among prior studies of RJ since status offenders comprise 50% of both the VOM and comparison sample. In addition, because the entire sample are diverted youth, the present study evaluates RJ effectiveness in contrast to a reasonable comparison group. The final significant contribution of the present study is its evaluation of the moderating effect of a VOM intervention on individual variables (such as sex, ethnicity, age, prior offending, etc) linked with recidivism throughout the literature on juvenile delinquency. Such evaluation is made possible via utilization of the group comparison feature in Structural Equation Modeling (SEM). Several of these variables (including stability and school attachment) have never been included in multivariate analysis of RJ programs. Though the present evaluation found VOM ineffective for reducing juvenile recidivism, the results also indicate that males, status offenders, those engaged in prior disciplinary behavior at school, and with siblings involved in the system are uniquely vulnerable to failure. Overall, the contributions of this study should assist practitioners in tailoring and utilizing RJ programs appropriately by considering important characteristics of the juveniles they seek to transform.

Key Words: Restorative Justice, Juvenile Recidivism, Victim Offender Mediation, Diversion, Moderation

[1] The author would like to thank Kimberly Harris for her assistance during the data collection phase and the anonymous referees for numerous insightful comments which strengthened the quality of the publication significantly.
[2] Please direct all correspondence to: Western Kentucky University, Department of Sociology, 1906 College Heights Blvd #11057, Bowling Green, KY 42101-1057.

INTRODUCTION

As a model, restorative justice (RJ) focuses on repairing the harms of offensive behavior, including but not limited to criminal behavior, among all affected (Braithwaite, 1989; Brazemore & Umbreit, 2001; Zehr, 2002). A product of this approach is to "humanize" justice by bringing offenders and the injured party together for reparation. If through this process, the offender takes responsibility for his/her actions, a sense of community is potentially restored and community safety enhanced (Braithwaite, 1989). In that regard, the movement is about restoring the community to wholeness (Braithwaite, 1989; Braithwaite, 2002; Brazemore & Umbreit, 2001; Umbreit & Zehr, 1996; Zehr, 2002). Because implementation of this philosophy can take a variety of forms (i.e., Community Reparative Boards, Victim Offender Mediation, Family Group Conferencing, Circle Sentencing, etc.), evaluations which present their findings as "general" evidence of RJ likely mask important notable variation. In contrast, empirical analysis which emphasize the specifics of RJ design/implementation offer important discoveries. The present study adds to the body of empirical research on RJ by examining a singular Victim Offender Mediation (VOM) program for juveniles in KY. Several unique features of this VOM, and the analytic techniques utilized, make this evaluation a distinctive study of the effects of VOM on juvenile recidivism.

Regarding program features, the first notable characteristic is that status offenders (specifically beyond control juveniles) comprised 50% of the participants in the present study and an equivalent amount of the comparison group. Such juvenile offenders are rarely seen in prior research evaluating the general efficacy of RJ and when they are, they never appear in numbers great enough to model their behavior specifically. Second, participants of the current RJ group experienced pre-adjudicated diversion + mediation while the comparison group experienced pre-adjudicated diversion alone. As such, the present study evaluates VOM effectiveness in contrast to a reasonable comparison group. Alternatively, some prior research is appropriately criticized for comparing RJ juveniles, often eligible for diversion given their lack offense history or non threatening nature of their offense, to juveniles who experience formal court processing, habitually selected for court due to their prior record or severity of current offense. When evaluations contrast such different groups, results are likely biased in favor of the RJ participants. In contrast, other research has exposed RJ participants to adjudication prior to participation in RJ. According to Braithwaite's theory of reintegrative shaming, a philosophical rationale used in the development of RJ, formal court processing is a stigmatizing experience. Such stigma is hard to "shed" and among juveniles, the systems most impressionable offenders, it can lead to the internalization of a negative sense of self (Braithwaite, 1989). Because the effectiveness of RJ is thought to lie in its informal diversionary nature, adjudication prior to RJ involvement likely mediates its potential benefits. Finally, while RJ research as begun evaluating interaction effects within a Family Group Conferencing model (de Beus & Rodriguez, 2007; Rodriguez, 2007), moderation within a VOM framework has yet to be presented. Using the group comparison feature in SEM, this study illustrates moderation of individual characteristics (such as age, sex, school performance, and prior offending) on recidivism by examining whether the juvenile experienced VOM or traditional diversion alone.

The Restorative Justice (RJ) Movement

Within the RJ model, Victim Offender Mediation (VOM) provides one approach utilized with juvenile offenders in the United States. The purpose of VOM is to offer a setting in which victims and offenders meet and openly discuss their conflict via a structured and safe exchange facilitated by a trained mediator. Though a plan for reparation can result from a VOM dialogue, the primary goal is to provide an expressive outlet for the victim which should assist the offender in taking accountability for his/her actions (Brazemore & Umbreit, 2001; Bergseth & Bouffard, 2007; Niemeyer & Schichor, 1996; Roy, 1993; Umbreit, 1994; Urban & Burge, 2006;). It is important to note that most VOM structures allow for a single contact between victim and offender, often as short as two hours, and are primarily oriented to make reparations to victims. Thus, some argue that expecting a dramatic impact on recidivism from a program offering such limited victim-focused interaction is naive in light of the more consistent influence of family and personal characteristics experienced by juvenile offenders (Umbreit, 1994). Such limitations are catalysts for the utilization of additional RJ program options, which provide more sustained involvement and interaction.

Thus, restorative justice programming is not limited to VOM but rather consists of community reparative boards (CRB), family group conferencing (FGC), and circle sentencing (Brazemore & Umbreit, 2001; Umbreit, Coates, & Vos, 2002) as well as "hybrid" models (Bergseth & Bouffard, 2007; de Beuz & Rodriguez, 2007; Rodriguez, 2005; Rodriguez, 2007). One of the oldest RJ approaches (dating as far back to the 1920s in the US) is the CRB. Communities using this model seek to empower their citizens by giving local groups authority to develop sanctions and oversee their successful implementation while also working alongside the offender to ensure that the maximum amount of accountability is achieved (Karp & Walther, 2001). Though the CRB structure has lead to significant community involvement, one concern among RJ philosophers is that, unlike VOM, FGC, and Circle sentencing, CRBs often lack the appropriate victim input (Brazemore & Umbreit, 2001).

The final two models have the greatest connection with the conflict resolution process used by many indigenous communities across the world, and are thought to offer greater potential for change given the increased involvement generated via their structure. First, Family Group Conferencing (FGC) has its roots in the resolution traditions of the Maori of New Zealand and was even adopted as national legislation in New Zealand in 1989 (McElrea, 1993; Morris & Maxwell, 2001). This approach gathers all community members affected by the offense (typically both the victim and offender, their support groups, and additional concerned community stakeholders), at a conference where a resolution decision is made by those present. Similar to the VOM model, a trained moderator provides safe and guided facilitation at the conference. Unlike the VOM model, a resolution agreement is a typical outcome. This agreement assists the offender in understanding the harms done by his/her actions and engages his/her support group by holding them accountable for the future behavior of the offender (Hayes & Daly, 2003). Also similar to the VOM model, most FGCs provide a singular contact between victim and offender. However, because this approach involves more support personnel and, as noted above, seeks to engage these individuals in becoming part of the solution, the FGC model is typically more intensive and complex than VOM.

The final model is often referred to as circle sentencing as its roots are traced to the peace making circles of native North American groups (Melton, 1995; Stuart, 1996). This approach takes FGC a step further as it is equally concerned with resolving the present dispute/criminal offense, and addressing the underlying causes of the conflict. Therefore, not only are victims, offenders, their support groups and interested community members involved, but also service providers (such as representatives from justice, social service, counseling, and education groups). In contrast to traditional punitive criminal justice policies alone, these four restorative justice approaches, and many hybrid models, are being employed by municipalities in order to help restore the community and rehabilitate juvenile delinquents (Brazemore & Umbreit, 2001). Few, if any, studies exist evaluating the impact of either CRBs or circle sentencing on juvenile recidivism. Thus, the majority of RJ programs whose impact on juvenile recidivism has been evaluated in comparison to a non-RJ intervention, are either VOM or FGC (Baffour, 2006; Bergseth & Bouffard 2007; de Beuz & Rodriguez, 2007; Hayes & Daly, 2003; Hayes & Daly, 2004; Luke & Lind, 2002; McGarrell, 2001; McGarrell, & Kroovland, 2007; Niemeyer & Schichor, 1996; Rodriguez, 2005; Rodriguez, 2007; Roy, 1993; Umbreit, 1994; Urban & Burge, 2006). The current study evaluates the effectiveness of a VOM offered to juvenile offenders in KY when compared to a matched group of diverted juveniles in a separate KY county.

RESEARCH EVALUATING THE EFFECTIVENESS OF RESTORITIVE JUSTICE (RJ) ON JUVENILE RECIDIVISM

Victim Offender Mediation (VO*M)*

Four prior studies evaluated juvenile VOM projects each using a different type of comparison group (Niemeyer & Schichor, 1996; Roy, 1993; Umbreit, 1994; Urban & Burge, 2006). Among those, the only study which attributed a significant reduction in recidivism to VOM participation was the most recent (Urban & Burge, 2006). Urban and Burge (2006) evaluated a juvenile VOM program operating in St. Louis since 2001. Results indicate that VOM completers (only 24% of those referred to the program) had a significantly lower level of subsequent referrals than juveniles who were assigned to a control group. However, several characteristics of this study are of concern. First, while program completion was not a necessity for inclusion in the control group, the VOM group was comprised solely of VOM completers. This characteristic, known in the literature as selection bias, is representative of the most consistent weakness in prior RJ evaluations seeking to determine the effectiveness of this approach for reducing juvenile recidivism (Bergseth & Boffard, 2007; Sherman, Strang, & Woods 2000). In other words, because program completers comprise those most willing to change or show remorse, the subsequent behavior of RJ groups might be more a factor of self-selection than program treatment. A methodological remedy is to treat all those assigned to RJ as the RJ group whether they participated/completed or not. Of addition concern, the initial "offense severity" average for the control group in the St. Louis study was significantly higher than those referred to VOM, indicating they were at greater risk for recidivism, though multivariate analysis including such an initial difference was not conducted. Thus, the significant impact of VOM assessed in this study should be interpreted while also considering that selection bias and initial variation in offense severity between the two

groups could have also significantly affected the variation in recidivism observed.

The three additional VOM studies are a decade older (Niemeyer & Schichor 1996; Roy, 1993; Umbreit, 1994). Both Roy (1993) and Umbreit (1994) compared VOM participants to youth processed more traditionally. The results of these studies indicate a consistent pattern; the inability of VOM to significantly reduce recidivism. When critically examining the quality of these two early evaluations, it is important to note that each of these programs gave juveniles and their families the option to participate in the RJ program, and an unknown number declined. Thus, while noting the pattern of non-effectiveness observed in both studies, readers should also be aware that concerns about selection bias exist. Finally, Niemeyer & Schichor (1996) contrasted the recidivism of participants who completed a VOM program in CA with juveniles who were referred to the program but did not participate. They too observed no variation between groups, though self-selection could again contribute to their findings. In summary, though only one of four prior VOM studies among juveniles found the intervention effective, one should be mindful of the effects of selection bias when interpreting this pattern.

Though methodological limitations weaken the potential impact of the VOM evaluations reviewed thus far, a program evaluation of significant quality was conducted recently in a mostly rural Midwestern county. Bergseth & Bouffard (2007) acknowledge their RJ evaluation involved a program most similar to VOM. However, because a variety of RJ processes were utilized (VOM, indirect mediation, victim-impact panel, or community reparative boards), they prefer to reference it as a "hybrid" or "more restorative" model (Brazemore & Umbreit, 2001). In this study RJ participants, along with a comparison group of matched offenders who received traditional treatment, were followed long-term (as long as four years for some). In contrast to the studies described above, Bergseth and Bouffard (2007) guard against self-selection bias by including juveniles in the RJ group if they were referred to the RJ program no matter if they completed it. The authors found general support as the RJ group had less recidivism at every follow-up time point in contrast to the comparison group. Further, even though the RJ group was younger, less urban, and had significantly fewer prior contacts with police (16% had prior contacts compared to 35% of the control group), multivariate analysis indicated that an independent effect for RJ remained when such differences were controlled. Therefore, while not entirely a VOM program, Bergseth and Bouffard (2007) provide evidence of the effectiveness of RJ within an exceptional methodological analysis. The present research seeks to add to the work begun by Bergseth and Bouffard (2007) by modeling the effectiveness of an exclusively VOM intervention alongside multiple individual characteristics.

Family Group Conferencing (FGC)

In addition to assessments of VOM, prior research evaluating the effect of RJ on juvenile recidivism often observed the Family Group Conferencing (FGC) approach. Because of legislative changes implemented in New Zealand and municipalities of Australia in the late 1980s and 1990s, it is no surprise that three of the first FGC evaluation studies, which use recidivism as an outcome, originate from that geographic area. First, Griffiths (1999) found no significant variation at one year post-intervention between the post-adjudication FGC group and a matched group of juvenile offenders managed on probation. Next, Luke and Lind (2002) offer one of the first large scale evaluations

of the success of FGCs at reducing juvenile recidivism in their inaugural year analysis of the New South Wales Young Offenders Act. While controlling for gender, ethnicity, age, and offense type, they find that pre-adjudicated FGC juveniles (both first time offenders and those with prior records) were significantly delayed in the time taken to reoffend (hazard ratio of .78 and .84), and their reoffending rate is moderately, though significantly, reduced (15-20%) when compared to youth who experienced the traditional court process. While these authors are fairly confident in their findings, they do note that, "given the complexity of decision making in the justice system, and the complex causes of offending behavior, it is possible that this lower level of reoffending for conferences is partly due to selection decisions by referring bodies and the young people themselves" (pg. 13). By the authors' admission, selection-bias cannot be ruled out when interpreting their findings. In a second pre-adjudication design, Sherman and Strang (2007) observed the effect of the Reintegrative Shaming Experiments (RISE) in Canberra, Australia for as many as three years post intervention. Similar to the Bergseth and Bouffard (2007) study, the Canberra study prevented self-selection bias by including juveniles in the RJ group whether they completed the intervention or not. Their results indicate that neither conferenced juvenile shoplifters nor conferenced juvenile property offenders who harmed a private citizen were less likely to recidivate than the control group. The RISE evaluation did however indicate that violent "youthful" offenders assigned to a FCG were 38% less likely to engage in reoffense[3].

As in Australia, FGC has become a popular RJ approach in North America in recent decades. Utilizing random assignment, McGarrel and Hipple (2007) evaluated the effectiveness of a FGC diversion program among first time offenders in Indianapolis in contrast to a control group who received an alternative court ordered diversion (primarily teen court, a shoplifting diversion program, community service, or VOM). The RJ program, including all cases referred not just those successfully completed, was effective (the RJ group took longer to reoffend and had a 17.4% lower re-offending rate), though the effects waned (but remained significant) toward the end of the 2-year follow-up period. However, in multivariate analysis, the FGC results were mediated by program completion and age such that younger youth and those who completed diversion had a lower rate of failure (McGarrel & Hipple, 2007). Also in the U.S., Baffour (2006) conducted an analysis of the experimental FGC program implemented by police in Bethlehem, Pennsylvania. The study sought to impose a high quality experimental methodology by using random assignment into treatment and control groups. Unfortunately, less than half (80 juveniles) completed the FGC among the 189 juveniles selected for the treatment. In the analysis, this small group alone was treated as the experimental group and found 43% less likely to recidivate. Future research replicating such a design while avoiding the concern associated with self-selection bias is warranted to establish stronger faith in these findings.

Prior research examining restorative justice (RJ) Moderation

In an attempt to explain for whom or under what conditions Victim Offender Mediation (VOM) is impactful, the present study will also investigate variation in individual effects by program participation. Several studies investigated variation in

[3] It is important to note this violent group was not solely comprised of juveniles as it included offenders as old as 30 years of age.

recidivism by individual characteristics exclusively among Family Group Conferencing (FGC) participants (i.e., without a comparison/control group). First, from New Zealand, Maxwell, Kingi, Robertson, Morris, & Cunningham (2004) found that youth who showed remorse and agreed with the resolution agreement were less likely to recidivate. Similarly Hayes and Daly (2003), examining the impact of FGCs in Queensland Australia, found remorseful juveniles and those who experienced consensus outcomes less likely to recidivate. In further analysis more similar to the present, Hayes and Daly (2004) found that females were 6 times less likely to reoffend while first time offenders 2 times less likely. In contrast, they observed that offenders in mid-adolescence (aged 13-16) are at least 14% more likely to reoffend, and those who began their criminal offending at an earlier age were 1 and ½ to 2 times more likely (Hayes & Daly, 2004). While the effect of these characteristics are important to note, as mentioned above neither Maxwell and Morris (2006) nor Hayes and Daly (2003; 2004) contrast the likelihood of their findings with a comparison group.

Two researchers (de Beus & Rodriguez, 2007; Rodriguez, 2005; Rodriguez, 2007) have begun exploring moderating effects while including a comparison group. The RJ program in Maricopa County, Arizona is described as a hybrid because though Family Group Conferencing is used, the conference is mediated by Community Justice Committees who act as Reparative Boards. Results predicting recidivism in three separate analyses were varied and complex as one study included community effects (Rodriguez, 2005) and several included multiple interaction terms to evaluate moderating effects (de Beus & Rodriguez, 2007; Rodriguez, 2007). Because individual effects are the focus of the present study, discussion of Arizona results will be limited to those observed at the individual level. First, all results indicated that RJ participants were less likely to recidivate than juveniles in other diversion programs even when additional variables were added to the analysis. Among the additional individual characteristics tested, males, younger youth, status offenders, and juveniles with prior JJ involvement were found more likely to recidivate while property offenders and those completing their diversion program (RJ or otherwise) were at least 42% likely.

While these results are insightful, especially program completion given the issue of self-selection in some prior studies, several moderating findings provide even more detailed understanding (de Beus & Rodriguez, 2007; Rodriguez, 2007). First, as noted above females were generally found less likely to recidivate. However an interaction between sex and RJ participation indicated that females benefit more from RJ but males still benefit in contrast to the diversions experienced by the control group. Next, a complex finding regarding prior offending adds greater nuance to the general finding that more prior offending leads to more recidivism post-intervention. Specifically, Rodriguez (2007) found that RJ participants with one prior offense or no prior offenses were less likely to recidivate while RJ participants with two or more are actually 2 times more likely to recidivate than the control group. Regarding variation in the effect of offense type by program, status offenders in the RJ group were 31% less likely to recidivate than status offenders in the control group. In conclusion, incorporating moderation into RJ program analysis has revealed several mechanisms through which FGC operates. It is the intent of the present study to add to our understanding of causal mechanisms by illustrating how the effect of VOM is

moderated by individual level characteristics such as sex, race, age, and family dysfunction. Further, given institutional interest in finding successful interventions for status offenders, the present evaluation hopes to replicate the results of Rodriguez (2007) for this population.

DESCRIPTION OF THE RETORATIVE JUSTICE (RJ) PROGRAM UNDER EVALUATION

The current study evaluates the effectiveness of a Victim Offender Mediation (VOM) program utilized among a group of diverted youth in a principally urban KY county in comparison to a matched sample of similar offenders in a comparable KY county. The VOM is overseen by a Subcommittee of the Model Court Program and is referred cases by the local Court Designated Worker (CDW) Office in addition to family and district court judges. Though the staff of the VOM are comprised solely of volunteers, office space is provided by the Administrative Office of the Courts (AOC), the entity which operates the CDW program in KY. Further, the VOM has a collaborative partnership with the College of Social Work at the University of Kentucky and a not-for-profit organization, the Center for Human Entrepreneurial Solutions (CHES).

From 2008-2011, the director of the VOM and a host of volunteers offered mediation and/or case management to approximately 200 juveniles, their families, and/or victims. The director holds a 4-year degree in Social Work and is trained in facilitative mediation, transformative mediation, and restorative justice processes. Most volunteers are student interns who are trained by the director and acquire additional knowledge via the mentoring relationship with the director during their apprenticeship. The youth whose cases were handled by the VOM during the evaluation period comprise the restorative justice (RJ) group for this evaluation (N=197).

In addition to mediation, the cases of all VOM youth are managed by CDWs through which they are completing a pre-adjudication diversion program. Kentucky's diversion program is a process designed to, "educate, instill a sense of accountability, and deter young people from getting into further trouble" (pg. 2, CDW, 2009). Similar to most diversion programs in the U.S., diversion in KY focuses on preventing future offending by identifying the social problems that underlie problem behavior and matching those problems with programs and services in the surrounding area. Because the CDW office serves as the intake agency of the juvenile justice system in KY since its inception in 1986, they employ legislative guidelines to determine which juvenile cases must go to court and which can be managed on diversion. In KY, CDWs can refer any juvenile case to diversion unless a firearm is used during commission of a felony or a juvenile is charged with either contempt of court or violation of probation. However, most cases involving serious offenses and repeat offenders go to court. State-wide, approximately 50% of juvenile cases are monitored on diversion.

After a court designated worker (CDW) performs an initial assessment, a diversion agreement is written. In it, each youth is given tasks (such as attend school, perform a service learning project, refrain from associating with negative influences, etc.) appropriate to their current charge and initial assessment. After the agreement is signed by the youth, s/he is monitored by a CDW from 4 to 6 months. If the agreement is completed successfully, the case is dismissed. Alternatively, formal court proceedings are set up for youth who fail to comply with the conditions of diversion. Youth on diversion in KY are charged with

both status offenses, criminal due only to the age of the offender (e.g., truancy, running away, beyond control of parent), and public offenses which are criminal no matter the age of the offender. As such, the VOM provided mediation services to both status and public offenders. To attend mediation was a diversion term for 93% of the VOM youth while following the rules of mediation was a term for 45%, 48% were required to do both as part of their CDW diversion agreement.

After initial referral, the staff of the VOM organization convene a mediation conference. For the majority of cases, this single conference was the sole face-to-face interaction offered by the VOM. During the evaluation period, conferences were attended by the juvenile, their parent, and their victim. For juveniles charged with beyond control of parent, the parent was the victim in those cases. When the victim was another child (often cases involving assault or harassment), the parent of the other child was also typically in attendance. A third party was occasionally in attendance and played the role of attorney, community advocate, or provider of additional community services (such as psychiatric or educational services).

Before the mediation occurred, the parties involved signed an *Agreement to Mediate* confidentiality agreement. Within this first step, everyone is made aware that the program is voluntary, though the juveniles also learn that if they choose not to participate, their case is transferred back to the CDW for further action. Typical of a RJ approach following a VOM process, the KY VOM process is non-authoritarian and presented as "outside the system" (Brazemore & Umbreit, 2001). The main goals of the conference are: to encourage the juvenile to take accountability for the harms done, provide the victim a venue for expressing the harms, and to restore the relationship to its former (more peaceful) state through the development of a mediation contract. Most resulting mediation contracts listed tasks to be completed by the juvenile in an attempt to restore the relationship by repairing the damage caused by the offensive behavior.

Research Questions for the Current Study

The purpose of this evaluation is to address the following questions: 1) Did the victim offender mediation (VOM) reduce recidivism in comparison to a similar group of KY diverted offenders who received no such "additional" intervention?, 2) Which individual characteristics predicted subsequent offending and how does the impact of these characteristics vary over time?, and finally 3) Did VOM moderate the role of the above mentioned individual characteristics in predicting recidivism and if so how? The effectiveness of the VOM will be based on the occurrence of later offending and the number of later offenses. Specifically, this evaluation seeks to address whether participation in VOM decreased the likelihood of subsequent offending, defined as new referrals, in contrast to juveniles experiencing only pre-adjudicated diversion. Using data obtained from the electronic Case Management System (CMS) of the court designated worker (CDW) program, the occurrence and amount of subsequent offending was measured at multiple time periods in order to determine if and how the impact of the VOM varied throughout the follow-up time period (all cases were observed for 6 months post-intervention, while some cases were observed for as long as three years). Statistical analysis begins with comparisons of important life characteristics between the two groups using a series of independent *t* tests and chi-square tests of significance. Next, *t* tests and chi-square tests of significance are used to

illustrate between-group variation in recidivism (again: occurrence and amount of subsequent offending). Finally, multivariate analysis illustrates characteristics most associated with reoffending and how those characteristics are moderated by VOM participation.

METHODS

Sample

The victim offender mediation (VOM) group included 197 diverted juveniles who were referred to mediation as part of their diversion agreement in a principally urban KY county at some point during December of 2008 through December of 2011. The evaluation of VOM in the current study is more conservative than some reviewed above as any juvenile referred to VOM is retained in the RJ sample regardless of VOM participation/compliance. A comparison sample was generated by selecting youth in a separate KY county of similar size, whose diversion cases were being managed by a court designated worker (CDW) and were of similar race/ethnic, gender, offense type, and offense date to the VOM cases. Because such a high portion of diversion cases in the VOM were selected for diversion, choosing a comparison group from an entirely separate county was necessary to ensure enough cases for a comparative sample. To be clear, every juvenile in the sample was selected for and chose to participate in diversion. However, the average number of diversion terms for the comparison group was 5.42 and 4.18 for the VOM group, a difference which is statistically significant (T-test=7.246**). Such a difference could be viewed as a limitation, the implication of which is discussed in the conclusion section below.

To achieve as accurate a match as possible, the researcher requested an exhaustive list of comparison county offenders from the administrative office of the court's (AOC) Office of Research and Statistics. This list was organized by date and offense type, but also contained information about gender and racial/ethnic status. The primary evidence used in selecting the comparison county was the most recent *County Health Rankings* compiled by The University of Wisconsin's Population Health Institute and the Robert Wood Johnson Foundation. Based on their evaluation of "health outcomes," the VOM county ranked as the 12th healthiest county in KY and the comparison county the 13th. Further, regarding similarity in socio-economic status of children, while the portion of children receiving free lunch in the VOM county was 38% and in the comparison county was 39%, 24% of children live in poverty in the VOM county in contrast to 26% for the comparison. Finally regarding childhood "risk," the teen pregnancy rate in the comparison county was 38/1,000 while in the VOM county it was 41/1,000. In sum, it is on the basis of similarity among these measures of "health," which makes the comparison group as viable a comparison as exists in the state (University of Wisconsin, 2012).

Measures

Case Management system (CMS) data was obtained for all cases (395) from the CDW's office. To provide a comprehensive evaluation of the RJ site in contrast to the comparison group, analysis is presented for five "types" of variables. These include recidivism measures, demographic variables, instability measures, school achievement and attachment variables, and measures of prior trouble or present disorders. The outcome measures used in this evaluation illustrate recidivism. The current study defines recidivism as additional referrals from date of intervention through September of 2012. To provide as thorough an indication of recidivism as

possible, measures of both the occurrence and amount of recidivism were included in the analysis. Both *occurrence of subsequent offending* (0=no subsequent referrals & 1=yes at least one subsequent referral within the time period considered) and *amount of subsequent offending* (# of subsequent referrals within the time period considered) were measured at 6 months, 1 year, 18 months, 2 years, 30 months, and 3 year follow-up time periods.

Age (Range 10-18), gender (females=0, males=1), race/ethnicity (whites=0, racial minority=1) and current charge (status offense=0, public offense=1) were included as demographic control variables. Siblings in the system allowed analysis contrasting juveniles whose siblings have been involved with KYs department of juvenile justice (DJJ) (coded 1) and those with no sibling involvement (coded 0). Grade retention (yes=1) and average (a=95; b=85; c=75; d=65; & f=55) assessed academic achievement while the additive scale school trouble evaluated whether the juvenile had ever arrived late or missed school, or experienced either in or out of school suspension (alpha=.68, range 0-4 where 0=none of the behaviors had ever occurred and 4=admission to all behaviors). To measure risk prior to the intervention, the variable any priors (yes=1) was included and two composite scales from the Global Appraisal of Individual Needs (GAINS) short screener. This screener includes 4 components which assess internalizing, externalizing, substance, and crime and violence disorders with 5 questions each (range for each subscale is 0-5, where higher scores give stronger evidence for diagnosis). Factor analysis of the relationships between these screeners indicated a moderate relationship between the externalizing and crime/violence disorder questions (alpha=.50), and the internalizing and substance abuse questions (alpha=.45). Based on such relationships and to obtain efficiency in the consideration of prior disorders, summative scales were created for externalizing + crime/violence (range=0-9; again, higher scores indicate a more negative self-assessment) and internalizing + substance abuse (range=0-10; again, higher scores indicate a more negative self-assessment). Creating two composite scales instead of using an overall score for GAINS (i.e, adding the four subscales together) allows for illustration of the differing impacts of "internalized" versus "externalized" disorders.

RESULTS

Sample Characteristics: Variation between victim offender mediation (VOM) and comparison groups

In addition to providing information about the whole sample, Table 1 also illustrates where the VOM and comparison groups are similar and where they differ. Regarding demographics, no significant variation exists between the two groups. Such lack of variation is not surprising as sex, racial/ethnic status, and type of charge were used to select comparison group cases based on information about the VOM group. On average, the sample was fourteen and a half, and included as many male, minority, and public offenders as female, white, and status offenders. However when evaluating several other control variables, significant variation between groups is observed. First, the family situation of the comparison group was less stable as 26% reported sibling involvement with DJJ in contrast to just 6% of the VOM group (x^2=37.31; p<.001).

Table 1: Sample Characteristics (***p<.001; **p<.01; *p<.05; ᵗp<.10)

VARIABLE	Entire Sample (395)	Comparison (N=198)	VOM (N=197)	Inferential Test
Age at Referral				
Mean (SD)	14.67 (1.66)	14.67 (1.62)	14.67 (1.71)	T-Test=.03
Gender				
Male	52%	51%	50%	x^2=.31
Female	48%	49%	50%	
Race/Ethnicity				
Racial Minority	51%	48%	54%	x^2=1.75
White	49%	52%	46%	
Type of Current Chrge				
Status Offense	52%	52%	52%	x^2=.00
Public Offense	48%	48%	48%	
Siblings in the System?				
Yes	22%	29%	6%	x^2=38.99***
No	78%	71%	94%	
Have You been Retained?				
Yes	26%	29%	23%	x^2=1.80
No	74%	71%	77%	
Grades Average				
Mean (SD)	77 (9.5)	78.2 (8.87)	75.6 (9.93)	T-Test = 2.78**
School Trouble				
Mean (SD)	2.90 (1.24)	3.12 (1.02)	2.69 (1.41)	T-Test = 3.45***
Externalizing + Crime/Violence Scale				
Mean (SD)	2.81 (2.43)	2.6 (2.47)	3.0 (2.38)	T-Test = 1.74ᵗ
Internalizing + Substnce Abuse Scale				
Mean (SD)	1.88 (2.28)	1.61(2.29)	2.16 (2.25)	T-Test = 2.39*
Any Priors				
Yes	31%	25%	37%	x^2=5.9**
No	69%	75%	63%	

Though the difference was relatively nominal, comparison county youth reported a significantly higher grade average (*F*-test=-2.78; p<.01). In contrast to that

positive school characteristic, the comparison group also acknowledged significantly more experience with school trouble (*F*-test=-2.78; p<.01). For the final school variables, grade retention, no between group variation was observed. While group variation in school achievement and attachment was mixed, the final category of variables consistently indicates that the VOM group is at greater risk of recidivating than the comparison group. First, the VOM group scored a higher average on the screener to detect both an internalized or substance abuse disorder (F-Test =-2.39*) and an externalized or crime/violence disorder (though the later difference approached but did not achieve statistical significance; F-Test =-1.74[t]). Finally, and perhaps of greatest interest, was the finding that 36% of the VOM group had a prior referral in contrast to 25% of the comparison group (x^2=5.9**).

Before bivariate recidivism analysis is presented, a point of clarification is needed. As Table 2 suggests, because the sample included youth involved in mediation and/or diversion programs across a 4 year time period, the length of time for which follow-up observations was possible varied. The loss of cases does not represent typical attrition (i.e., when subjects refuse to participate at some point during the RJ program). Instead the length of follow-up available varies because cases were added across a 3 year period so that not enough time has passed to include lengthier points for cases occurring during more recent periods.

Table 2: Variation in Follow-Up

FOLLOW-UP TIME PERIOD	Entire Sample (395)	Comparison (N=198)	VOM (N=197)
Through 6 months	395	198	197
	100%	100%	100%
Through 1 Year	366	183	185
	93%	93%	93%
Through 18 months	306	159	147
	77%	80%	75%
Through 2 years	249	126	123
	63%	64%	62%
Through 30 months	183	90	93
	46%	45%	47%
Through 3 years	124	56	64
	31%	28%	32%

For example, because all of the cases were mediated or selected for inclusion because of a referral in December of 2011 or prior, 100% of the cases had at least 6 months of follow-up data available at September 1 of 2012 (the most recent time point at which recidivism data was recorded). In contrast, only 31% of cases have 3 years of follow-up recidivism data because only this small portion was involved in VOM or selected as a comparison case because of offending during the earliest time period (between December of 2008 and Sept 1 of 2009). Therefore, while recidivism data is available for more than ½ of the sample through 2 years post-intervention (126 control cases and 123 comparison cases), results evaluating 30 months or 3 years post-

intervention (especially those drawing conclusions about patterns and trends), should be interpreted with caution considering that the sample drops to 1/3rd the original size at these more distal points. Presentation of findings now turns to recidivism, the key outcome by which the success of the VOM was evaluated.

Bivariate Analysis

The first research questions asked: Did the victim offender mediation (VOM) reduce recidivism in comparison to a similar group of KY diverted offenders who received no such "additional" intervention? The analysis necessary to answer this question, is presented in Table 3. The evidence consistently illustrates that there is no variation in subsequent offending between VOM and comparison groups when the occurrence of recidivism is observed (there were no additional charges=0, there were additional charges=1). When the amount of subsequent recidivism is considered, the VOM group was moderately more likely ($p<.05$) to have more referrals at 6 months and 18 months post-intervention and mildly more likely ($p<.10$) at 1 and 2 years post-intervention. While one goal of unique RJ interventions is to provide value to those served by reducing the likelihood of subsequent trouble with the system, that conclusion is not supported in this initial bivariate analysis of the VOM group in relation to a matched comparison group.

Table 3. Recidivism

	Entire Sample (395)	Comparison (198)	VOM (197)	x^2
ANY ADDITIONAL REFERRAL WITHIN 6 MOS.				
Yes	12%	10%	14%	0.00
No	88%%	90%	86%	
ANY ADDITIONAL REFERRAL WITHIN ONE YEAR				
Yes	26%	25%	27%	0.13
No	74%	75%	73%	
ANY ADDITIONAL REFERRAL WITHIN 18 MOS.				
Yes	39%	37%	40%	0.30
No	51%	63%	60%	
ANY ADDITIONAL REFERRAL WITHIN 2 YEARS				
Yes	43%	45%	41%	0.36
No	47%	55%	59%	
ANY ADDITIONAL REFERRAL WITHIN 30 MOS.				
Yes	46%	46%	47%	0.06
No	44%	54%	53%	
ANY ADDITIONAL REFERRAL WITHIN 3 YEARS				
Yes	50%	52%	48%	0.13
No	50%	48%	52%	

	Entire Sample (395)	Comparison (198)	VOM (197)	F-Test
# OF ADDITIONAL REFERRALS				
WITHIN 6 MOS.	.18 (.61)	.12 (.41)	.24 (.75)	2.01*
WITHIN ONE YEAR	.48 (1.02)	.39 (.77)	.57 (1.22)	1.70^t
WITHIN 18 MOS.	.71 (1.16)	.57 (.85)	.86 (1.41)	2.16*
WITHIN 2 YEARS	.94 (1.46)	.82 (1.11)	1.07 (1.73)	1.39
WITHIN 30 MOS.	1.1 (1.68)	.87 (1.33)	1.34 (1.94)	1.93^t
WITHIN 3 YEARS	1.1 (1.71)	1.03 (1.60)	1.28 (1.80)	0.80

Multivariate analysis

The second research question asked: Which individual characteristics predicted subsequent offending and how did the impact of these characteristics vary over time?[4] To answer this question, a series of logistic regression equations are presented for *occurrence* outcomes and Structural Equation Modeling (SEM) for continuous.[5] First, the effects for both *occurrence* presented in Table 4 and *amount* presented in Table 5, are generally more significant at 18 months and beyond (indicated by the reduced -2 log-likelihood in Table 4 and the improved BIC statistic in Table 5, the consistent growth of recidivism variance explained, and the increasing number of variables observed to affect recidivism). Next, though expected based on earlier bivariate analysis, results in both tables indicate that VOM as an exceptional diversion experience for juveniles generally has no impact on recidivism.

Concerning demographics, younger adolescents were more likely to recidivate and when doing so engaged in more recidivism beginning at the 18 month post-intervention and lasting through the final follow-up period. *Age* results observed in the *occurrence* of recidivism were robust (ranging from $p<.001$; odds=.75 at 18 months to $p<.05$; odds=.73), while the results predicting the *amount* wavered as those at 2 and 3 years post intervention were marginal ($p<.10$). Similarly, status offenders were 45% to 55% more likely to have an additional referral at 18 months, 2 years, and 30 months (thought the effect at 30 months is marginal at $p<.10$), in addition to having accumulated a greater number of subsequent referrals at those same time periods. While the results of these variables indicate waning effectiveness for diversion among younger adolescents and status offenders beginning at 18 months (in comparison to older adolescents and public offenders), the effectiveness of the two remaining demographic variables in predicting recidivism were far weaker. First, though *gender* never predicts the *occurrence* of recidivism (Table 4), males are found marginally ($p<.10$) more likely to accumulate more subsequent referrals both at 2 years and 30 months (Table 5). Finally, results from Table 5 indicate that minority youth, no more likely to engaged in recidivism (Table 4), obtained more referrals at the most distant follow-up periods, 30 months ($p<.05$) and 3 years ($p<.05$), than did whites. Next, an assessment regarding the influence of family and school contexts is presented. First, the lone family instability measure, *siblings in the system,* was mostly ineffective as it failed to affect the *occurrence* of recidivism (Table 4) and was associated with more offending at only the 30-month follow-up time period. Three school variables were included in the models, grade average, grade retention, and the composite measure assessing school attachment. While *grade average* and *retention* never impacted the likelihood of an *occurrence* or affect the *amount* of recidivism, admitting greater *school trouble*

[4] For the sake of clarity, the results addressing the second research question displayed in Tables 4 and 5 are discussed together.

[5] Though SEM was selected to address the third question posed by the current research, moderation, there are several general benefits for its use with the continuous recidivism measure addressing the second question as well. First, SEM permits multiple regression equations to be considered simultaneously for each variable and as such allows measurement of the co-variation among predictor variables. A second benefit of SEM is that it provides a number of "fit" statistics which indicate how well the theorized model fits the data at hand. Finally, an enhanced feature of SEM is the ability to create and analyze latent constructs. To be clear, SEM was chosen to evaluate the moderating influence of VOM however no latent variables were analyzed as part of the analysis illustrated in either Table 5 or 6.

(i.e., arriving late or missing school or experiencing in-school suspension or expulsion) did. In predicting recidivism *occurrence, school trouble* marginally increased the likelihood at 18 months post intervention (p<.10; odds 1.23) and significantly so at the two most distal follow-up periods. The stronger effects for the two most distal time periods indicate that diverted juveniles who acknowledged more *school trouble* have a 1.37 greater odds of recidivism at 30 months and 1.57 odds at 3 years post-intervention. The effect of *school trouble* at predicting the *amount* of recidivism was slightly more reliable and while it began marginally at 18 months (p<.10) it consistently gained significance and strength through the last follow-up period. In sum, similar to the results for age and type of offense, the effectiveness of diversion among students who have engaged in prior school-related disciplinary behavior wanes in contrast to students who admit no such behavior.

Finally, in assessment of the predictive information obtained via psychiatric screeners and accounts of prior involvement with the DJJ system, several results are worth note. First, while neither screener predicted the *occurrence* of subsequent referrals, a high score on the *externalizing/crime-violence* screener predicted an increased number of subsequent offenses at the two most distal

Table 4. Logistic Regression Predicting *Occurrence* of Reoffense (***=p<.001; **=p<.01; *=p<.05; ᵗ p<.10).

Variable	Recid. 6 Mo. Follow-up		Recid. 1 Year Follow-up		Recid. 18 Mo. Follow-up		Recid. 2 Year Follow-up		Recid. 30 Mo. Follow-up		Recid. 3 Year Follow-up	
	B	Odds	B	Odds	B	Odds	B	Odds	B	Odds	B	Odds
	SE		*SE*		*SE*		*SE*		*SE*		*SE*	
Constant	-1.83	.16	.54	1.72	4.11*	60.61	4.38*	79.59	6.02*	430.79	1.75	5.76
	2.40		*1.81*		*2.03*		*2.09*		*2.64*		*3.20*	
VOM	.03	1.03	-.13	.89	-.10	.90	-.32	.74	-.15	.86	-.08	.92
	0.35		*0.27*		*0.27*		*0.31*		*0.38*		*0.45*	
Age	-.04	.96	-.08	.92	-.29***	.75	-.29**	.75	-.43***	.65	-0.31*	.73
	0.12		*0.09*		*0.09*		*0.1*		*0.12*		*0.15*	
Male	.33	1.40	.09	1.10	.03	1.03	.04	1.04	-.22	.81	-.36	.70
	0.36		*0.27*		*0.27*		*0.27*		*0.37*		*0.45*	
Racial Minority	.03	1.03	.14	1.15	.09	1.09	.13	1.14	.33	1.40	.01	1.01
	0.35		*0.26*		*0.26*		*0.27*		*0.37*		*0.45*	
Public Offense	-.61	.54	-.55	.58	-0.64*	0.53	-.60*	.55	-.69ᵗ	.50	-.69	.50
	0.39		*0.29*		*0.29*		*0.32*		*0.39*		*0.55*	
Siblings in the System	-.71	.49	-.19	.83	-.31	.77	-.05	.95	.34	1.41	-.04	.97
	0.48		*0.26*		*0.25*		*0.30*		*0.40*		*0.41*	
Grade Average	-.01	.99	-.02	.99	-.02	.98	-.02	.98	-.02	.98	.02	1.01
	0.02		*0.01*		*0.02*		*0.02*		*0.02*		*0.03*	
Retained	.20	1.22	.24	1.25	.44	1.51	.28	1.32	.31	1.36	-.35	.73
	0.38		*0.29*		*0.30*		*0.33*		*0.40*		*0.49*	
School Trouble	.03	1.03	.11	1.12	.21ᵗ	1.23	.17	1.19	.32*	1.37	.45*	1.57
	0.15		*0.12*		*0.11*		*0.12*		*0.15*		*0.2*	
INT/SUBABUSE	.11	1.10	.06	1.06	.07	1.04	.05	1.05	.11	1.12	.01	1.02
	0.09		*0.07*		*0.07*		*0.09*		*0.11*		*0.13*	
CVSCR/EDSCR	.09	1.08	.04	1.00	.01	1.01	.03	1.03	.13	1.14	.16	1.17
	0.09		*0.07*		*0.07*		*0.08*		*0.1*		*0.12*	
Any Priors	1.51***	4.577	1.03***	2.80	.98**	2.61	1.35***	3.87	1.33***	3.78	.98*	2.66
	0.37		*0.28*		*0.29*		*0.33*		*0.42*		*0.5*	
	N=385; R^2=.11		N=356; R^2=.09		N=296; R^2=.11		N=241; R^2=.14		N=178; R^2=.24		N=123; R^2=.21	
	-2 LL=241.145; x^2=40.59***		-2 LL=378.85; x^2=32.15***		-2 LL=360.52; x^2=34.98**		-2 LL=293.007; x^2=37.09***		-2 LL=196.10; x^2=49.85***		-2 LL=141.15; x^2=29.35**	

follow-up periods. In contrast to the rather weak ability to predict future behavior based on these assessments, those with prior referrals were both more likely to engage in recidivism and commit a greater amount of recidivism in contrast to adolescents with no prior system involvement. Specifically, prior referrals resulted in a 2 and a half to 4 and half times greater likelihood of recidivation. Further this past history was consistently observed as a risk factor as it was significant at every follow-up time period from 6 months post-intervention ($p<.001$) through 30 months ($p<.05$) though the magnitude of the effect waned over time. In conclusion, consistent with past research, prior involvement in the system is the single best predictor of future behavior with age, type of offense, and school trouble revealing consistent effects as well.

Table 5. Structural Equation Model Predicting Continuous outcomes

	Recid. 6 Mo. Follow-up		Recid. 1 Year Follow-up		Recid. 18 Mo. Follow-up		Recid. 2 Year Follow-up		Recid. 30 Mo. Follow-up		Recid. 3 Year Follow-up	
Variable	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
VOM	.04	.06	.07	.11	.10^{t}	.14	.07	.19	.17*	.23	.13	.30
Age	-.05	.02	-.02	.05	-0.13	.06	-.11^{t}	.09	-.16**	.07	-.15^{t}	.12
Male	.06	.06	.07	.11	.04	.13	.11^{t}	.17	.12^{t}	.24	.11	.30
Racial Minority	-.02	.06	.05	.11	.03	.13	.08	.18	.15*	.24	.15*	.30
Public Offense	-.03	.07	-.10^{t}	.12	-.16**	.14	-.15*	.20	-.15*	.27	-.01	.37
Siblings in the system	-.04	.06	.03	.10	.01	.12	.08	.16	.14*	.21	.14	.25
Grade Average	-.01	.00	.01	.00	.01	.01	.03	.01	.02	.01	.05	.02
Retained	.03	.07	.05	.12	.07	.14	.08	.19	.03	.24	-.08	.29
School Trouble	.06	.03	.06	.04	.10^{t}	.05	.13*	.07	.18**	.13	.22**	.16
INT/SUB-ABUSE	.08	.02	.01	.03	-.01	.04	-.02	.05	-.14	.07	-.08	.08
CVSCR/EDSCR	.05	.01	.11	.06	.07	.07	.10	.10	.21**	.07	.25*	.08
Any Priors	.22***	.08	.22***	.14	.26***	.17	.27***	.22	.17*	.29	.08	.36
Pseudo R^2 =	0.12		0.1		0.14		0.17		0.23		0.32	
X^2 =	39.37		39.37		39.37		39.37		39.37		39.37	
p =	.32		.32		.32		.32		.32		.32	
GFI =	.98		.98		.98		.98		.98		.98	
RMSEA =	.02		.02		.02		.02		.02		.02	
BIC =	-174.95		-172.13		-165.48		-158.08		-147.17		-73.51	

***=p<.001; **=p<.01; *=p<.05; t p<.10

"Model-Stacking" procedure

The final question evaluated by the current study was: Did victim offender mediation (VOM) moderate the role of the above mentioned individual characteristics in predicting recidivism and if so how? This question was answered by using the multiple group comparison feature in SEM (Bollen, 1989).[6] Analysis for moderating effects are presented in Table 6 where shaded boxes indicate effects moderated by VOM participation. To begin, the smaller Bayesian Information Criterions (BIC) in Table 6 than in Table 5 indicate that the moderation models fit the data better (Raftery, 1995). Next, upon general examination of Table 6 three moderation effects stand out. While in Table 5 marginal variation by gender was observed, VOM seems to moderate this effect at the 18 month (x^2=3.89; df=1; p<.05), 2 year (x^2=3; df=1; p<.10), 30 month (x^2=3.1; df=1; p<.10), and 3 year (x^2=4; df=1; p<.05) follow-up periods. Multiple group analysis indicates that from 2 years on, males in the VOM group alone engaged in more recidivism than females. Similarly, sibling involvement in the system was also influential only for the VOM group and this variable was more consistently effective than general results in Table 5 indicated. Specifically, the group analysis presented in Table 6 indicate that at 1 year (Δx^2=9; df=1; p<.01), 18 months (Δx^2=13.9; df=1; p<.001), 2 years (Δx^2=5.2; df=1; p<.05), 30 months (Δx^2=2.71; df=1; p<.10), and 3 years (Δx^2=2.9; df=1; p<.10), only VOM participants with a sibling already involved in the system had more subsequent offenses (though at the most distal time points, the VOM effect was marginal—i.e., p<.10).

The third and final moderation regards status offenders. Recall that the sample used in this evaluation of RJ was unique because 50% of the cases were status offenders. Further 75% of the status offense cases were beyond control (37% of the overall sample). Because states are interested, some might even say under pressure, to find alternative community-based programming for status offenders in lieu of institutionalization, a moderating effect which indicates that restorative justice (RJ) status offenders were less likely to recidivate than their public offender counterparts would be a boon to the field of RJ. Unfortunately, no such moderating effect is found. The results in Table 6 indicate that at 6 months (Δx^2=5; df=1; p<.05) post-intervention moderation by charge was observed, however the results failed to reach statistical significance for either group. In contrast, results in Table 6 support the general multivariate results displayed in Table 5 such that status offenders engage in more subsequent offending than public offenders no matter the intervention.[7]

[6] A model comparison test seeks to reject the null hypothesis that all the paths in a model are equal across the groups included. In this analysis, the groups are VOM and comparison. The first step in this process is to constrain all paths equal for both groups. Then one path at a time is freed to differ between the two. Consecutive tests are performed until all of the structural regression paths are tested for invariance. A change in chi-square is used to measure the efficacy of allowing the single path to differ. Since only one path changes during this procedure, the degrees of freedom are one and the significance of the change in chi-square is determined by looking at a chi-square table. For example, is the effect of gender on the amount of recidivism moderation by which group the case is located (i.e., if the case experiences VOM or not)? If we find significant effects only for the VOM group, then we are saying than only males exposed to the treatment had a higher rate of recidivism in contrast to VOM females and no such gender variation exists for participants who experienced traditional diversion. The model comparison process is often referred to model "stacking" (Bollen, 1989).

[7] The remaining moderation is less qualitatively significant. Grade average is moderated at 6 months

In conclusion, the ability of the moderation analysis to enhance our understanding of for whom VOM is effective is relatively weak as only two such enhancements are discovered to be robust. First, while a marginal effect for gender was observed in the general analysis at 2 years and 30 months post-intervention (Table 5), the moderation analysis illustrates a lower level of success among male VOM participants while no gender-specific effect is observed among the control group. Such analysis indicates that VOM participation is less successful among male participants in the long-term. While these results show evidence of a pattern, the reader is reminded that the amount of cases involved in the analysis dips below 50% in the 30 month and 3 year follow-up periods which could significantly impact the findings. Next, starting at one year post-intervention, adolescents experiencing VOM who also report having siblings in the system have higher counts of recidivism than those participating in the VOM without siblings involved (though this effect quickly wanes to a $p<.10$ level of significance). The general effects displayed in Table 5 show an effect for this variable at 30 months alone. Thus, the moderation analysis improves our understanding for whom sibling involvement is impactful by showing a consistent (though at distal points marginal) detrimental effect for the experimental group alone.

CONCLUSIONS AND RECOMMENDATIONS

Though effectiveness of restorative justice (RJ) practices to reduce recidivism among juveniles has been mixed, acknowledgement of the diversity of programs evaluated explains much of the variation in outcome observed. The current study further clarifies our RJ knowledge in several ways. Specifically, while most evaluations observing success with RJ have been in association with FGC, the present study evaluated the VOM approach among a group of diverted offenders. In the process, a suitable control group of diverted youth was selected via a matching procedure and cases remained in their respective groups regardless of whether the program was successfully completed. Such features make this study an enhancement of existing knowledge regarding a pure VOM model. In addition, for the first time in an evaluation of VOM among juveniles, a significant group of status offenders were included so that VOM impact on their subsequent behavior might be modeled specifically. As part of such specific modeling, this study was the first to test moderating effects associated with VOM

(Δx^2=3.3; df=1; p<.10), but effects for neither group reach statistical significance. Similarly, while the effect of prior offending is moderated on two occasions (18 months Δx^2=4, df=1, p<.05; 2 years Δx^2=3.5, df=1, p<.10), the effects again vary between the groups in magnitude alone. The effects for both school trouble and the externalizing crime violence scale indicate that on several occasions (at 18 months and 2 years for school trouble and 1 year and 30 months for the externalizing scale), there is a positive effect for the VOM group alone. However, at other points (at 30 months and 3 years for school trouble and at 3 years for the externalizing scale) these positive effects hold for both groups. Thus, the interpretation for these findings is that while negative school attachment and admission of more negative externalizing behavior consistently increases recidivism for the RJ group, they are observed at times to increase recidivism for the comparison group as well. The final effect of note is for grade retention. It appears that before the moderation analysis, a positive effect for this variable was suppressed. While the effect was never moderated by VOM involvement, the analysis in Table 6 indicates that having been retained a grade increases recidivism during the early stages of 6 months (p<.10), 1 year (p<.10), 18 months (p<.05), and 2 years (p<.10) post intervention, though it is important to note that most effects are marginal at best.

Table 6. "Stacking procedure" in SEM to illustrate variation by location in the prediction of recidivsm (std. coefficients presented).

	Recid. 6 Mo. Follow-up		Recid. 1 Year Follow-up		Recid. 18 Mo. Follow-up		Recid. 2 Year Follow-up		Recid. 30 Mo. Follow-up		Recid. 3 Year Follow-up	
Variable	**Comp.**	**VOM**	**Comp.**	**VOM**	**Comp.**	**VOM**	**Comp.**	**VOM**	**Comp.**	**VOM**	**Comp.**	**VOM**
Age	-.05	-.03	-.02	-.02	-.17*	-.11*	-.15*	-.11*	-.19*	-.15*	-.15^{t}	-.15^{t}
Male	.04	.02	.02	.01	-.11	.12	-.05	.16*	-.00	.20*	-.04	.27*
Racial Minority	-.09	-.05	-0.01	-.00	-0.01	-.02	.08	.05	.19*	.14*	.18*	.17*
Public Offense	-.01	-.08	-.10	-.06	-.22**	-.13**	-.16*	-.10*	-.20*	-.14*	-.11	-.11
Siblings in the system	-.12	.09	-.04	.20**	-.12	.20**	-.02	.15^{t}	.10	.15^{t}	.11	.18^{t}
Grade Average	.07	-.05	.01	.01	-.01	-.01	-.01	-.01	-.02	-.02	.04	.06
Retained	.10^{t}	.05^{t}	.11^{t}	.06^{t}	.14*	.08*	.12^{t}	.08^{t}	.02	.01	-.04	-.04
School Trouble	-.12	.07	-.11	.11	-.06	.14^{t}	-.02	.16*	.15*	.15*	.16*	.21*
INT/SUB ABUSE	.01	.15^{t}	.01	.00	.03	.02	.04	.02	-.09	-.07	-.10	-.09
CVSCR/EDSCR	.01	.10	.03	.17*	-.10	.09	-.09	.14	.10	.28**	.27*	.24*
Any Priors	.28***	.17***	.22***	.15***	.19*	.24**	.18*	.26**	.14^{t}	.11^{t}	.03	.03
Pseudo R^2	.13	.13	.08	.14	.12	.21	.09	.23	.16	.27	.16	.31
N =	385		356		296		241		178		123	
X2 =	69.55		72.38		69.30		68.22		69.68		72.35	
p =	0.27		0.27		0.30		.34		.36		.31	
GFI =	0.97		0.97		.98		.98		.98		.98	
RMSEA =	0.02		0.02		.02		.01		.01		.01	
BIC =	305.50		315.67		294.88		282.81		272.32		250.07	

***=p<.001; **=p<.01; *=p<.05; t p<.10

and included several variables which have never been incorporated into RJ moderation studies.

Generally, former evaluations of VOM failed to find effectiveness of this approach among diverted juvenile offenders (Niemeyer & Schichor, 1996; Roy, 1993; Umbreit, 1994). The impact of the sole evaluation which provides evidence of VOM effectiveness among juveniles (Urban & Burge, 2006) is limited by selection bias and a failure to perform multivariate analysis when other between-group differences were clearly evident. Thus, the fact that the results of the present study conclude no significant difference in the occurrence of recidivism between groups is of no surprise. In contrast, the majority of the evidence indicates that for most juvenile offenders, adding a single meeting with the victim does not significantly reduce future offending beyond that achieved with traditional diversion alone.

Beyond the failure of VOM to reduce subsequent offending among this juvenile sample in KY, several direct and moderating effects of multivariate analysis are worth noting. First, multivariate analysis predicting both occurrence and amount of subsequent offending found a consistent group of additional variables which impacted the process. From 18 months post-intervention, younger participants were found both more likely to reoffend and offended at a higher rate than their older counterparts. However, it is worth noting that older youth began their recidivism earlier than younger youth so the variation in recidivism by age could reflect the way recidivism was measured in this study. Specifically, it could be that older participants either aged out or had their subsequent cases filed directly in the adult

system. In either case, because re-offense was observed as additional referrals to the juvenile justice system, the reoffending of older juveniles could have gone unobserved. Having said that, a negative effect for age is consistent with several prior studies evaluating family group conferencing (FGC) (de Beus & Rodriguez, 2007; Luke & Lind, 2002; Rodriguez, 2005).

The inclusion of several variables which either measure prior behavior or attempt to predict future risk is unique to the present study. First, whether behavior that resulted in a previous referral to the justice system, or formal admonishment at school, prior behavioral problems consistently predicted future offending. Specifically, while former trouble at school increased recidivism beginning at 18 months post-intervention, prior offending consistently increased the likelihood of reoffending by as much as four and a half times. While no former study evaluating the effectiveness of RJ among juveniles included school trouble, the inclusion of prior offending is much more common and results similar to the present are consistent (Bergseth & Bouffard, 2007; de Beus & Rodriguez, 2007; Luke & Link, 2002; Rodriguez, 2005; Rodriguez, 2007). Thus, while prior trouble with the juvenile justice system is confirmed to be the best predictor of subsequent offending, the current study adds to our ability to predict long-term recidivism by considering non-normative behavior in school. In contrast, the effectiveness of psychological screeners which seek to assess needs and direct treatment were less consistently effective at predicting recidivism. To add to that conclusion, having been retained a grade (again, an actual event) predicted the likelihood of early recidivism, from 6 months to 2 years, only within the moderation analysis. In other words, though the effect of retention was not moderated by participation in RJ, the effect was suppressed in the initial analysis. Further, like prior trouble in school and with the juvenile justice system, grade retention also increases recidivism (though the results are weaker as most are significant at $p<.10$), especially in early follow-up time periods. Though perhaps a logical conclusion, this study illustrates that actual prior experience is a more effective predictor than self-report indicators of potential involvement in risk.

A present finding unique among victim offender mediation (VOM) studies is that status offenders, in comparison to public offenders, engaged in more subsequent offending between one year and 30 months post-intervention. Though the present study is the first to evaluate the behavior of status offenders specifically, offending among KY status offenders supports Arizona evaluations of an RJ program following the family group conferencing (FGC) model (de Beaus & Rodriguez, 2007; Rodriquez, 2005). However unlike results from Arizona, participation in RJ in KY did not moderate the offending of status offenders (de Beaus & Rodriguez, 2007). The lack of RJ effectiveness among this sample of VOM participants is disappointing. The deinstitutionalization of status offenders is a key best practice of the Office of Juvenile Justice and Delinquency Prevention based on the substantial empirical evidence that institutionalizing status offenders consistently results in more harm than good (Federal Advisory Committee on Juvenile Justice, 2010; Holman & Ziedenberg, 2006; Nelson, 2008). Further troubling is the fact that KY ranks high among states using institutionalization for status offenders who violate court orders (Blueprint for KY kids, 2010). In short, while replicating the findings from Arizona would have provided solid evidence that community interventions following a RJ model are significantly related to a decline in future offending among status offenders, perhaps there is a

lesson to be learned by differentiating between the two RJ experiences. First, consider that most of the status offenders in the KY sample were beyond control of their parents or runaways. Because family relationships are dynamic and enduring, assigning clear roles of victim and offender might not be logical. In contrast the FGC process is more complex because it involves all community members who were affected by the offense and seeks to engage all individuals present in an ongoing process of determining a productive future for the juvenile offender. While quality empirical evaluations of RJ are recent, those exploring moderating effects are exceptionally so and to date, few in number. As such, future research exploring moderation by offense type, or exploring effectiveness of RJ models for status offenders specifically is needed in order to support and advocate for RJ community interventions for status offenders.

While direct paths for independent variables substantially contribute to our understanding of recidivism among diverted youth, moderating effects allow us to consider the effect of each IV combined with RJ status. While the effect of offense type was not moderated by RJ participation, gender and sibling involvement in the system was. First, it is important to note that neither gender nor sibling involvement was a significant predictor of recidivism, generally speaking, prior to moderation analysis (see Tables 4 & 5). However when moderation was explored, similar to results from Arizona (Rodriguez, 2007), males in the RJ group were more likely to recidivate than their female counterparts. As gender is typically one of the most consistent predictors of offending among juveniles, these results support the extensive call for individualized treatment based on a significantly different etiology of offending for males versus females (Chesney-Lind & Pasko, 2013; Steffensmeier & Broidy, 2001). Finally, the moderating effect observed for juveniles with siblings in the system is entirely unique to the current study since such family dynamics have not been explored previously within the RJ literature predicting juvenile recidivism. This finding illustrates that among those participating in VOM, those with siblings involved in the system are more likely to recidivate than their counterparts. Such a finding likely underscores that troubling family dynamics which involve not just the juvenile in the program, are not effectively addressed within the VOM format utilized. Perhaps this evidence provides additional support that a single VOM session, added to a comprehensive diversion intervention, is not enough to enhance the outcomes among juveniles facing such family instability. Future research which uniquely accounts for family instability when evaluating restorative justice (RJ) effectiveness among juveniles is needed, especially that which considers the more complex efforts of family group conferencing (FGC) or Circle Sentencing.

While this paper makes a number of significant contributions to the existing literature on RJ for juveniles, particularly that of VOM, it is important that several limitations be acknowledged. First, while an experimental design is optimal in the evaluation of policy, the current study relied upon a control group based on matching. Further, the study relied upon RJ and control groups from different parts of KY. As noted earlier, though an effort was made to select a control group from as similar an area to the RJ program as possible within KY, the findings of this study could be an artifact of ecological differences. These differences could occur at the general level of the community or within the operational schema of the court designated worker (CDW) offices specifically. For example, at

approximately 300,000, the RJ county has two times the population of the control county. In contrast, while many Kentucky CDWs work alone and cover multiple counties, both control and RJ counties have multiple CDWs who work together from the same office. One effect of many versus one is that a culture is developed and passed on regarding expectations of how one does the job. Therefore, while CDWs in both counties averaged between 4 and 5 diversion terms per juvenile, the tasks required of the juveniles and the level of supervision maintained could have varied between the two sites. Further, as noted earlier, the variation in the number of diversion terms was found to be statistically significant. This difference could indicate that while the control group received a more comprehensive diversion experience of greater similarity to CDW management in KY, VOM was treated as the primary diversion intervention for the experimental group (attending mediation was a diversion term listed for 93% of experimental cases and compliance with VOM was an additional term listed for ½ of the experimental group). If so, on the one hand this is certainly a limitation of the present study (the inability to compare typical diversion with typical diversion plus VOM). On the other, the present study could simply be considered an assessment of traditional versus VOM-centered diversion.

Further, the VOM evaluated by the current research took place throughout a three year period. It is certainly possible that elements of that intervention (style, staff, strategy to name a few) were modified during this process in ways unknown by this researcher and thus undoubtedly unaccounted for and this too is a limitation. An additional weakness of the present study regards the lack of data for all cases at all follow-up periods. Therefore, interpretation of patterns based on the 30 month and 3-year follow-up periods must be viewed as tentative. Finally, while this study was hopeful that the effectiveness of VOM could be more finely illustrated via the use of moderation analysis, the quality (particularly the strength of several individual effects) of the few consistent moderations observed leaves the accuracy of these effects less than definitive.

As noted throughout this paper, evaluations of the effects of RJ on juvenile recidivism which account for or avoid selection bias are few. In addition, those which evaluate moderating effects can be counted on one hand. The present study corroborates most evidence regarding VOM and juvenile recidivism finding little effectiveness for this RJ strategy. As such, policy makers interested in employing restorative justice strategies are wise to select a more sustained method illustrated by the family group conferencing and circle sentencing approach (though there is lack of rigorous evaluation of the latter). In other words, evaluation research consistently shows a single meeting between victim and offender no more impactful on juvenile recidivism than traditional approaches. In contrast, circle sentencing and FGC incorporate VOM within a more intensive design focused on holistic problem solving and treatment. Therefore, these approaches are better suited to achieve the goals of restoration among juvenile offenders who are often enmeshed in family and other social dysfunction. Specifically, while victim offender mediation (VOM) was found ineffective, future research should explore the unique utility of family group conferencing (FGC) or Circle sentencing for juveniles with siblings in the system and those engaged in previous disciplinary behavior at school in addition to replicating findings which found FGC an effective intervention for status offenders (Rodriguez, 2007). One final acknowledgement,

moderation analysis has the potential to enhance our understanding of restorative justice (RJ) effectiveness for other types of offenders, such as drug offenders, who have so far been excluded from any RJ evaluation. Pursuing such specialized analysis and stating exactly the characteristics of the RJ programs evaluated will do much to enhance our understanding of how and among whom Restorative Justice interventions disrupt the path to recidivism for juvenile offenders.

Page Intentionally Left Blank

References

Anderson, E. (1999). *Code of the Street*. New York: W.W. Norton.

Baffour, T.D. (2006). Ethnic and gender differences in offending patterns: Examining family group conferencing interventions among at-risk adolescents. *Child and Adolescent Social Work Journal, 23*(5-6), 557-578.

Bergseth, K.J. & Bouffard, J.A. (2007). The long-term impact of restorative justice programming for juvenile offenders. *Journal of Criminal Justice, 35,* 433-451.

Blueprint for KY kids (Last updated: 2010). *Reducing the use of incarceration for status offenders in KY*.

Bollen, K.A. (1989). *Structural equation modeling with latent variables.* USA: John Wiley and Sons.

Braithwaite, J. (1989). *Crime, shame, and reintegration*. Cambridge, UK: Cambridge University Press.

Braithwaite, J. (2002). *Restorative justice and responsible regulation.* New York: Oxford University Press.

Brazemore, G. & Umbreit, M. (2001). A comparison of four restorative conferencing models. *Juvenile Justice Bulletin.*

CDW (last modified 2010). *Kentucky Court of Justice, Court Designated Worker Program: Making a difference*.

de Beuz, K. & Rodriguez, N. (2007). Restorative justice practice: An examination of program completion and recidivism. *Journal of Criminal Justice, 35,* 337-347.

Federal Advisory Committee on Juvenile Justice (Last updated: 2010) *Federal Advisory Committee on juvenile Justice: 2010 Annual Report.*

Griffiths, M. (Last updated: 1999). The implementation of group conferencing in juvenile justice in Victoria.

Hayes, H. & Daly, K. (2003). Youth justice conferencing and reoffending. *Justice Quarterly, 20,* 725-764.

Hayes, H. & Daly, K. (2004) Conferencing and Re-offending in Queensland. *The Australian and New Zealand Journal of Criminology, 37*(2), 167-191.

Holman, B. & Ziedenberg, J. (Last updated: 2006). *The Dangers of Detention: The Impact of Incarcerating Youth in Detention and Other Secure Facilities*.

Karp, D. & Walther, L. (2001). Community reparative boards: Theory and practice. *Restorative community justice: Cultivating common ground for victims, communities, and offenders.* Cincinnati, OH: Anderson.

Luke, G. & Lind, B. (2002). Reducing juvenile crime: Conferencing versus court. *Crime and Justice Bulletin: Contemporary Issues in Crime and Justice, 69*, 1-19.

McGarrel, E.M. & Hipple, N.K. (2007). Family group conferencing and re-offending among first-time juvenile offenders: The Indianapolis experiment. *Justice Quarterly, 24*(2) 221-246

McElrea, F.W.M. (1993). A new model of justice. *The youth court in New Zealand: A new model of justice,* Auckland: New Zealand.

Melton, A.P. (1995). Indigenous justice systems and tribal society. *Judicature, 79*(3), 126-133.

Morris, A. & Maxwell, G. (2001). Restorative conferencing. *Restorative and community justice: Cultivating common ground for victims, communities and offenders*, Cincinnati, OH: Anderson.

Maxwell, G., Kingi, V., Robertson, J., Morris, A. & Cunningham, C. (Last updated:2004). *Achieving effective outcomes in youth justice: Final report.*

Nelson, D. (Last updated: 2008). "A Road Map for Juvenile Justice Reform." *2008*

National KIDS COUNT Data Book

Niemeyer, M. & Schichor, D. (1996). A preliminary study of a large victim/offender reconciliation program. *Federal Probation, 60,* 30-34.

Raftery, A. E. (1995). Bayesian Model Selection in Social Research. *Sociological Methodology, 25*, 111-163.

Rodriguez, N. (2005). Restorative justice, communities, and delinquency: Whom do we reintegrate? *Criminology and public Policy, 4,* 103-130.

Rodriguez, N. (2007). Restorative justice at work: Examining the impact of restorative justice resolutions on juvenilenrecidivism. *Crime and Delinquency, 53,* 355-379.

Roy, S. (1993). Two types of juvenile restitution program in two Midwestern counties: a comparative study. *Federal Probation, 57,* 48-53.

Sherman, L.W. & Strang, H. (2007). Reintegrative shaming, procedural justice, and recidivism: The engagement of offenders' psychological mechanisms in the Canberra RISE drinking-and-driving experiment. *Law and society review 41*(3), 553-586.

Sherman, L.W., Strang, H. and Woods, D.J. (Last updated: 2000). *Recidivism patterns in the Canberra reintegrative shaming experiments (RISE)*.

Steffensmeier, D. & Broidy, L. (2001). Explaining the female offender. *Women, Crime, and Criminal Justice: Contemporary Issues* (pp.111-134). Los Angeles: Roxbury Press.

Stuart, B. (1996). Circle sentencing--Turning swords into ploughshares. *Restorative justice: International perspectives* (pp. 193-206). Monsey, NY: Criminal Justice Press.

Umbreit, M. (1994). *Victim meets offender: The impact of restorative justice and mediation.* Monsey, NY: Criminal Justice Press.

Umbreit, M., Coates, R., & Vos, B. (2002). The impact of restorative justice conferencing: A multi- national perspective. *British Journal of Community Justice, 1*(2), 49-62.

Umbreit, M. & Zehr, H. (1996). Restorative family group conferences: Differing models and guidelines for practice. *Federal Probation, 60,* 24-29.

University of Wisconsin. (Last updated: 2012). *Community Health Rankings*. Urban, L. & Burge, S. (2006). Victim/offender mediation in St. Louis: An assessment. *Justice research and policy, 8,* 89-114.

Zehr, H. (2002). *The little book of restorative justice.* Intercourse, PA: Good Books.