Restorative Justice and Recidivism: A Meta-Analysis

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RESTORATIVE JUSTICE AND RECIDIVISM: A META-ANALYSIS

A Thesis

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Abstract

Restorative Justice is an approach to resolving conflict that has become increasingly relevant as both financial and social costs associated with crime have continued to rise. As alternative methods of managing crime are being considered and implemented there is a call from policy makers for evidence that those programs are indeed the best practice. Although there is a significant amount of research on restorative justice, synthesis of that information is lacking which impedes full understanding of the potential of the impact and role of this approach. A central argument is that restorative based programs produce benefits because they reduce recidivism rates. Is that true? I conducted a meta-analysis on 24 published studies to evaluate the claims for effectiveness and to discover what aspects of restorative justice programs are most effective in reducing recidivism, as well as what offender characteristics make for the best restorative justice candidates. Analysis indicated that recidivism may be decreased more for adults than juveniles, when there is contact with the direct victim of the offense, and after the offender goes through the treatment. Surprisingly, community involvement, the ability to develop consensus, and victim satisfaction indicated an increase in recidivism.
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**Introduction**

Conflict is often considered an inevitable result of people living together. Much of the conflict occurring in everyday life is manageable and can even be productive and healthy because it encourages social change, discourages premature group decision making, facilitates the reconciliation of people’s legitimate interests, and can foster in-group solidarity (Pruitt and Kim, 2004.) However, there are many conflicts that are unhealthy and detrimental to individuals and society as a whole. Conflict is the process by which people perceive that others have engaged in an action that negatively affects their interests (Levi, 2011). Crime negatively affects the interests of an individual as it creates psychological distress, incurs some type of loss for the victim, and leads to instability within the community as the offender, the victim, and community members attempt to manage the ramifications of one member being harmed by another.

Throughout history, society has sought to find the best way of handling conflicts in general and crime in particular.

Conflicts can be exacerbated by factors such as scarcity of resources, zero-sum thinking, invidious comparisons, status, distrust, and lack of normative consensus amongst others (Pruitt and Kim, 2004). Similarly, crime is also influenced by those factors. A scarcity (or perceived scarcity) of resources can make individuals feel that they need to commit criminal acts in order to obtain those resources. Invidious comparisons lead to crime when individuals in one group perceives the “other” as not
being superior, but as having more than their own group (Pruitt and Kim, 2004), justifying criminal acts to balance out the inequality. Distrust of those in power and large differences in status can also lead individuals to justify engaging in criminal acts. Oftentimes people committing crime do so because they do not see the law as legitimate; this demonstrates a lack of normative consensus within a community. Offenders feel that crime is the best method of resolving conflicts but society disagrees, leading to a secondary conflict of how to handle the crime itself. Eliminating, or at least managing, crime is an important goal for society but the means of accomplishing it are not easily established.

If crime is a conflict than how to resolve it can be examined through the various methods of conflict resolution. There are typically four strategies for handling conflict: contending, problem solving, yielding, and avoiding, although compromise is often added as a fifth method. The strategies are differentiated by the concern the person has with their own interest versus the interest of the other. Those with high concern for themselves and low concern with the other will choose the contending strategy; this would be the strategy chosen by the offender when he commits a crime. Low concern for self and the other leads to the avoidance strategy, low concern for self and high concern for other prompts accommodation, and high concern for both self and other inclines one to problem solving. Compromise is chosen when there is moderate concern for the interests of both the self and the other. Choosing a strategy to deal with conflict is done through assessing which one is most likely to be effective (Pruitt and Kim, 2004). There are several influences on which strategy is seen as most viable, such as individualistic versus collectivistic culture, placement of blame, and concern for self versus other. The
contending strategy is the choice of the traditional justice system, while alternative justice
has opted for problem solving.

The traditional criminal justice system employs the *contending* strategy for
dealing with crimes. It is considered a zero-sum strategy with one clear winner and one
clear loser. Courts are highly adversarial in design with the prosecutor fighting on behalf
of the state and the defense championing the offender, each trying to win the case and
defeat the opposition. This system is influenced by the individualistic nature of the
United States culture that maintains responsibility for success and failure lies with the
individual; highly individualistic cultures are more likely to choose confrontational
strategies, such as contending (Pruitt and Kim, 2004). This focus on the individual
encourages people to place blame on the offender for the crime, without regard to
extraneous circumstances. It fosters the belief that because the individual chose to do a
bad thing the act makes them a bad person and therefore such individuals should be
punished. Believing an offender to be “bad” reduces the “concern for other” element of
the equation, thus encouraging the use of the contending strategy. The criminal justice
system in the United States is based on the contending strategy of conflict resolution
because crime is seen as a zero-sum situation between offenders and victims (Hudson,
2002), has a culture of individualism, places blame on the offender, and a tendency
toward high concern for the self and low concern for the interests of the other.

Two facets that are very influential in the traditional justice system are the belief
that crime belongs to the state and that punishment is the correct response to crime. Once
a crime has been committed, the offender is punished for breaking a law; the offense is
not the harm caused to the victim, but rather the act of engaging in a prohibited activity,
and the state then takes ownership of the crime (Christie, 1977). The offender, details of the crime, and decisions on how to proceed are now in the hands of the state with little input or influence from the victim; the process is focused on technicalities and precedent rather than making right the wrong and victims are ostracized from the process (Zehr, 1985). As the focus shifts to what laws were broken and away from harms committed by the victim, punishment, rather than restitution, is the goal.

The state uses certain types of punishment as a way of enforcing social compliance and obedience to laws and societal norms (Tyler, 2006). A desire for retribution could be due to a desire to clarify and enforce normative standards (Karp, 1998). Clear (as cited by Levrant, Cullen, Fulton, and Wozniak, 1999) states that growth in levels of punishment is justified by a retributive philosophy of inflicting deserved pain and the arguments of deterrence and incapacitation. Von Hirsch (as cited by Lemley, 2001, pg. 45) asserts that the “past oriented, traditional justice model dwells in pain and suffering by emphasizing harm created by the offender and balancing it to the offender.” The belief that the best response to crime is to punish the offender because it will reduce future criminal acts is a driving force behind the ‘get tough’ philosophy that has come to dominate the current system. However, the resulting intensification of punishment for offenders has led to criticisms of the system.

The predominate method of dealing with offenders in the developed world involves incarcerating the individual. According to Haney and Zimbardo (as cited by Tyler, 2006), the United States’ prison population has swelled so much that the United States is now one of the leading countries in terms of the proportion of its adult population that is incarcerated. The idea is it serves as a detriment to other potential
offenders and reduces recidivism rates. However, studies and research have brought into question the viability of this method of responding to and controlling crime. Bilchik (1998) claims that the juvenile justice system (which is modeled after the adult system) has fallen short of its intended design and conceptual framework, resulting in a system that does not consistently serve the public safety, hold juveniles accountable, or meet needs of the offender. Tyler (2006) claims that it has decimated poor and minority dominated communities as a large portion of the population has spent time in jail. The focus on incarceration has led to overcrowding in jails and a solidification of offenders’ identities as criminals (Gromet and Darley, 2009). Internalization of ‘offender’ as the defining characteristic of a person’s identity makes reintegration into society more difficult. When others define a person as an offender, he is stigmatized and this can result in anger and hostility by the offender and the disintegration of social bonds (Pruitt and Kim, 2004), increasing the likelihood of recidivism.

The recidivism rate in the United States is high according to two studies that analyzed rearrests for eleven states in 1983 and rearrests and reincarceration rates for fifteen states in 1994, showing that 62.5% and 67.5% of offenders, respectively, were rearrested (Reentry Trends in the US, 2012). Often the response to high recidivism rates is to take a harsher stance on crime and more incarceration. Brown and Polk (1996, pg. 399) in their study of reduction of crime-related fear in Tasmania recount how “one member of the group pointed out early in the process that if putting people in prison was a solution to the crime problem, California should be one of the safest cities in the world.” There is increasing frustration over the inability of the current system to have a significant impact on crime rates (Lemley, 2001).
Another concern with the trend of harsher punishments in response to crime is the increase in financial cost to the country. Considering its lack of evidence in decreasing crime, the public and legislative policy makers are reluctant to spend ever-increasing sums of money on the justice system, particularly for incarceration (Lemley, 2001). In February 2007, the Associated Press published a study on prison population growth, predicting that by 2011 the prison population would rise by thirteen percent, costing more than $27 billion. However, Susan Urahn, managing director of policy initiatives for the Pew Charitable Trusts which funded the study, claimed that the growth and associated costs were not inevitable; state policies, economic changes, and cultural changes could all alter these forecasts. In 2010, the Pew Charitable Trusts released another study that showed a decline in prison population, the first shift downwards in nearly forty years (Prison Count 2010, 2010). There are many reasons that might account for the decline, including a shift in focus from the punishment of offenders through incarceration to a reintegrative approach that attempts to bring offenders back into society as contributing members as quickly and efficiently as possible. The report states that 73% of Texas voters supported alternatives to prison, such as community corrections; the percentage increased, to 83%, when polled respondents were informed that diverting lower-level offenders could save $1 billion in expected new prison costs. An important consideration since correction costs have quadrupled in the last two decades and require at least $1 of every $15 in the state general fund discretionary dollars (Prison Count 2010, 2010).

Discontent with the traditional criminal justice system has led to advocation of a different conflict resolution strategy for handling crime, namely problem solving. High rates of recidivism, large prison populations, and the associated costs with incarceration
have caused policy makers to focus on alternative methods of managing crime, bringing attention to various programs and theories that have been propagated by social scientists and criminal justice experts for years. Alternative dispute resolution methods, such as mediation and restorative justice, have gained popularity and can be seen in communities and courts across the nation. This philosophy of conflict resolution moves away from a zero-sum belief to a win-win perspective. It also attempts to create a more balanced approach that takes into account the needs of all parties involved, moving away from a high concern for self and a low concern for other view, to a high concern for self and high concern for other perspective.

But which method of conflict resolution is more effective in responding to the crime issue in society: contending or problem solving? Which strategy is favored relates to the debate on the nature of the justice process. The process-based model asserts that when people are treated fairly and with respect, they will view authority as legitimate and entitled to be obeyed, become self-regulating and assume personal responsibility for following social rules (Tyler, 2006). This view contradicts the perspective that it is only the consequence for the action that matters, not how that consequence is achieved. Consequence as the major influence is what drives the ‘get tough’ response to crime and the increase in punishment seen in the United States today. If only punishment matters, then a severe response to crime would be the most effective in stopping and preventing crime. However, if the nature of the justice process matters, than an alternative form of criminal justice should be considered.

One theory that incorporates the problem solving approach to crime-based conflict resolution and focuses on the nature of the justice process is restorative justice.
Since the 1970s, this alternative system has been evolving. It counters the philosophy of the mainstream punitive system approach; opposing the traditional system’s contentious method of solving the crime problem, restorative justice emphasizes restitution and collaborative approaches.

Restorative justice focuses on the involvement of everyone affected by the crime: the offender, the victim, families of the offenders, families of the victim, and the community. The parties are brought together, and through dialogue, an understanding of the crime, its causes, and its effects is developed. Emphasis is placed on accountability and taking responsibility, while actively avoiding the stigmatization of the offender. Those present then work together to establish a plan of how to repair the harm caused by the crime and for the offender to fulfill his/her obligations, as well as develop strategies to help the offender reinte‌rgrate into the community and avoid reoffending.

Advocates claim that restorative justice programs have many benefits. However, a major difficulty in analyzing the effectiveness of restorative justice processes relate to the diverse nature of the cases, the multifaceted approach it promotes, and the involvement of multiple stakeholders (Mattson and Erbe, n.d.). Another challenge is the various definitions of what constitutes restorative justice. Different justice processes are conducted in different ways depending on how the program determines and defines relevant restorative aspects.

**Thesis Purpose**

The purpose of this thesis is to explore the impact of the nature of the justice processes on the effectiveness of restorative justice in reducing recidivism using a meta-
analysis methodology. Meta-analysis is a tool that allows comparisons across a host of research studies in an attempt to further understanding of restorative justice and to determine what practices are most important to designing successful programs. How important is the nature of the justice process in reducing recidivism rates of offenders? What particular aspects of the process matter most? Do demographic variables matter? Are demographic variables more important than process variables or vice versa?

Restorative justice is a theory that emphasizes principles, rather than specific processes, as the features that provide general guidelines and differentiate it from other perspectives, creating uncertainty about the ‘independent variable’ that produces results (Bazemore and Green, 2007).

Researchers in criminal justice are focused on testing and analyzing various conflict resolution approaches in order to understand what is most effective in reducing recidivism. As a relatively new process, restorative justice is undergoing thorough examination. Is it more effective than traditional justice in reducing recidivism? If so, why? There is a need to understand how theoretical ideas and claims of the benefits of restorative justice translate into practice. What variables are important within the process of resolving conflict through this method? Which ones increase effectiveness? There have been few efforts to test competing theories; therefore, claims about what is good and bad practice are rarely evidence-based (Bazemore and Green, 2007 and Braithwaite 2002b). Empirical evidence for success in achieving its own goals is essential because a truly restorative program will be rooted in empirical evidence on what works in changing offender behavior (Gal and Moyal, 2011 and Levrant et al., 1999). Although a blueprint for success has not been established as yet (Levrant, et al., 1999), the ability to identify
what aspects of the process are responsible for positive outcomes increases the ability of proponents to create that ‘blueprint.’ Defining and measuring dimensions of ‘restorativeness’ and establishing methods of using those dimensions to gauge the integrity and strength of programs is essential in advancing policy (Bazemore and Green, 2007). This meta-analysis is an attempt to contribute to those efforts in developing an understanding of relevant and key aspects of restorative processes.

Studies on restorative justice impact vary from anecdotal-based evidence to systematic assessments of specific programs. Mostly the conclusion is that the restorative justice program is more effective than the control group in reducing recidivism, or offer notable benefits when a control group was not utilized. Meta-analyses have tried to put together a larger picture generally showing restorative justice to be more effective in reducing recidivism compared to traditional justice. A large criticism revolving around research of restorative justice impact is the large self-selection bias- offenders volunteer to participate in the program- that casts doubt on results compared to control groups. Recently there has been more effort to correct this problem as studies use quasi-experimental designs, random assignment, and include in the treatment group those that were assigned but chose not to participate. As the field has grown and evolved, researchers have found ways of measuring claims made by restorative justice advocates and are now beginning to understand which are supported and which may need adjustments.

The improvement in the quality of studies that attempt to determine whether restorative justice is more effective than traditional justice methods may not be enough to convince policy makers that adopting the alternative approach is the best course for
society. Traditional justice is well established. More lawmakers are trained in these
techniques. If Christie (1977) is correct that conflict becomes the property of the state
when it is deemed a crime, a shift away from this assumption will require significant,
persuasive evidence and a credible plan for the government to relinquish control and treat
conflict resolution as an issue between a victim and community. Many claim that
restorative justice represents such a paradigm shift it would produce an entirely new
system and, as such, policy makers are asking for a system model that can effectively and
restoratively address all the conditions and issues of administering justice (Van Ness,
2002). Considering the entrenchment of the current system and the ambiguity of
restorative justice it seems unlikely policy makers will endorse this alternative. However,
Zehr (as cited by Levrant et al., 1999) asserts that paradigm shifts occur when reformers
are frustrated by an existing model’s inability to solve a problem.

Restorative justice is advocated as a viable and advantageous method of conflict
resolution within the criminal justice field. Examining a variety of restorative justice
programs with varying levels of ‘restorativeness’ and procedural elements will hopefully
answer the questions of whether processes matter, what elements matter the most, what is
the effect of various processes on the outcome of recidivism rates, are more restorative
processes more effective at reducing recidivism than less restorative processes, and what
type of impact do demographics have on program success.

I am proposing two categories of variables that could account for differences in
results between restorative justice processes to be considered in the meta-analysis. The
first has to do with the demographics of participants in the process. The second relates to
the degree to which the process is restorative.
Demographics of participants and specific aspects of the crime may have a significant impact on the results of a restorative justice process; Gendreau, Little and Goggin (as cited by Hayes and Daly, 2003) found in a meta-analytic study that age, gender, race, and criminal history were the strongest ‘static,’ or unchangeable, predictors of reoffending. When looking at the offender some potential considerations could be the age, sex, ethnicity, offending history, involvement in drugs/alcohol, personality traits, and presence of a support system. Each of these has the potential to affect how an offender reacts to the process and therefore how effective the process is for everyone involved. The type of crime committed may also affect the viability of restorative justice processes in relation to recidivism. Some studies show differences in recidivism within restorative justice processes, with the type of crime being cited as the determining variable (Braithwaite, 2002a).

The nature of justice processes can be more or less restorative and that the more restorative a process is, the more positive the outcomes, suggest Zehr (2002) and Van Ness (2002). Van Ness differentiates between restorative processes and outcomes, listing four attributes for each on a continuum. On the most restorative end of the process continuum he lists inclusion, balance of interests, voluntary practices, and problem-solving orientation. The four attributes listed as the most restorative in outcomes are encounter, amends, reintegration, and whole truth. Processes that embody more restorative attributes in process or outcomes will likely demonstrate less recidivism than processes that are less restorative. An increased level of restorativeness may also affect other measures of success for restorative processes, such as an increase in victim satisfaction (Braithwaite, 2002a).
Before it can be determined what factors contribute the most to the success of a restorative justice program, it is necessary to determine what constitutes success. Proponents argue that there are many benefits associated with restorative justice, including an increase in victim and offender satisfaction, an increase in perceptions of procedural fairness, greater community involvement, empowerment, and a reduction in recidivism. Zehr (2002) cautions against using recidivism rates as criteria for success in restorative justice; however, whether or not it should be used as a criterion for success is irrelevant because in today’s political climate its use is unavoidable. Both the public and policy makers are going to see recidivism as a key aspect of any criminal justice system. Even for those proponents that see the other benefits of restorative justice as more important than recidivism, understanding the processes that reduce recidivism is necessary because those are the most likely to be supported. For these reasons I chose to focus on recidivism rates in differentiating the more successful from the less successful restorative justice programs.

**Policy Importance**

The inability of the traditional justice system to meet justice needs has frustrated both policy makers and the public. Despite the concerns surrounding restorative justice and the apparent need to deepen understanding about effective processes, the promise and evident benefits of the restorative justice approach have encouraged states across the United States to begin including restorative justice into their legislation and policies. Pavelka (2008) found sixteen states that prescribe both restorative justice and balanced approaches (an approach that focuses equally on accountability, community protection,
and competency development) within their statutes, eight that have restorative justice principles, and seven that use the balanced approach. Some states specify specific types of programs to be used whereas others are more vague. Minnesota specifies victim-offender mediation; Oregon refers to a “family decision making meeting;” Arizona applies victim reconciliatory services and family group decision making processes; Vermont, Colorado and Maine use reparative/community/accountability boards; and Hawaii employs victim impact panels and family impacted classes. According to Pavelka (2008), Pennsylvania, Alaska, and South Carolina are considered models of restorative justice reform and implementation. All three employ an annual ‘report card’ method to rate on outcome measures and improve programs. States are using restorative justice at various stages of the criminal justice process, for a wide variety of crimes, and with both adults and juveniles (although emphasis on juvenile restorative justice is still apparent). “Virtually every state is implementing restorative justice at various levels” (Pavelka, 2008, pg. 110).

This effort to implement effective restorative justice within the United States can also be seen in the funding of an initiative whose primary focus is to develop concrete model systems in pilot jurisdictions by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) (The Balanced and Restorative Justice Project, n.d.). Once the model is established a national conference of juvenile justice policy makers plan to implement it in all states. Jurisdictions find restorative justice appealing but are looking for concrete examples of successful programs. The OJJDP is therefore using those models that other jurisdictions have implemented successfully and building upon those to
demonstrate how jurisdictions can develop balanced systems based on restorative justice (The Balanced and Restorative Justice Project, n.d.).

The following chapters will look at different definitions of restorative justice, briefly review the modern history of restorative justice, consider various types of restorative justice approaches, and examine where and how these approaches are used. An overview of the alleged benefits, current research, and the cautions of critics will also be reviewed. In Chapter two I outline the meta-analysis process: its development and application to the field of conflict resolution and a description of my methodology. Chapter three begins with a review of current meta-analyses on restorative justice and then briefly describes each of the studies used in my research. Chapter four reports the results of my analysis. The final chapter reviews the analysis and attempts to place it into the context of current restorative justice literature, and looks at what needs to be done in the future to develop a better understanding of restorative justice processes.
Chapter 1: Restorative Justice Overview

The purpose of this chapter is to give an overview of restorative justice, beginning with a presentation of various definitions. A brief review of its history in modern times will be given, followed by an examination of the various restorative justice processes currently being used around the world. Claims of the alleged benefits, the research behind these claims, and concerns and criticisms will be presented.

According to Weitekamp (2003), deviant behavior in primitive societies constituted both a community problem and a community failure and thus provided a motivation for everyone to participate in processes aimed at resolving conflict. This philosophy changed as society became more self-sufficient and less dependent on the contribution of every individual. As centralized government began to define crime as an offense against the state, not the individual, restitution that otherwise would have been awarded to the victim (Weitekamp, 1996) was claimed by the state.

Forms of restorative justice have been observed in Aboriginal societies in Australia and New Zealand, Native American tribes throughout the United States of America and Canada, and by various peoples across Africa. Ury (2000) argues that early humans survived through cooperation and collaboration rather than violence and domination; every member of a group was vital to the survival of the community as a whole, making the loss of one person a strain to all. Restorative justice was a logical way to ensure the continued contribution of all members. The offender was held accountable
for his actions, reintegratively shamed, and asked to pay restitution in a forum that
allowed for the reparation of damaged relationships that, if not addressed, would detract
from the group’s ability to survive. Reintegrative shaming is a concept often associated
with restorative justice. It is a theory from Braithwaite (1996) that claims that the
societies with the lowest crime rates are those societies that shame criminal conduct most
effectively. He differentiates between stigmatization and shaming offenders in a
reintegrative way; the first condemns the offender as a whole, whereas the second
condemns the offender’s act and strives bring the offender back into the community.

Definitions

What exactly is restorative justice? Zehr (2002) considered it a value system
rather than a specific process. He outlines three interrelated principles on which it is
based: crime creates harms, these harms create obligations, and these obligations should
be met through active participation of those affected. Bazemore and Green (2007, pg.
295) seem to agree with Zehr, “because no practice or process is inherently restorative,
principles... provide general guidelines that differentiate restorative justice from other
perspectives.” The idea is to focus on repairing the harm to the victim, the community,
and even the offender rather than punishing the offender. Braithwaite (2002b, pg. 564)
states “the restorative method is to discuss consequences of injustices and to
acknowledge them appropriately as a starting point toward healing the hurts of injustice
and transforming the conditions that allowed injustice to flourish.” According to Lemley
(2001, pg. 35), “roughly described, restorative justice focuses on harm caused by
offenders by seeking to repair harm to victims and communities and reducing future harm
by preventing crime.” Gal and Moyal (2011, pg. 1014) postulate “in their ideal form, restorative justice processes involve a safe and respectful encounter between the parties, in which they discuss the crime and its effects and together reach an agreement regarding ways of repairing the harm... and preventing further harm.” Thefreedictionary.com defines restorative justice as “a form of criminal justice that emphasizes reparation to the victim or the affected members of the community by the offender, as by cash payment or community service.”

In essence, restorative justice is a process that places a high value on victim involvement, offender acknowledgment of guilt and assumption of responsibility, and a collaboratively reached agreement for repairing the harm. Individual programs around the world prioritize these values and principles of restorative justice differently, designing processes based on that prioritization as well as logistical realities and consideration.

**History**

Although restorative justice has its roots in ancient practice, there has been a resurgence of restorative justice around the world, as the current ideology behind criminal justice has not proved effective. A history of the modern development of restorative justice has not seriously been attempted, but some general major developments can be identified. According to Van Ness and Heetderks Strong (2010) the term was first used in reference to criminal justice by Albert Eglash in 1958. The 1970s saw the first major interest in restorative justice in the United States and Canada with mediation; the first wave consisted of community based mediation in the 1970s, followed by the victim offender reconciliations programs that were exclusively restorative in the
1980s, that then evolved into the social-work based movement of victim offender mediation programs (VORP) in the 1990s (McCold, 2006). It was through this second wave that restorative justice theory really began to take shape as members of the Mennonite church that were involved in various VORP programs developed and articulated its principles. It was victim-offender mediation and community mediation that found its way to the United Kingdom in the mid 1980s (McCold, 2006 and Liebmann, 2007). The first acknowledged “circle processes” widely used in restorative justice processes, were used in the United States by the Navajo nation in 1984 (McCold, 2006).

Although restorative justice began as a grassroots, community based movement it has evolved into something much more. Family Group Conferencing (FGC), a major form of restorative justice, developed in New Zealand in response to the increasingly apparent need to address juvenile (particularly Maori children) criminal behavior and needs. It was incorporated into the Children, Young Persons and Their Families Act of 1989. This format of restorative justice has been used in various other locations around the world, although none to the same extent as New Zealand. Another large-scale restorative justice movement is the Truth and Reconciliation Act of 1995 that was used to promote healing in South Africa after the cessation of apartheid. Ireland has tested restorative justice as a viable form of justice, researching its application in the country for two years before the National Commission of Restorative Justice announced its conclusion in 2009 that restorative justice should be implemented nationally for adult offenders (Griffin, 2010).
Because restorative justice is a broadly defined movement that focuses on principles rather than exact specifications, diversity in processes has evolved. Marshall (1998) notes seven restorative justice practices: victim-offender, victim-community, offender-community, victim-offender-community, justice agencies and victims, justice agencies and offenders, and justice agencies and communities. McCold (2006) groups all restorative justice processes into three main categories: mediation, conferencing, and circles because only these meet all of the criteria for restorative justice laid out by Tony Marshall of the Restorative Justice Consortium in his proposed working definition that was later adopted by the United Nations. Some might question how a paradigm of criminal justice can hold so much diversity and still be considered the same paradigm; each process interprets and accounts for restorative principles and goals in different ways and makes adjustments for the community within which they operate. In order to understand each process and its place in the restorative justice dialogue, it is important to examine each separately.

**Forms**

Victim-offender mediation (VOM) is probably one of the most widespread and common forms of restorative justice in the United States and Europe (Lemley, 2001, and Bazemore and Umbreit 2001). It usually involves the victim, the offender, and a mediator to facilitate the face-to-face dialogue. It is also not uncommon to see support persons for the victim or offender at the mediation (Umbriet, Vos, and Coates, 2008). The focus of VOMs is the dialogue between victims and offenders. This is different from other forms of mediation, which focus on finding agreement (McCold, 2006). Victim-
offender mediations are one of the most common forms of restorative justice used in later stages of the justice process. Its focus on dialogue rather than creating agreement is conducive to those wishing to meet with the offender or victim after a sentence has been given, or even after the offender has been incarcerated.

New Zealand is an excellent example of a country that has decided to implement an alternative justice system. It has implemented a large-scale restorative justice program for all juvenile offenders, consisting of Family Group Conferences. It has conducted studies to assess the effectiveness of the program as an alternative to the previous, more traditional system (Maxwell and Morris, 2006). New Zealand implemented family group conferences as their primary justice system for juveniles in 1989. This system is laid out in a clear manner with detailed processes for different situations. The court intervenes only upon recommendation of the conference, rather than the conference only happening as a result of the court’s recommendation, which is the common practice elsewhere. The outlined process focuses on goals and principles that MacRae and Zehr (2004) believe will result in a restorative approach if implemented and followed throughout the conference and decision making process. It was designed to develop community alternatives to institutionalization, respond more effectively to victim needs, provide more support for families, to increase involvement of Maori’s in decisions regarding their children, and to decrease the number of offenders appearing before court (Maxwell and Morris, 2006). Typically, family group conferencing involves the offender, the victim, parents and/or family of the offender, the police, the youth justice coordinator, and possibly a social worker. The idea is for the group to create a plan to repair the harm and ensure the offender does not offend again. Morris and Maxwell (1998) did a case study
on conferences and found that the likelihood of reoffending was equal to or less than the traditional justice system. They also found that satisfaction rates of the process among offenders and their families were 84% and 85%, respectively, and about half of the victims also reported being satisfied. They conclude that Family Group Conferencing is a useful strategy for countries wishing to move to a more restorative justice process.

The Family Group Conferencing in New Zealand is the most extensive and well-known variation of conferencing but there are other types as well. Some are called “community group conferencing” or “restorative group conferencing” but each places focus on bringing the offender, the victim, support persons, and the community together in order to address the harms, design a plan to repair them, create an environment in order to decrease the chance of future crime activity by the offender.

Another form of restorative justice is the circle process, which is often used in Canada. The circle process has five phases: creating the foundation for dialogue (opening ceremony, guidelines, storytelling round, clarifying the purpose of the circle, etc.), expressing needs and interests, exploring options for potential consensus, building consensus or a sense of unity, and closing (Pranis, Stuart, and Wedge, 2003). Different types of circles are used in tandem with the traditional justice system because the process has proven to be effective in responding to crime and the needs that follow (Pranis, Stuart, and Wedge, 2003). There are three common types of circles used: healing, peace, and sentencing. The main purpose of a healing circle is to transform the dysfunction within the community and allow for healing. These are used in Manitoba in response to prevalent alcoholism and sex offending. Peacemaking circles, used primarily by the Navajo Nation, allows for someone who feels they were wronged to talk through the
matter with the offender, respected community members, and family in a non-confrontational way (McCold, 2006). Sentencing circles work with the justice system and in addition to traditional restorative justice participants (victim, offender, community) court personnel participate in order to create a respectful space where the offense can be examined and understood, steps are outlined to heal those wronged, and plans are made to prevent future offending (McCold, 2006). Pranis, Stuart, and Wedge (2003) note ten different benefits acquired from circles: relationship building, breaking through isolation, fostering open dialogue, encouraging value-based action, providing a space to acknowledge responsibility, facilitating innovative problem-solving, bringing healing and transformation, addressing deeper causes of conflict, generating a systemic review, empowering participants and communities, and reintroducing participatory democracy. Circles place a lot of emphasis on involving all those affected by the offense and in creating a reparation plan that best addresses all harms and needs of everyone involved. Circles can often be large as all those that feel affected participate and so many incorporate a “talking piece” that is passed around to designate who may speak (Umbreit, Vos, and Coates, 2006).

Reparative boards are often considered a form of restorative justice and more familiar to citizens of the United States. A reparative board consists of a panel of highly trained community members that meet face-to-face with offenders ordered by the court to participate and develop, monitor, and report on sanctions (Bazemore and Umbreit, 2001). Community reparative boards have existed in the United States since the 1920s but have become more prominent since the 1990s, particularly in Vermont (Bazemore and Umbreit, 2001). Although this process is more restorative than the current legal system
within the United States, it does not employ all the values outlined by Zehr (2002) regarding restorative justice. It focuses on trained community members utilizing dialogue with the offender to determine what actions the offender will take to repair harm- it does not typically include victim involvement and participation from offenders is not voluntary.

More recently forms of restorative justice have been developing within the educational system. After the rise of violence seen in various schools around the country, districts began modeling their responses after the criminal justice philosophy of quick, harsh responses to violence, developing the “zero-tolerance” approach. However, this response began to expand to incorporate a wide range of offenses and people began to question the wisdom of isolating, excluding, and stigmatizing children (Stinchcomb, Bazemore, and Riestenberg, 2006). In response, many schools have begun implementing various restorative justice programs as an alternative to “zero-tolerance” in order to keep children in school, instill a sense of accountability, and aid the offender in successful reintegration. The state of Minnesota has one of the best-developed and implemented restorative justice programs in the United States (Stinchcomb, Bazemore and Riestenberg, 2006). Individual schools were exposed to various forms of restorative justice and then encouraged to choose what would be most effective for their school; many chose peace circles for their primary form of restorative justice. Restorative justice can be used as a disciplinary option, a means of addressing a conflict, a forum for discussion of the incident, or as a means of building interpersonal relationships (Stinchcomb, Bazemore, and Riestenberg, 2006).
Victim-offender mediations, Family Group Conferencing, peace circles, and reparative boards are various forms of restorative justice found around the world today. The different processes are often modified as program designers make adjustments based on their needs and resources. Restorative justice processes have become less distinct over time and the lines between types of processes have become blurred making it more difficult to distinguish between them (Umbriet, Vos, and Coates, 2006). What does this mean for policy makers desiring an alternative to the current criminal justice model? Which form of restorative justice should be employed?

Conferencing and mediation (in their various forms) seem to be the two most popular forms of restorative justice currently being employed. Victim-offender mediation is very common, especially within the United States and Europe. According to Nugent, Williams, and Umbreit (2004) a survey found more than three hundred VOM and VORP programs in the United States and over one thousand in Europe. They cite both Umbreit (2001) and Zehr (1990) as they claim that victim-offender mediation is both the oldest and the most popular form of restorative justice. As the basis of their entire juvenile justice system, family group conferencing is obviously the most common process within New Zealand and it has spread to Australia with some force; the majority of restorative justice programs are based on the conferencing model used in New Zealand (Strang, 2001). Conferencing can also be found in the United States (Pavelka, 2008). Is one form better than the other? Considering the lack of clarity surrounding restorative justice, should any form be utilized, or should policy makers move their attention to other theories and models?
Proponents of restorative justice exist and are promoting its evolution and growth in the field of criminal justice. What is it about restorative justice that people find worth advocating? What does restorative justice have to offer that is not being provided currently in the retributive justice system used in much of the western world?

**Benefits**

Before exploring what the research on restorative justice has shown it is important to understand the claims proponents make about the benefits: increased victim satisfaction, offender satisfaction, offender accountability, increased perceptions of fairness of the process, more/better reparation of the harm caused by the offense, healing, empowerment, ability to tailor the process to the community’s needs, and the transfer of ownership of the harm from the state to the victim. There are claims that restorative justice applications reduce recidivism. According to Barnett (1977), a restorative system is more likely to benefit victims, offenders, and taxpayers.

Victim related aspects of restorative justice may be the most commonly cited as advocates try to demonstrate the benefits of restorative justice. Zehr (1985) outlined the needs of victims:

Victims have many needs. They need chances to speak their feelings. They need to receive restitution. They need to experience justice: victims need some kind of moral statement of their blamelessness, of who is at fault, that this thing should not have happened to them. They need answers to the questions that plague them. They need a restoration of power because the offender has taken power away from them. Above all, perhaps, victims need an experience of forgiveness.

It is vital to meet victim needs as much as possible and that means victim involvement is imperative in all stages of the criminal justice process (Herman and Wasserman, 2001
and Hurley, 2009). It is thought that restorative justice affords victims the opportunity to get these needs met better than traditional court because it is a more victim-centered approach than the traditional court system (Braithwaite, 1996) allowing victims access to the process of justice at any and all stages.

Emphasis on the need for victim involvement is increasing because of the large number of victims, the negative impact crime has on victims’ perceptions of government and their community, the connection between victimization and future offending, the system dependency on victims coming forward, the psychological impact of crime that decreases victims’ ability to function, and research that suggests victim involvement reduces recidivism (Hurley, 2009). It is apparent that victims want to be involved in the justice process. Within the traditional justice system, 90% of victims will give a victim impact statement when notified of their right to do so (Herman and Wasserman, 2001). Victim participation ranges between studies, typically between 40-60% participating although some show participation up to 90% (Umbreit, Vos, and Coates, 2006 and Maxwell and Morris, 2006). Victims often attend restorative justice processes because they want to help the offender, to hear why the offence happened, to explain the impact of the crime to the offender, and to find assurance that it will not happen again. Decisions not to participate are often because the offense was too trivial, they are afraid of the offender, or they want the offender to get a harsher sentence (Umbreit, Vos, and Coates, 2006).

Healing is also mentioned as a beneficial feature of restorative justice (Zehr, 2002; Van Ness, 2002; Gehm, 1992; and Pranis, Stuart, and Wedge, 2003). Forgiveness is important for victims of crime and an integral step in healing (Zehr, 1985). However,
talking about healing in conjunction with retribution, incapacitation, deterrence, and other functions of the traditional criminal justice system seems inappropriate (Gehm, 1992).

For many victims there exists a direct, often intimate, relationship to the offender (Herman and Wasserman, 2001) that increases the importance of repairing some of the harm caused by the offense. Although advocates do not hesitate to state that healing and forgiveness cannot and should not be forced in a restorative process, part of what makes the process “restorative” is its potential for restoring relationships and providing healing. Restorative processes create a safe place for victims and offenders to come together, share perspectives of the incident, and through this sharing come to see one another as individuals. Oftentimes, this results in the offering and acceptance of apologies, which can be seen as a step in the healing process. This is most apparent in healing circles where focus is on the reparation of the relationship in order to keep the offender in the community (Umbreit, Vos, and Coates, 2006). In the traditional system “we have few rituals of apology for offenders to publicly announce their guilt and sorrow (when they do indeed feel it). Thus, we have few opportunities for public forgiveness and readmission into the community” (Karp, 1998 pg. 286.) Proponents argue that restorative justice provides that platform for the assumption of guilt and the bestowment of forgiveness.

Real offender accountability, argues Zehr (2002), is beneficial for victims, society and offenders. He counters the current retributive system of punishing an offender as accountability with claims that true accountability is facing up to what one has done. He asserts that restorative justice provides the venue for that accountability as it promotes understanding of the consequences (harm) caused by the offender’s act. Walgrave (1995, pg. 262) states “the offender is confronted more directly with the consequences of his act
and an active effort is demanded of him to repair or compensate the harm.” Van Ness (2002) considers a process where the offender has taken steps to make amends for his crime as highly restorative and a process where the offender is required to “pay” for the crime by suffering harm as not restorative. There are few opportunities for offenders to assume responsibility for their crime in the traditional criminal system (Karp, 1998) but accountability is considered a key principle of restorative processes.

Increased accountability and assumption of responsibility by offenders lead to better reparation of harm to victims. One of the guiding principles of restorative justice is the reparation of harm and most processes include some type of agreement developed consensually by all involved stakeholders of how to repair that harm. Compared with court research suggests high rates of compliance with these agreements (Braithwaite, 2002a). Braithwaite (2002a) notes that it is not just material reparation that is considered important in or provided through the restorative process. Symbolic reparation is cited as consequential and is received more often by victims through restorative justice than the traditional system.

Empowerment is another listed benefit of restorative justice (Hudson, 2002). Restorative justice empowers victims, communities, and offenders. Its programs bring decision-making power to those most affected by the crime. Involvement in their own cases as they go through the justice system can return a sense of power to victims who often feel a loss of control when offended against (Zehr, 2002). It empowers victims to tell their side, decide what they need for healing and reparation, and offer forgiveness. It allows communities to assert morals and values, change systems that lead to offending, support victims and offenders, and take ownership of justice. Restorative justice permits
offenders to tell their sides, offer apologies, have a say in their fate, take ownership of their actions and the consequences, and make reparation. Braithewaite (2002) asserts that the empowering feature of restorative justice is its involvement of listening to the stories. He states, “so long as the core listening principle of restorative justice is retained, this kind of empowerment cannot be threatened” (pg. 564). The involvement of communities empowers them to take control of areas of concern and need within their community. This potentially decreases the amount of crime and the fear of crime (Brown and Polk, 1996 and Herman and Wasserman, 2001).

Closely associated with this element of empowerment is the argument that restorative justice returns ownership of the crime, its incurred harms/obligations, reparation, and the justice process back to the victims and the community and away from the state. Throughout history as the state’s power increased so did its ownership of crime and any resulting reparation was assumed by the state (Weitekamp, 1996). Christie (1977) argues that crime is the property of the state and as a result the victim is removed almost completely from the process. In the retributive model, crime is seen as a violation of a law rather than harm against an individual or a community. The reaction is to punish the offender rather than relieve obligations caused by the harm. The criminal justice system “remains state centric, largely separated from communities and victims, with little recognition of the harm caused by criminal acts- harm that is rarely repaired” (Lemley, 2001, pg. 44). The traditional justice system is often incomprehensible and too restrictive for both the victim and the offender with very little censuring of the actual act (Hudson, 2002). Restorative justice processes view victims as central and the crime as ‘belonging’
to all involved parties. It focuses on ensuring the process is both accessible and understandable to everyone and that reparation and restitution go to the victim.

Procedural fairness is an important concept in criminal justice. People are more likely to comply with the law and authorities when they feel they were treated fairly (Henderson, Wells, Maguire, and Gray 2010). Two types of procedural fairness are important: justice in the quality of decision-making and justice in the quality of treatment (Tyler, 2006.) Restorative justice’s focus on involving offenders in a meaningful way in deciding how to repair harm and emphasis on showing respect to offenders throughout the process allow for both types of procedural justice. It strengthens the influence of social values on law-related behavior through reintegrative shaming and decreases the likelihood that people will reoffend (Tyler, 2006). Relatedly, restorative justice advocates claim that the process increases offender satisfaction with the justice system (Morris and Maxwell, 1998). This increase in satisfaction compared to offenders that go through court could be related to the sense of procedural justice provided by restorative processes (Rottman, 2007). The higher perceived procedural fairness, the higher the rates of satisfaction with criminal justice decisions and authorities. The use of reintegrative shaming versus the stigmatization often associated with traditional court systems is another potential influence on offender satisfaction levels. Reintegrative shaming is likely to increase the perception of procedural justice as it emphasizes respect for the offender as well as effectively conveying and impressing social norms and values to the offender. Ideally, this increase in viewing the law as legitimate will lead to a decrease in reoffending.
Recidivism rates are always a major topic of interest when discussing any form of criminal justice. Reducing reoffending is often considered the holy grail of a criminal justice program. However, in restorative justice, reducing recidivism is seen as a beneficial side effect of the process, not an essential goal (Zehr, 2002). Theoretically, restorative justice should aid in reducing recidivism because the process helps the offender in taking accountability and understanding the impact of his offense. The involvement of the community should allow for an understanding of the offender’s perspective, and lead to rectification of the circumstances that encouraged offending. Restorative justice claims to be victim-centered and many of the alleged benefits are for the victims of the crimes. But do these claims have merit? In a review of restorative justice literature, Umbreit, Vos, and Coates (2006) found that 80-90% of victims in victim-offender mediation reported satisfaction, with the vast majority showing higher satisfaction rates than a control group of court victims. Satisfaction in conferencing ranged from 73% to 90% with satisfaction ratings increasing in more recent studies. Circle processes have not been evaluated as thoroughly but the research available shows very high victim satisfaction rates, especially when processes have been implemented correctly. The findings of Umbreit, Coates, and Vos (2004), in their review of studies, found an increase in victim involvement and healing, as well. Researchers cite high satisfaction and the willingness of victims to recommend restorative justice processes to others as indicators that victim needs are better met through restorative justice than traditional court.

Allegedly, victims also benefit from restorative justice processes because of an increase in offender accountability. According to Strang (as cited in Braithwaite, 2002a)
71% of conference participants receive apologies with 77% feeling that the apology was sincere (only 17% of court victims received an apology), there was a 38% reduction in victims that felt angry pre and post conference, and the number of victims that felt sympathy for the offender almost tripled. Studies by Sherman and Strang and Umbreit (as cited in Braithwaite, 2002a) also report a decline in victim fear of re-victimization and feelings of upset after the restorative justice process. Davis (2009) found that victims that went through mediation were significantly less likely to feel anger (23% vs. 48%, p < .01), fear revenge (21% vs. 40%, p < .01), and were more likely to see positive changes in the defendant’s behavior four months later (62% vs. 40%, p < .01). New Zealand’s Family Group Conferencing also demonstrates an increase in offender accountability. Before its implementation, only three out of five offenders received any formal penalty; a comparison of offenders in 1998 showed that 97% were being held accountable in some way (Maxwell and Morris, 2006). Restorative elements were the most likely to be included in offender plans (84%), reflecting the importance placed on apologies. Restriction was placed on offenders in 60% of cases, reintegration in 39%, and rehabilitation in 31%.

**Critique**

Morris (2002) notes that restorative justice has been critiqued by multiple individuals as doing more harm than good, providing a disservice to stakeholders, and using values difficult to translate into practical reality. There are claims that restorative justice does not take into account power imbalances, is too easy on offenders, does not have good standards, utilizes poorly executed research/does not have enough research to
support its claims, is detrimental for certain victims, does not ensure the rights of offenders, and is not appropriate for certain types of crimes.

A major point of contention within the field is what types of crimes and what types of victims are appropriate for restorative justice. The least controversial use of restorative justice, which is demonstrated by its prolific presence, is for minor and middle seriousness offenses committed by juveniles (Hudson, 2002). There is more reluctance in using restorative justice with very serious crimes. Even New Zealand’s juvenile justice system does not employ its Family Group Conferences for murder and manslaughter charges. However, there are arguments that the more serious the crime the more effective restorative justice can be because the emotional harm expressed by victims provide more potential for real change within the offender (Gal and Moyal, 2011). Often minor crimes do not have direct victims and it can be difficult to convey to the offender the impact of their crime in a meaningful way. Even when there is a direct victim, if the crime is minor it is difficult to procure the victim’s involvement; the crime being to trivial and not worth the time and effort needed for the process is a major reason victims choose not to participate in processes (Umbreit, Vos, and Coates 2006). Hurley (2009) argues that restorative justice can be especially important for those incarcerated for longer periods because they were denied the ability to reconcile with those that were harmed and may have become disconnected from their crime. Advocates for the use of restorative justice for more serious crimes admit that good facilitation is essential and the risk of re-victimization is greater, but assert that the potential for healing and restoration is also greater.
There is a lot of debate on the appropriateness of restorative justice for victims of
gendered crimes and sexual assault. There is a fear that restorative justice is not an
effective or severe enough response to gendered violence, something that is especially
alarming considering these types of crimes have only recently been taken seriously
(Hudson, 2002). Limited use of restorative justice with these types of crimes has kept the
debate at a mostly theoretical level. Concern over the ability to prevent intimidation and
power imbalances in these types of crimes is pressing. Cossins (2008, pg. 365) cautions
“it is essential to consider the limits of restorative justice where victim trauma and
distress are high and where the essence of the crime is manipulation, control, self-
gratification, and lack of empathy, as is the case for child sex offenses.” The potential for
these power imbalances in these situations make good process techniques essential;
“restorative processes must be structured so as to minimize power imbalances”
(Braithwaite, 2002b). Gal and Moyal (2011) note that a major factor for low
restorativeness in a process is bad facilitation. Proponents counter that it empowers
victims through the telling of their story and confrontation of the offender. The potential
for healing relationships could be especially important when there is an intimate and
important relationship between victim and offender that cannot easily be dismissed
(Herman and Wasserman, 2001). The Hollow Water First Nation Community Holistic
Circle Healing focuses on sexually based crimes and preliminary research suggests that
these circles have positively impacted the lives of those involved (Umbreit, Vos, and
Coates, 2006).

Two major concerns surrounding restorative justice and offenders are the
offender’s rights are not being assured or protected and that the process is too easy on
offenders. Lemley (2001) found Family Group Conferences in New Zealand were not as conscientious of offender rights as they should have been. There is worry that offenders who go through restorative justice will not have access to counsel, be properly informed of their rights, and will make decisions that are not legally sound. There is also criticism that restorative justice processes are not “tough” enough on offenders. This belief was listed as a common reason for victims declining to participate in restorative justice (Umbreit, Vos, and Coates, 2006). People default to retributive justice when first confronted with a crime and the more serious the crime, the more inclined people are to retribution (Gromet and Darley, 2009). However, research on Family Group Conferences in New Zealand does not support the fear that offenders are treated mildly Lemley (2001). Hudson (2002) asserts that restorative justice can offer a better balance of moral censure and crime reduction than formal criminal justice processes and that retribution is and should be a part of restorative justice. He states (pg. 626), “…it could carry out the traditional functions of criminal justice - retribution, rehabilitation/reintegration, individual and public protection - better than formal justice does... restorative justice can achieve a better balance between these aims” and (pg. 631)

    if the aims and principles of retributive and restorative justice are integrated with the targets of restorative justice ... being pursued within the constraints of due process safeguards and standards such as proportionality and equitable treatment, then a better justice will be possible.

Restorative justice is not incompatible with retribution or the philosophy of being tough on crime. What may be necessary is to define what tough and effective retribution look like. It could be argued that requiring the offender to make reparation and take accountability for their actions is at least as difficult or severe of a consequence as those given by the state.
Conclusion

One of restorative justice’s strengths is its ability to accommodate the needs and unique circumstances of those involved. The variety of processes associated with restorative justice allow program developers more freedom in deciding the best way to serve victims, offenders, and their community. However, the lack of definition within the field has caused some concern. “Because no practice or process is inherently restorative principles... provide general guidelines that differentiate restorative justice from other perspectives (Bazemore and Green, 2007, pg. 295). Bazemore and Green (2007) assert that without defining restorativeness it will be difficult advance policies. There is fear that restorative justice will experience corruption by: being used as another “get tough” technique, not being restorative for participants, being more symbolic than substantive, and retributive programs being relabeled as restorative due to resource and organizational obstacles (Levrant et al., 1999).

In an attempt to alleviate these problems, many have suggested the development and use of process standards. Bazemore and Green (2007) list several standards that have been offered for judging restorative justice: process standards, stakeholder involvement, goal focused standards, and programmatic standards. Braithwaite (2002b) emphasizes the need for a top-down as well as a bottom-up approach to restorative justice development, noting that poor practice masquerading as restorative justice is a threat to its future. A top-down approach could provide the structure and direction for good standards. Braithwaite (2002b) describes three types of standards appropriate for restorative justice: constraining standards that must be enforced and honored as
constraints, maximizing standards that advocates should actively encourage, and emergent standards that manifest from the process when it is most successful. Although Braithwaite (2002b) acknowledges the need for standards in restorative justice to make it robust, he cautions that research is still in a primitive state and as such claims on what is good or bad practice is rarely evidence based; “we are still learning to restorative justice well” (pg. 565). He cautions that “we should even worry about regulatory proposals that are highly prescriptive about how we should define what a standard or a principal of restorative justice is... we have not learnt enough yet... to be ready for such prescription” (pg. 565).

The need for standards to ensure the integrity of restorative justice is a caution acknowledged by even avid proponents of restorative justice. However, the benefits and potential for this justice philosophy are well researched and theoretically sound. The belief in the theory, as well as the demonstrated benefits of restorative justice, are responsible for the development and spread of thousands of restorative justice programs, from small community based initiatives to nation-wide juvenile justice systems. The lack of prescription and focus on principles rather than a specific process has allowed for the development of a variety of processes that include: circle processes, family group conferencing, reparation boards, and victim-offender mediation. As restorative justice has matured and spread, and its benefits have been demonstrated empirically, the theory has moved from a grassroots movement to a serious contender as an alternative justice system. This evolution has left a void in the literature, thus the need for meta-analysis and my study.
Chapter 2: Meta-Analysis Methodology

The following chapter describes a meta-analysis approach and why it is a viable technique in research for examining the effectiveness of restorative justice in reducing recidivism. Past use of meta-analytic techniques in conflict resolution are reviewed. Then the specific research design and methodology in this study is laid out: a description of the selected variables and justification for why these were chosen, an account of the procedures used in data coding and the statistical tests used for the analysis.

Purpose

The ability to measure the restorativeness of programs and construct conceptual models is essential in determining what role restorative justice will have in the future criminal justice system (Van Ness, 2002). Hayes (2005) used variation analysis to begin examining which factors are the most influential on restorative justice outcomes and found violent offenders that experienced conferencing reoffended less than those that experienced court while property offenders showed no difference in recidivism between groups, and females that attended conferences were less likely to reoffend than conferenced males. Although that study provides valuable insight into potentially important variables, it only gives information on one particular program, the Bethlehem Pennsylvania Restorative Policing Experiment, making it difficult to generalize the
results to processes that differ greatly in structure. Meta-analysis provides an avenue to compensate for this deficiency of within-study variation analyses.

In the 1970s, Glass (1976) began promoting the use of meta-analyses in the field of Education because of the large number of studies that were appearing. Meta-analysis is a method of integrating and statistically analyzing the results of numerous studies in order to synthesize findings and understand the substantive information present in the literature. Druckman (1994, pg. 511) states that it “is an operational approach to cumulation in science.” A meta-analysis is especially useful because, according to Glass et al. (as cited in Stuhlmacher and Gillespie, 2005) it is geared towards generalization; it is a method of finding larger themes and key variables affecting a dependent variable through already completed studies without resorting to the ‘vote-counting’ (counting the number of studies that show statistical significance in an expected direction versus an unexpected direction). Meta-analysis enables a greater understanding of a subject through exposure and examination of contradictory results from disparate studies taking into account study quality and sample size (Stuhlmacher and Gillespie, 2005). These techniques allow for the comparison of results for different independent variables (Druckman, 1994). Hedges (as cited by Stuhlmacher and Gillespie, 2005) asserts that despite a standard methodology, meta-analyses are defined by the creativity, planning, and decision-making of the researchers. Meta-analyses have shown to be more accurate in the synthesis of literature than more traditional approaches (Stuhlmacher and Gillespie, 2005).

Although meta-analyses were initially developed for research in the field of Education, the technique has gained popularity in a variety of disciplines. Stuhlmacher
and Gillespie (2005) note that it has emerged within negotiation and social conflict studies but its use is still relatively limited, and claim that conflict resolution field is a fertile ground for meta-analyses because the competition between ideas and theories produce a lot of research that this method can help to organize, re-conceptualize, and synthesize. It is their belief that more opportunities for constructive dialogue and advances in understanding of social conflict are afforded by meta-analyses.

The value of meta-analyses for building conflict resolution knowledge can be seen in several studies. Four are notable. First, Druckman (1994) completed a meta-analysis examining the effect of nine variables on compromising behavior in bargaining experiments. The nine variables were: representatives and nonrepresentatives, accountable and nonaccountable representatives, prenegotiation experience, negotiator’s orientation, visibility of negotiation, opponent’s strategy, conflict size as initial position differences, conflict size as large or small issues, and time pressure. The meta-analysis was able to distinguish relatively important variables from unimportant variables as they operated across studies by comparing effect sizes of each study based on certain variables. Post Hoc tests also revealed significant differences between the top four (negotiator’s orientation, prenegotiation experience, time pressure, and initial position distance) and bottom five variables (opponent’s strategy, group representation, accountability, large versus small issues, and visibility/surveillance), the top four differed significantly from the middle three variables, the top three and two variables differed significantly compared to the bottom three and two, respectively. Analysis also showed that at least seventy-five studies with results in the unexpected direction would be needed to reverse the effect created by the variables of prenegotiation experience, orientation,
position distance, and opponent’s strategy, all of which were revealed to have strong
effect sizes by this meta-analysis in the expected direction. This shows analysts of
negotiation which variables to highlight as main effects and guides practitioners in which
variables to manipulate a bargainer’s willingness to compromise. The results caution
against single-factor explanations of negotiating behavior and identified important factors
for variations. The meta-analysis brought to light potential interaction-effects that were
not covered in the analysis, providing direction for future studies of negotiation and
compromising behavior.

A second meta-analysis on negotiation was conducted by Stuhlmacher and
Walters (1999). The study focused on the relationship of gender and negotiation
outcomes. The meta-analysis was conducted in part to resolve the conflicting
conclusions from previous studies that indicated either no difference between negotiated
outcomes between genders, or better outcomes negotiated by men. (Although the studies
up to the point of the meta-analysis were limited and contradictory, many researchers had
begun omitting mention of participants’ gender and conducting gender analysis because
of a belief that personal attributes were not important in the ability of negotiators.) The
results showed a statistically significant difference between genders, with men
negotiating better outcomes (p< .01). Testing for homogeneity revealed that the studies
used samples from the same population, removing a mandate for a search of moderating
variables, although one was still conducted in order to find greater insight into gender
differences in negotiation. No significant moderators were found, however. The authors
conclude that, consistent with stereotypical gender expectations, men negotiate better
outcomes than women and this difference can have very real applications when
considering women in the workplace; the results suggest that negotiation outcomes may be a factor in the creation of a “glass-ceiling” (pg. 670) as it directly affects promotional opportunities and salary.

A third study by De Dru and Weingart (2003) used a meta-analysis approach to understanding the associations between relationship conflict, task conflict, team performance, and team member satisfaction. The meta-analysis was conducted to relieve some tension between two major theories regarding conflict and team performance. The first theory maintained that although small amounts of conflict can be beneficial to team performance, as it intensifies the cognitive abilities of team members would decrease due to stress. The second, newer theory differentiated between types of conflict. This theory contended that relationship conflict always resulted in a decrease in performance and satisfaction within teams but task conflict resulted in performance improvements. It also claimed that task conflict was more beneficial in highly complex, non-routine tasks and detrimental in simpler, well-established tasks. In concordance with both theories, the meta-analysis revealed a strong correlation that an increase in relationship conflict resulted in a decrease in team performance and member satisfaction. However, the meta-analysis results did not support the second theory that task conflict was beneficial for team performance— the average effect size showed a significant decrease in task performance of 23%. Task conflict also revealed a significantly negative decrease in satisfaction, although it was not quite as large as the effect of relationship conflict. In contradiction to the second theory, both types of conflict negatively impact highly complex tasks more than routine tasks. A strong correlation was found between task and relationship conflict; teams with highly correlated types of conflict experienced less
satisfaction and performance than those with low correlations suggesting that high levels of trust can mitigate the negative effects of conflict. This meta-analysis challenged the theory that task conflict is positively correlated with team performance and lent support to the initial theory that any type of conflict that exceeds low levels decreases both satisfaction and performance of team members.

Fourth, several meta-analyses have been conducted on school-based conflicts in an attempt to synthesize that literature. Garrard and Lipsey (2007) examined thirty-six studies and helped to address whether conflict resolution education programs implemented in schools are effective. The analysis revealed that students that participated in such programs were .26 standard deviations lower on the outcome measures for antisocial behavior, and that improvements in antisocial behavior outcomes attributable to conflict resolution education were similar for different program approaches. However, homogeneity tests indicated the presence of moderating variables. Regression analysis revealed developmental age and implementation fidelity of the program had significant independent relationships with effect size. The results showed improvements compared to control groups observed in mid-adolescence (age 14-17). The results indicated that implementation fidelity of the program and the age of students are variables that have large impact on the effectiveness of programs. Schools wishing to implement conflict resolution education programs can use meta-analyses such as this one to establish the most effective program.

A meta-analysis that compares various types of restorative justice programs to one another based on restorative elements as well as demographic and program structure could help to ascertain what variables truly affect recidivism rates. Because the analysis
would be comparing restorative justice programs to one another rather than to a control group, self-selection bias, one of the most common criticisms of studies of restorative justice, would be less problematic. If the majority of participants are affected by self-selection bias, then what other factors account for the variation between offender success rates in the different studies? It would also help to determine in what situations and with what populations restorative justice programs are likely to be the most effective; useful information for advocates in convincing policy makers to implement this form of criminal justice and for policy makers in feeling comfortable choosing this alternative justice system over the current one.

Data

In order to conduct a proper meta-analysis study, the first requirement is to assemble the research reports. I began by collecting of relevant published studies. The data consist of articles on restorative justice and recidivism in peer-reviewed academic and professional journals in the fields of Conflict Resolution, Psychology, Education, Sociology, and Criminal Justice published between 1993-2011. The time frame was designed to include a sufficiently large sample of studies, and no pertinent publications appeared before 1993 in my literature search. Because this analysis is focused on how various restorative processes relate to recidivism, information on the rates of recidivism for offenders had to be presented in the results. Included studies also had to describe a program that claimed explicitly to be restorative, thus diversionary or rehabilitative programs that did not claim to be restorative justice were not included. Excluded studies included the effect of training on police officers’ ability to correctly implement a risk-
needs-responsivity model of rehabilitation (Bonta et al., 2011), forgiveness and transitional justice in the Czech Republic (Roman and Choi, 2006), the decision of juveniles to recidivate based on five different sentencing models (Corrado, Cohen, Glackman and Odgers, 2003), the effect of randomized experiments that occurred in the 1960s and 1970s on reoffending in Great Britain (Farrington, 2003), impact of reintegrative shaming on recidivism (Hay, 2002; Hosser, Windzio, and Greve, 2008; Murphy and Harris, 2007; Tittle, Bratton, and Gert, 2003; and Zhang and Zhang, 2004), an Afrocentric diversion program (King, Holmes, Henderson, and Latessa, 2001), the effect of an intensive juvenile probation program, (Lane, Turner, Fain, and Sehgal, 2005), and wraparound programs and their effect on juveniles with special needs (Pullman et al., 2006) because all of these studies focused on programs that did not claim to use restorative justice approaches or conducted their analyses on variables not associated with a program.

I began by searching Google for the top journals as was indexed by Thomson Reuters in its 2007 Journal Citations Report for the Social Sciences in these fields: Sociology, Criminal Justice, Psychology, and Education. An index of top journals for Conflict Resolution was not available. The rankings are based on impact factors, decided by the number of times a paper is cited (a weighted measure.) Each of the top twenty journals listed in the different fields were searched for the key terms: “restorative justice” and “recidivism” in order to narrow the results and ensure the inclusion of more relevant studies. I also searched for “peace circles,” “family group conferences,” and “victim offender conferences” with the word “recidivism” for each journal. The list of all journals is in the Appendix. Conflict Resolution Quarterly and the Journal of Conflict
Resolution were searched, as well as the following databases: Psychinfo, PsychArticles, and HeinOnline through the University catalogue system.

Within each of the studies, I searched the reference list for other published research that might be relevant. Initially, sixty-six different studies were collected. However, reviewing each study for relevant features (e.g. focused on a program that claims to use a restorative approach and included recidivism data) forty-two articles were excluded, most commonly because no data on recidivism rates of restorative justice participants were included or the article was a literature review rather than a research report. I included studies on processes that claimed to be a restorative justice program even if the process was not commonly considered restorative justice, such as teen courts and victim impact panels.

In all, I included twenty-four research publications for my meta-analysis. (See Table 1). This is consistent with other meta-analyses of restorative justice. Nugent, Williams, and Umbreit (2004) included fifteen studies, as did Bradshaw, Roseborough, and Umbreit (2006), and Latimer, Dowden, and Muise (2005) used twenty-two (twelve of which were unpublished) in their respective meta-analyses. The intent of this meta-analysis was to determine what aspects of a restorative justice program reduce recidivism and programs that claim to be restorative could help in determining the most influential factors.
<table>
<thead>
<tr>
<th>Author(s) and Date</th>
<th>Article Title</th>
<th>Journal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bergseth, K. J. and Bouffard, J. A.</td>
<td>“The Long Term Impact of Restorative Justice Programming for Juvenile Offenders”</td>
<td><em>Journal of Criminal Justice</em></td>
</tr>
<tr>
<td>Davis, R. C. 2009</td>
<td>“The Brooklyn Mediation Field Test”</td>
<td><em>Journal of Experimental Criminology</em></td>
</tr>
<tr>
<td>de Beus, K and Rodriguez, N. 2007</td>
<td>“Restorative Justice Practice: An Examination of Program Completion and Recidivism”</td>
<td><em>Journal of Criminal Justice</em></td>
</tr>
<tr>
<td>Hayes, H. and Daly, K. 2003</td>
<td>“Youth Justice Conferencing and Reoffending”</td>
<td><em>Justice Quarterly</em></td>
</tr>
<tr>
<td>Author(s) and Date</td>
<td>Article Title</td>
<td>Journal</td>
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<tr>
<td>Hayes, H. and Daly, K. 2004</td>
<td>“Conferencing and Re-Offending in Queensland”</td>
<td>Australian and New Zealand Journal of Criminology</td>
</tr>
<tr>
<td>Hayes, H. 2005</td>
<td>“Assessing Reoffending in Restorative Justice Conferences”</td>
<td>Australian and New Zealand Journal of Criminology</td>
</tr>
<tr>
<td>Little, M., Kogan, J., Bullock, R. and Van Der Laan, P. 2004</td>
<td>“An Experiment in Multi-System Responses to Persistent Young Offenders Known to Children’s Services”</td>
<td>British Journal of Criminology</td>
</tr>
<tr>
<td>Polacsek, M. et al. 2001</td>
<td>“MADD Victim Impact Panels and Stages-of-Change in Drunk Driving Prevention”</td>
<td>Journal of Studies on Alcohol</td>
</tr>
<tr>
<td>Author(s) and Date</td>
<td>Article Title</td>
<td>Journal</td>
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<tr>
<td>--------------------------------------------</td>
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<tr>
<td>Umbreit, M. S. and Coates, R. B. 1993</td>
<td>“Cross-Site Analysis of Victim Offender Mediation in Four States”</td>
<td>Crime &amp; Delinquency</td>
</tr>
</tbody>
</table>
Table 1 shows the twenty-four studies used in this analysis. The publication dates of the articles range from 1993 to 2011 and appeared in a range of journals from: psychology, criminology, and law. An evaluation for the solicitor general of Canada is also included. The research in these articles studied conferencing, mediation, and circles, and their effect on recidivism. Studies looked at programs in the United States, New Zealand, Australia, Great Britain, and Canada. Three studies focused on inner-process variations, the other twenty-one compared treatment groups to some type of control. A summary of each of the studies is given in chapter three.

The next step was to review each article and code information from it. I measured the restorativeness of the different processes using Van Ness (2002) who describes restorativeness in terms of both processes and outcome variables. In the category of processes he lists on the most restorative end: inclusion, balance of interests, voluntary practices, and problem-solving orientation. He considers encounter, amends, reintegration, and whole truth to be features of the most restorative outcomes. He proposes that the more a process exhibits these characteristics, the more restorative it is and the more successful the process and outcome will be, using a continuous scale. Thus his hypothesis is that the more restorative a process is the more restorative the outcomes of the process will be. For this analysis I attempted to characterize these restorative elements of process into variables that could be found within the collected studies. I chose contact with the victim, reintegrative shaming, presence of forgiveness, offered apologies, presence of community, support for victim, support for offender, voluntary participation, satisfaction with reparation agreement, completion of reparation, satisfaction of victim, satisfaction of offender, if the offender perceived the process as
fair, and if there was opportunity for the offender to participate in the
reparation/consequences for the crime. I also included if a facilitator trained in
restorative justice was part of the process. I used these variables to assess the restorative
level of the process and outcomes using Van Ness’s (2002) continuum. (See Table 2).
<table>
<thead>
<tr>
<th>Processes</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion: All individuals affected by the crime are invited to participate.</td>
<td>1. Victim Present</td>
</tr>
<tr>
<td></td>
<td>2. Community Present</td>
</tr>
<tr>
<td></td>
<td>3. Victim Supporters Present</td>
</tr>
<tr>
<td></td>
<td>4. Offender Supporters Present</td>
</tr>
<tr>
<td>Balance of Interests: The needs of all those affected are taken into consideration and accommodated for.</td>
<td>1. Trained Facilitator Present</td>
</tr>
<tr>
<td></td>
<td>2. Opportunity for Consensus</td>
</tr>
<tr>
<td>Voluntary Practices: Parties participate and assume responsibilities because they want to, not because they are required.</td>
<td>1. Offender Choice to Participate</td>
</tr>
<tr>
<td>Problem-Solving: Focus is placed on the future even as it addresses the past.</td>
<td>1. Victim Offers Forgiveness</td>
</tr>
<tr>
<td></td>
<td>2. Victim Satisfied with Process</td>
</tr>
<tr>
<td></td>
<td>3. Offender Offers Apology</td>
</tr>
<tr>
<td></td>
<td>4. Offender Satisfied with Process</td>
</tr>
<tr>
<td></td>
<td>5. Offender Perceives Process as Fair</td>
</tr>
<tr>
<td></td>
<td>6. Completion of Program</td>
</tr>
</tbody>
</table>

(Source Van Ness, 2002)
Information on several variables was not found in enough articles to be analyzed and were eliminated. These included if forgiveness was present and if an apology was offered. Information on if the offender offered an apology was found in only three studies and none of the studies included information on if forgiveness was offered.

Many of the studies indicated both the presence and absence of certain variables within the research. For the purposes of this analysis, a dichotomy of present/absent for the variable was determined based on the percentage of cases within the study that demonstrated the presence of that variable. The variables victim satisfaction, offender satisfaction, offenders perceiving the process as fair, or completion of the program/reparation were considered present in the study if positively indicated for eighty percent or more of the samples. Several studies utilized multiple types of processes (victim offender mediation and family group conferencing, for example), which meant that some of the study sample involved community members while the rest did not. Studies with fifty percent or more of processes involving community were classified as having community present.

Support for both the offender and the victim were collapsed into the category of community as they were not specified in many studies and often times supporters serve a similar purpose to community- to explain to the offender that his/her actions have larger ramifications than the direct impact on the individual victim. Community was not considered present if the process involved only a large group of offenders, such as in studies of victim impact panels. In studies where peers played the role of court personnel, community was marked as absent because those roles do not fulfill the traditional role of community members in restorative justice processes.
I included two categories of victim contact. Contact with the direct victim(s) of the crime and any victim contact to assess if processes involving direct victim contact were more, less, or equally effective as any victim contact. Direct victim contact was present if the direct victim participated in person, used written documents to communicate, used shuttle mediation, or sent a representative because all those methods allowed the actual victim of the crime to convey the impact the offender’s direct actions had on them. Any victim contact included those situations plus surrogate victims who, although unrelated to the offender’s specific crime attempted to convey to the offender the harm the offender had caused through their own experiences with crime.

Whether or not a program was considered voluntary was based on the ability for the offender to opt out at any point. Many programs required that the offender admit the offense in order to be allowed to participate in the process; although the offender may not have volunteered for the program they still retained the option of denying guilt in order to opt out.

In order to understand the impact that independent variables can have on reoffending, I looked at the following demographic information because they have been shown to impact recidivism; gender, race, age, if there were prior offenses, and if the crime that resulted in the restorative justice intervention was violent or non-violent (Gendreau, Little and Goggin, 1996).

All person offenses were demarcated as violent and all other offenses as non-violent. Some studies differentiated between person, property, and status offenses, the latter two categories were collapsed and classified as non-violent.
Race was viewed in a white vs. non-white dichotomy because the studies often differentiated between white and a specific minority group that was most relevant to the country in which the study took place.

Studies were divided into adult versus juvenile. Studies that focused on drunk driving were classified as adult; some of the participants in those studies may have been between the years of sixteen and eighteen but the majority of participants were above eighteen making ‘adult’ the more relevant classification. There was also some variation in what age participants were considered to be juveniles. Typically, the term juvenile was classified as under eighteen, usually no younger than ten. If the study considered the sample to be one of juveniles and the majority of participants were under eighteen, I accepted the classification of the original researchers and categorized the study as involving juveniles.

Other variables considered in the analysis included whether or not the participants were randomly assigned to the restorative justice process, if a trained facilitator was present, if the process took place in the United States or another country, at what point in the process recidivism was tracked, how long offenders were followed to assess failure, and if the restorative justice process showed a significant decrease in recidivism compared to the control group of the study. Past meta-analytic reviews within the criminal justice field have traditionally accepted multiple definitions of recidivism (Latimer, Dowden, and Muise, 2005) so I did as well.

Once the elements of restorativeness, demographic characteristics, and general variables were determined, I began to code the information in each of the studies. The majority of the variables could be coded into yes/no based on if the element was present.
Gender, race, prior offenses, and violent crimes were present to different degrees in many of the studies so were divided based on what percentage of cases in each study demonstrated the variable of interest. 0-25% was coded as 0, 26-50% as 1, 51-75% as 2, and greater than 75% as 3.

I looked at what point recidivism was tracked and divided the studies into three groups. Those that tracked recidivism after the initial arrest, those at treatment referral, and those that were tracked after treatment. Some studies looked at the effect referral had on recidivism but this analysis is interested in the effect of treatment so if possible those that experienced the treatment were separated from those that were referred but did not actually experience the treatment. This was not always possible based on information supplied in the studies. The length of time offenders were followed were coded as follows: less than twelve months, twelve to twenty-four months, and longer than twenty-four months.

Although I wanted to know which restorative elements may have an impact on recidivism, I also wanted to know if the more restorative a program was the less likely an offender was to reoffend so the studies were divided into three groups based on the number of restorative elements the processes had. If the studied process had 1-4 elements it was considered minimally restorative, 5-6 it was considered moderately restorative, and 7-9 it was considered to be highly restorative. The studies ranged from having 1-9 restorative elements present.
Calculating Effect Sizes

Meta-analyses use effect sizes of the included studies to determine the strength of the treatment in comparison to a control group. An effect size is conceptualized as a standardized difference (Yu, 2010) and there are multiple methods of establishing effect sizes of studies. One of the most common methods for establishing effect size is Cohen’s \( d \) and this was the method I employed to calculate effect sizes for the studies in this meta-analysis. The majority of the studies reported findings in a hit ratio (percentage that recidivated) so I used the formula

\[
d = \arcsin(p_1) - \arcsin(p_2), \text{ where } p_1 \text{ and } p_2
\]

were the failure rates of the treatment and control groups (Poston and Hanson, 2010). When a study reported the findings using Chi-square with one degree of freedom, the equation

\[
\text{abs}(d) = 2\sqrt{\text{Chi-square}/N - \text{Chi-square})}
\]

was used (Yu, 2010.) In one study, Luke and Lind (2002), total recidivism rates compared to a control were not offered but rather the number of official contacts each group had with the justice system after experiencing the different justice processes, so the effect size was based on the number of official contacts each group had and was calculated by entering the means and standard deviations of each group into an effect size calculator (Becker, 1999). Negative effect sizes indicate findings in the expected direction- those in restorative justice programs demonstrated less recidivism.

Three of the studies (Little et al., 2004; Luke and Lind, 2002; and Dembo, Wareham, and Schmeilder, 2005) used multiple control groups. Effect sizes were found for the treatment group and each of the controls and then averaged together in order to
establish on effect size (Garrard and Lipsey, 2007). In the study by Bergseth and Bouffard (2007) rates of recidivism were given for multiple years. Reoffending numbers for Year 2 were used to calculate the effect size of the study because it was the last year 100% of the sample was tracked. Hipple, Gruenewald, and McGarrell (2011) analyzed the effect restorativeness of conferences had on recidivism. Although there was no outside control group, the study indicated that restorativeness was significantly related to reoffending and the research differentiated between more and less restorative conferences. Conferences not displaying restorativeness were treated as a control group and an effect size was generated.

Effect sizes were not calculated for three of the studies: Hayes and Daly (2003), Hayes and Daly (2004), and Tyler et al. (2007). Both of the Hayes and Daly studies focused on within-group comparisons rather than treatment/control comparisons. These analyses did not permit the development of relevant effect sizes for this meta-analysis. The study by Tyler et al. used a comparison group but did not provide appropriate statistics to determine an effect size. The study used a Chi-square analysis with eight degrees of freedom; one degree of freedom is necessary for the Cohen’s d equation. Excluding these three studies, twenty-one effect sizes were determined.

The studies were then divided based on different variables in order to establish the effect of these variables. Because this analysis is particularly concerned with how the level of restorativeness affects recidivism, comparisons were made between the average effect sizes of highly and minimally restorative, highly and moderately, moderately and minimally, and highly plus moderately and minimally. The decision to combine highly and moderately restorative studies and compare them to minimally restorative studies
was made because only three studies were deemed highly restorative and one of them did not have an effect size. After combining these two groups, the comparison consisted of eleven and ten studies, respectively.

Comparisons of average effect size were made between studies of adults and juveniles and those that had direct victim contact with those that used surrogate victims or no victim contact. Effect sizes were compared for these variables because other analyses indicated statistically significant differences based on these variables. Considering the criticisms surrounding methodology used in restorative justice research, I also compared average effect sizes of studies that did or did not use random assignment.

**Statistical Analysis**

To understand the relationship between the different variables and establish which variables are the most influential in the success or failure of a restorative justice process, multivariate testing, specifically a principal components analysis, is the most appropriate type of analysis. This method would ideally identify a reduced number of underlying factors that account for the variations in restorative justice effectiveness. Identifying the key variables in restorative justice effectiveness would help policy makers and program designers recognize where to focus attention and energy. As the principal components analysis finds underlying factors a variance maximizing rotation (varimax) of the original space can be created, factors accounting for variance can be added until the majority of variance has been accounted for. Only factors that extract the equivalent of at least one variable or more (have eigenvalues greater than one) should be retained, per the Kaiser criterion. Using SPSS, a correlation matrix was run based on eigenvalues
principal components analysis. A Kaiser-Meyer-Olkin and Bartlett test of Sphericity was also conducted to test the viability of principle components analysis for the data set.

The next step was to enter the data into SPSS and run a series of tests to establish which factors had statistically significant impact on recidivism. I ran a series of Independent t-tests on the dichotomous variables in relation to recidivism. I also ran crosstabs and Pearson’s chi-squared tests on restorativeness, when the tracking for reoffending began, adult versus juvenile, and the length the offenders were tracked with recidivism rates. In order to do this, recidivism was redefined into three groups: those that had less than twenty percent recidivism rates, those with twenty to fifty-three percent, and those with greater than fifty-four percent recidivism. Certain variables were added as controls to establish the effect of gender, age, race, prior offenses, violent offenses, and country. For those variables that had more than four divisions if fifty percent or more of the study exhibited the characteristic it was coded as “yes” and less than fifty percent as “no” for the element. I also looked at how recidivism and the level of restorativeness were affected when the point at which recidivism was recorded was controlled for. This was examined using those studies that considered reoffending at any point after arrest versus those that tracked reoffending only after the completion of the treatment. ANOVA tests were conducted for variables that had multiple dimensions and then the Post Hoc Tukeys test was utilized for those variables that showed statistical significance in the ANOVA.

Many analyses were then repeated after excluding three studies that demonstrated outlying recidivism results. Two of the excluded studies had resulted in extremely low recidivism rates (2.76% and 5.41%) and the other excluded study had resulted in an
extremely high recidivism rate (87.5%). Interestingly, the first two studies did not show a statistically significant decrease in recidivism compared to their control groups but the third study did. Repeated tests included Independent t-Tests, Pearson Chi Square tests, and the ANOVA tests for all variables.

The number and variety of tests were used in order to examine as many relationships between variables as possible. In order to understand the importance of both process variables and demographic variables on recidivism, it is important to examine the data in various ways. Through thorough analysis a greater understanding can be gained as to what aspects of the process have the greatest impact on recidivism reduction and on what populations. Understanding both the interaction between moderating and process variables, as well as main effects of all types of variables, is vital as restorative justice processes are developed and implemented.

A meta-analysis is an excellent method for extracting important patterns and information from a large body of research. It has been used in many fields, including conflict resolution and restorative justice. Previous meta-analyses on restorative justice research have indicated that this approach does indeed provide benefits to participants. However, previous work offers little information on how much processes matters and what elements of the process are the most important to an effective restorative justice program. Using those variables, I coded and analyzed the data found in twenty-four studies selected for this analysis.
Chapter 3: Restorative Justice Research

This chapter will present two types of restorative justice research. First, previous meta-analyses on restorative justice are summarized to demonstrate the contributions of this methodology, examine their results regarding recidivism rates, and identify deficits in the literature. Secondly, the individual studies used in this analysis are outlined because each study is unique and was conducted using various methodologies. After searching for research reports on restorative justice programs that included recidivism rates, twenty-four studies were accumulated. A table depicting all twenty-four studies concludes this chapter.

Prior Restorative Justice Meta-Analyses

Several studies in the last decade have used meta-analysis to better understand the relationship between restorative justice and recidivism. Nugent, Williams, and Umbreit (2004) examined the effect of participation in victim-offender mediations on recidivism. The analysis used fifteen studies, nineteen study sites, and a sample of 9,307 juveniles. The researchers looked at the methodology used in each study for forming the participant and non-participant groups. The equivalency of group formation was examined for its impact on recidivism rates for each study. The studies showed variation in the magnitude of the effect of the victim-offender mediation programs. The meta-analyses determined the effect sizes of each of the study sites and found that eight of the nineteen sites showed...
participants in the victim-offender mediation were significantly less likely to reoffend than non-participants, six showed non-significant decreases, three showed non-significant increases in recidivism, and one showed a significant increase. What accounts for the variation? The researchers ran a series of tests that indicated definition of re-offense, the degree to which original treatment and control groups were equal, and the difference between the non-VOM group’s percentage of violent offenders and the VOM group’s percentage were the most likely explanatory variables predicting the VOM effects. Using a meta-analysis allowed the authors to examine the different studies and determine that methodological differences amongst the studies likely explained the variation in results between them. The synthesis of the data showed that victim-offender participants were .70 times as likely to reoffend as nonparticipants.

Bradshaw and Rosenborough (2005) conducted a meta-analysis on victim-offender mediations and family group conferences. They synthesized information on the effectiveness of restorative justice dialogues, to compare the intervention effects of victim-offender mediation and family group conferences on recidivism, and to examine potential moderating variables. The results showed an average effect size of .26 indicating that restorative justice approaches account for a 26% reduction in recidivism compared to non-participants. The analysis was also able to determine a statistically significant difference between the effect sizes of victim-offender mediation (effect size = .34) and family group conferencing (effect size = .11). It determined that the type of control group used in each study significantly affected the effect sizes; it would have been difficult to see that the type of control group used in a study could influence how effective the program is in reducing recidivism without a meta-analysis. Examining
effect sizes to compare types of processes also allowed researchers to more reliably determine that victim-offender mediation has greater success in reducing recidivism than family group conferences. These results have implications for criminal justice and provide better information on the effectiveness of programs. The meta-analysis also revealed a need for more studies on family group conferences, more studies employing random assignment, more inclusion of moderating variables and quantifiable definitions of moderating variables.

The effectiveness of various restorative justice programs compared to traditional justice systems using victim and offender satisfaction, restitution compliance, and recidivism as outcome measures was investigated by Latimer, Dowden, and Muise (2005) through a meta-analysis. The researchers determined the effect sizes for thirty-five individual programs in twenty-two studies, totaling sixty-six effect sizes. Regarding recidivism, the effect sizes ranged from .38 to -.23, with more than two-thirds being positive, showing a reduction in recidivism. The meta-analysis found that restorative justice participants were significantly less likely to reoffend during follow up periods (t(31) = 2.88, p< .01). The analysis indicated that restorative justice programs were more effective than traditional processes on all outcome measurements, although the variability in the effect sizes indicate that there are differences in the effectiveness of programs in reducing recidivism. The meta-analysis allows researchers to see that although restorative justice typically shows better results than alternatives, some processes are more effective than others. This leads to the question of why? What are the variables generating larger effect sizes in processes?
Bradshaw, Roseborough, and Umbreit (2006) conducted a meta-analysis to examine the effects of victim-offender mediation on juvenile recidivism using fifteen studies from around the United States. They note that meta-analyses are more reliable methods of analyzing literature than summaries that rely on the opinions of experts to interpret results. The intent of this study was to synthesize research and determine the overall effect of victim-offender mediation on juvenile recidivism, identifying potential moderating variables. Effect size for each study was determined, with the average effect size of .34 and a standard deviation of .46. Eleven of the studies indicated a reduction in recidivism, two showed no effect, and two showed an increase in reoffending rates compared to the control. Q statistical analysis was used to determine that the samples in the studies came from the same population, indicating that analysis of group means and correlations was warranted. When examining moderating variables, the meta-analysis showed that studies employing more methodologically sound procedures had smaller effect sizes. A decrease in effect size was also revealed for studies that used longer follow-up periods. Examining the studies individually or without statistical analysis hinders the ability of researchers to identify these types of variables, which are important in understanding the true impact of restorative justice. The analysis indicated a 34% reduction in recidivism for juveniles that participated in mediation. The results supported victim-offender mediation as a viable intervention, noting that the moderate results in reducing recidivism were especially good considering it was a one-time intervention.

These meta-analyses focused on synthesizing research in order to identify if restorative justice reduced recidivism. Moderating variables were also examined, focusing on methodological variations and quality within the studies rather than process
variables. Mattson and Erbe (n.d.) state that understanding what processes work, which work best, who are the best candidates, and what dynamics of the process most effectively evoke the values of restorative justice are benefits of a close evaluation. A meta-analysis provides an opportunity to examine a larger body of restorative justice studies and potentially find answers to some of these questions. Most research on restorative justice processes focuses on whether or not the treatment group shows different results than the control group; however, focusing on the variables and differences between processes may give insight into what variables are most effective (Hayes, 2005). A meta-analysis may compensate for the lack of studies on variations within restorative justice processes, as it can analyze the variations between studies. Even if a meta-analysis cannot fully explain past research, a good one can identify areas where further study is really needed (Stuhlmacher and Gillespie, 2005).

All four of the meta-analysis described here found decreases in recidivism associated with restorative justice practices. All four also identified variations in the strength and direction of the effect size for each study examined. Some of the variability was identified as being caused by methodological differences in the studies by three of the four meta-analyses. Two of the studies found process differences to be important in relation to recidivism rates. Victim-offender mediation was found to be more successful in preventing reoffending behavior than family group conferencing by one of the meta-analysis that identified process variations as relevant, while the other did not identify which variables increased the effectiveness of programs. Although these studies found important factors that account for differences between studies, they did not account for all
the variation, which leaves the question of what variables cause the differences in recidivism rates?

Current Articles on Restorative Justice and Recidivism

Each of the studies used in this meta-analysis are summarized below, by author(s), year of publication, article title, hypotheses, methodology, number of participants, and the research results. The ten studies that showed a significant decrease in recidivism between groups using restorative justice processes and a control sample are listed first, followed by eleven that did not, and three studies that did not use a comparison group. Within each of these three groups the studies are organized by the number of exhibited restorative variables starting with the more restorative studies are presented first. If more than one study in a group indicated the same number of restorative elements than the oldest study is presented first.

Significant Reduction in Recidivism Rates.

1. Bergseth and Bouffard (2007) “The Long Term Impact of Restorative Justice Programming for Juvenile Offenders,” examines factors such as prevalence of recidivism, number of later official contacts, and seriousness of reoffending behavior using a control group. The hypothesis was referral to restorative justice program impacts more than if an offender reoffends and that a longer follow-up period will provide better information than previously employed shorter follow-ups. The treatment group included all youth referred to the program and the comparison sample was developed by selecting youth referred to traditional court processing, trying to match the treatment group on certain variables.
The program is considered a “hybrid” program because it adjusted the intervention based on circumstances; if the victim was willing to meet than a face-to-face meeting was arranged, and if they were not than a shuttle mediation or victim impact panel was employed. Using a series of bivariate and multivariate analyses the authors found that restorative justice participants were statistically less likely to reoffend for the first three years but the difference was no longer significant for the fourth year (N= 164). The results also showed that the number of official contacts was significantly less for restorative justice participants (F= 2.85, p=.094) and they reoffended with less serious crimes (p=.003) than the control group. The conclusion supported the hypothesis; the analysis revealed the treatment increased the survival rates, decreased the number of official contacts, and decreased the seriousness of the reoffending. Six restorative elements were identified in this study.

2. De Beus and Rodriguez (2007) “Restorative Justice Practice: An Examination of Program Completion and Recidivism,” reports on a study of the impact that offense type, poverty level, and program completion had on recidivism rates of offenders in a restorative justice program compared to a control group. The authors hypothesized that these three variables would impact recidivism rates. All juvenile referrals eligible for diversion were examined in the study and individual-level data was collected from the county on-line tracking system database while Census data was used for community level data. The program resembled both family group conferences and reparative boards due to the involvement of family and victims in addressing harms and trained community members in the restoration process. They employed a quasi-experimental design and used logistical regression to determine poverty level had a significant impact on program
completion and juveniles in the restorative justice program were .64 times less likely to reoffend (N= 4,198, beta= -.442, p= <.001) than the control group. The less affluent the juvenile’s family was, the more likely they were to reoffend. Six restorative elements were identified in this study.

3. Luke and Lind (2002) “Reducing Juvenile Crime: Conferencing versus Court,” compared offenders in conferences and court in New South Whales. The authors hypothesized that there would be a reduction in recidivism for participants of conferences. The study focused on first time offenders and compared juveniles that experienced a conference to those that had a proven outcome in court; random allocation was not possible as police and courts determine who should be referred to conferencing. The study looked at the number of days to first reappearance and the number of reappearances per year during the follow up period. In order to reduce self-selection bias, the study also used the reoffending rates of first time offenders in the year immediately prior to the introduction of conferencing. Cox’s proportional regression model and the negative binomial form of the Poisson regression were used to analyze the survival rate and compare reoffending patterns between the treatment and control groups. Analysis showed that compared to the two control groups, conferenced youth were significantly less likely to recidivate (hazard ratio= .870, p= .094, N= 6,106 and hazard ratio= .833, p= .0244, N= 4420). Even after controlling for other variables, conferenced youth were significantly less likely to reoffend. There was no significant difference in survival rates between conferenced youth and either of the two control groups. Five restorative elements were identified in this study.
4. McGarrell and Hipple (2007) “Family Group Conferencing and Re-Offending Among First-Time Juvenile Offenders: The Indianapolis Experiment,” examined the hypothesis that offenders assigned to a family group conference are less likely to reoffend in twenty-four months than those assigned to a court ordered diversion program. Using conferencing in Indiana the intent of the study was to avoid some of the methodological issues cited in other studies as problematic. First-time offending youth (N= 782) were randomly assigned to either family group conferences or another court-ordered diversion program. Survival analysis (life tables and Cox regression) techniques were used to compare reoffending patterns after a two-year follow-up, using assignment to treatment rather than received treatment as the determinant. Survival analysis showed a significantly longer rate of survival for conferenced individuals (Wilcoxon statistic = 4.51, p=.037), although the total survival rate was not significantly different between groups (chi-square= 2.52, p=.112). The results from this study are conservative because recidivism was tracked at any point after the qualifying arrest, even prior to treatment, and some offenders in the ‘treatment group’ did not actually go through the process. Five restorative elements were identified in this study.

5. Rodriguez (2007) “Restorative Justice at Work: Examining the Impact of Restorative Justice Resolutions on Juvenile Recidivism,” used official court data (N= 4,970) on recidivism to examine the hypothesis that juveniles in a restorative justice program who had completed their dispositions were less likely to reoffend than juveniles who had completed court diversion terms and identify if the effect of the program was associated with legal and extralegal variables. The program involved both trained community members (similar to a reparative board) and victims and family members
(similar to a family group conference), making it a hybrid model of restorative justice. Results indicated that participants were less likely to reoffend compared to a control group and that gender and prior offending were important variables. Descriptive statistics and logistic regression were used to analyze the data. Results show a \( \beta = -0.350, p<0.05 \) for recidivism rates of the treatment group and indicate juveniles in the program were 0.704 times less likely than offenders in the control to reoffend. Boys were 1.391 times more likely to reoffend (\( \beta = 0.330 \)). Within the treatment group, offenders with two or more priors were more likely to reoffend than the control group (\( \beta = 0.299, p<0.05 \)). Five restorative elements were identified in this study.

6. Walker and Hayashi (2009) “Pono Kaulike: Reducing Violence With Restorative Justice and Solution-Focused Approaches,” tested and measured the application of restorative justice approaches for criminal cases. The restorative justice process was conferencing and was used in conjunction with solution-focused therapy, a highly endorsed and researched approach. The program developed three types of interventions: conferences involving the offender, the victims and their supporters; dialogues involving offenders and victims without supporters; and sessions involving separate meetings of the offender and victim with a facilitator, in which they were encouraged to bring supporters. The hypothesis was that these processes would help people to heal and decrease repeat criminal activity. Thirty-eight individuals were used for the study and eleven were considered recidivists. The control group was selected from individuals eligible for, but not referred to, the program that pled guilty. Immediate surveys of participants indicated that fifty-nine out of sixty-one viewed the process as positive and all ten that were contacted two to three years later reconfirmed those
feelings. The differences between program recidivism and the control group’s recidivism rate was statistically significant using a t-test (t=2.17, p<0.05.) The control group showed an almost doubled recidivism rate from the treatment group. The study concludes that restorative justice and solution-focused approaches are more effective than the current system. Five restorative elements were identified in this study.

7. Bonta, Wallace-Capretta, and Rooney “Restorative Justice: Evaluation of the Restorative Resolutions Project,” (1998) in a report for the Solicitor General of Canada examined the effect the project had on recidivism. They hypothesized that participants would show lower recidivism rates than a control group of probationers. The program was an offender-based alternative to incarceration that used victim-impact statements. Participants (N= 83) needed to meet the criteria of having a recommended sentence of six months or more, have pled guilty, and have been motivated to follow a community-based plan that included meeting the victim if the victim was willing. Precautions were taken to prevent net widening. Once the offender was accepted an individualized plan was developed and submitted to the Crown for acceptance; out of 297 offenders, only 99 had their plans accepted. Two measures of recidivism were used: one measured convictions resulting from custodial disposal and the other measured new arrests and/or convictions resulting custody or a violation of the conditions of supervision. Date of risk began at the placement of the offender into the program. Three control groups were used, each one matched for specific variables since the study was not randomized. One control group involved inmates and the other two were of probationers. The study showed that compared to a matched group of inmates, using the second criteria for reoffending, there was a statistically significant decrease in recidivism (chi-square= 4.56, p< .05.)
Recidivism rates were also significantly lower when compared to the probation groups (chi-square= 7.93, p<.001). Four restorative elements were identified in this study.

8. Rojek, Coverdill, and Fors (2003) “The Effect of Victim Impact Panels on DUI Rearrest Rates: A Five-Year Follow-Up,” studied victim impact panels and recidivism. They hypothesized that offenders that experienced a victim impact panel would show less recidivism than those that did not. Because all DUI offenders were required to attend the treatment, random allocation to the treatment and control group was not possible so the control group was taken from the year prior to the implementation of the VIP program. All offenders were followed for five years and both criminal record file and driving history file were searched for reoffending. They examined the hazard of re-arrest rate as well as a discrete-time model of the hazard of re-arrest (N=404). They discovered a significant difference in re-arrest rates in the first two years of follow up, although the impact seems to wane over time with the control and treatment groups showing similar recidivism rates for years three to five. The discrete time model coefficient was -0.815 and showed significance at a p< .01 level. Three restorative elements were identified in this study.

9. Little et al. (2004) “An Experiment in Multi-Systemic Responses to Persistent Young Offenders Known to Children Services,” examined a small group (N=24) of offenders known to be persistent reoffenders with two control groups to see the impact the program had on recidivism. The program was a multi-systemic response to offending not clearly identified with traditional restorative justice approaches. It was hypothesized that the offenders in the program would still reoffend but would have longer survival rates and less incidences of reoffending than the controls. Data was collected from local
police records, professional records and interviews with youth justice workers, and from national criminal records. The study used a randomized, controlled trial with a second control group and employed a two-year follow up period. They used chi square tests, ordinary t-tests, and multivariate analysis. Program participants were rearrested 30% - 50% less than the two control groups, confirming the hypothesis. The multivariate analysis showed that participation in the ISSP program was 4.7 to 6.2 times more effective in terms of offence-liberty ratio (p= .0131). Three restorative elements were identified in this study.

10. Forgays and DeMilio (2005) “Is Teen Court Effective for Repeat Offenders? A Test of the Restorative Justice Approach,” examined teen court’s ability to lower recidivism rates for repeat offenders (N= 26) compared to a control group. The authors hypothesized that teenagers experiencing teen court would reoffend less and more often complete agreements than those experiencing traditional court. Youth in teen court were referred and a random sample of youth that went to traditional court was used as a control. Parents or a designated adult were required to attend court with the offender. Recidivism was defined as rearrest. Results of a chi-square test indicated that those processed through teen court were significantly less likely to reoffend (chi-square= 3.35, p= .06), however the study used a six-month follow up period. Chi-square tests also showed teen court participants were more likely to complete their agreements (chi-square= 11.34, p< .001). Three restorative elements were identified in this study.
No Significant Reduction in Recidivism Rates.

11. Walker (2002) “Conferencing - A New Approach for Juvenile Justice in Honolulu,” looked at a restorative justice diversion program for first time juvenile offenders and examined the re-arrest rate of participants compared to a control group (N=102). The hypothesis was that participants in the program would exhibit less recidivism than the control group. Initially cases were selected randomly, but eventually runaway and shoplifting cases were selected out. Facilitators conducted structured conferences and the parties created agreements for reparation by the end of the conference. Seventy-three percent of agreements sought purely symbolic reparation indicting victims mostly want to know that offenders are remorseful. Walker used a t-test and discovered a statistically significant (t-test= -1.761, p= .04) decrease of reoffending for nonviolent offenders in the conferencing group, although overall rates were not significant. Nonviolent offenders were also less likely to escalate into violent offenses and high levels of satisfaction were indicated for all involved. Nine restorative elements were identified in this study.

12. Hayes (2005) “Assessing Reoffending in Restorative Justice Conferences,” reexamined the Bethlehem Restorative Policing Experiment (N= 64). Survival analysis, comparative analysis, and variation analysis were used to explore the hypothesis that there is value in both comparing the treatment group to a control group and in examining differences within groups. Offenders were randomly assigned to either court or conferences and then allowed to opt out of the conference if they chose. Researchers in the original study differentiated between those that attended court because they were assigned to it and those that chose to attend instead of participating in a conference. This
study combined those two groups for the analysis. Analysis showed that violent offenders were less likely to reoffend (p<.05) and have a longer survival (p=.06) compared to offenders that experienced court. Results also indicated that females attending conferences were less likely to reoffend and to survive longer than males (p < .05). There was no statistically significant difference between genders in the court group. Nine restorative elements were identified in this study.

13. Umbreit and Coates (1993) “Cross-Site Analysis of Victim Offender Mediation in Four States,” studied victim-offender mediations in juvenile courts across different sites looking for impacts on participant satisfaction, restitution completion, and recidivism rates. The authors hypothesized that participants in victim-offender mediation would have higher levels of satisfaction and restitution completion and lower rates of recidivism. Significantly higher completion rates, levels of satisfaction, and perceptions of fairness by victims were found using a quasi-experimental design that compared those that participated in victim-offender mediation with those that did not (N= 3,142). Differences in recidivism were not significant. Six restorative elements were identified in this study.

14. Davis (2009) “The Brooklyn Mediation Field Test,” analyzed an experiment where felony arrest cases (N=465) were randomly assigned to court or to a dispute resolution center to see the effect each had on participant satisfaction and recidivism. Victim-offender mediation was the restorative process used by the program. The study examined the hypothesis that even in cases involving family violence, restorative justice could be beneficial in reducing reoffending. All of the participants were acquainted and many of the cases involved intimate partners or family members; the sample also
included cases of family violence, making the data from this study unique to many other mediation situations. The cases were randomly filed in court and prosecuted or sent to a dispute resolution center for adjudication. Although mediation was perceived more positively and did not make victims of family violence less safe (a current critique of using mediation for these types of cases), there was no evidence that mediation reduced recidivism. Fisher’s exact test and chi-square analyses were conducted to achieve results. Davis asserts that the results of the analysis support in part the hypothesis that mediation should be tested in relation to this type of sample. Five restorative elements were identified in this study.

15. Armour, Windsor, Aguilar, and Taub (2008) “A Pilot Study of a Faith-Based Restorative Justice Intervention for Christian and Non-Christian Offenders,” used a pretest-posttest design to examine changes in offenders’ (N= 102) moral motivations after a 14-week program. The program was faith-based, drawing on restorative justice principles without adhering to a particular process. They hypothesized that changes are capable of being produced by a restorative justice intervention and that Christians will change more in dispositional empathy and forgivingness than non-Christians because the intervention is consistent with Christian ideals and principles. The program drew from restorative justice principles and used Christian and non-Christian samples. The study compared the initial and posttest scores of the different groups, as well as the intragroup changes in the test scores. A hierarchal regression model was used to examine the impact of the program. Christians showed significantly higher change scores on perspective taking and empathic concern. The results have implications for the use of faith-based and victim-centered programs as well as matching Christian participants with Christian
programs. Released participants of the program showed a recidivism rate of 5.4% compared to the general prison population rate of 7.2%, although this data was not analyzed in the study for significance. Four restorative elements were identified in this study.

16. Walker (2010) “Huikahi Restorative Circles: A Public Health Approach for Reentry Planning,” examined the effects of circle processes on incarcerated individuals, hypothesizing that the circles lead to increased healing and decreased recidivism. The program focused on inmates participating in circle processes with their families in order to find forgiveness and healing (N= 50). The idea was family members of the offenders are also victims of the crime due to the impact it has on the family. Participants volunteered for the process and in the five-year study period one hundred and forty applied. Satisfaction surveys of the loved ones that had participated indicated that 97-98% were positive or very positive that it had helped them forgive and that reconcile with the offender. All participants reported that it was a positive or very positive experience and requested a re-circle. The sample size was too small to examine recidivism rates in comparison to the general population of Hawaii, although the rates seemed promising. Of the twenty-three participants released from prison for more than two years, sixteen had not been charged or convicted of a new crime. Three restorative elements were identified in this study.

17. Baca, Lapham, Paine, and Skipper, (2000) “Victim Impact Panels: Who is Sentenced to Attend? Does Attendance Affect Recidivism of First-Time DWI Offenders?” examined if there were differences in those mandated to attend a victim impact panel and those not mandated, and if there were differences in recidivism rates
after a five year follow up between the groups. They hypothesized that those attending a victim impact panel would demonstrate lower recidivism rates due to the emotional impact. Using Cox proportional hazards model (cox = .9) and logistical regression the authors found that attending a VIP showed no impact to a 20% reduction in recidivism that was not statistically significant (N= 5238). Two restorative elements were identified in this study.

18. Tyler et al. (2007) “Reintegrative Shaming, Procedural Justice, and Recidivism: The Engagement of Offenders’ Psychological Mechanisms in the Canberra RISE Drinking-and-Driving Experiment,” examined the longitudinal data from the RISE study (N= 900) to evaluate the hypothesis that restorative justice conferences are more effective in lowering recidivism rates than traditional prosecution for drunk drivers. Interviews were used immediately following their prosecution/conference and again two years later to assess how well each engaged reintegrative shaming and procedural justice (580 were interviewed both times). Police records for all 900 were obtained for the four years prior and following the prosecution/conference and analyzed. A logistical regression was used for analysis. Results indicate no significant difference in recidivism between groups but show that in both processes recidivism was less likely when the process engaged the social psychological mechanism of reintegrative shaming and procedural justice. The findings suggest that the degree to which the people view the law as legitimate is the most important factor in recidivism rates. Two restorative elements were identified in this study.

because drug courts are more reintegrative and less stigmatizing they will show a reduction in recidivism compared to a control group (N= 602). Samples of felony cases from 1995 in Las Vegas both within and outside the drug court were used and both groups were similar across most measures of the independent variables. Field observations of drug court sessions were also conducted and 310 defendants were observed interacting with the judge over three months. Offender data from 1996 was used as a control variable and data from 1997 was used to establish recidivism in order to ensure that all participants had at least one year in which to reoffend. Results from logistical regression models showed that participants in drug court were 1.8 times more likely to reoffend than the control group (beta= .58, p<.05). Upon closer examination, the authors discovered that drug court in practice was less reintegratively shaming and more stigmatizing than the traditional court system. One restorative element was identified in this study.

20. Polacsek et al. (2001) “MADD Victim Impact Panels and Stages-of-Change in Drunk-Driving Prevention” examined the hypothesis that the addition of a VIP to a DWI education program would decrease recidivism rates. Participants (N= 813) were randomly assigned to either the DWI education program alone or the DWI education program and a VIP. A chi-square test was used to test the impact of the VIP panel on recidivism after a two year follow-up (chi-square= 4.56). No statistically significant difference was found between groups (p= .232). Findings indicated that adding a VIP does not increase the effectiveness of the education program. One restorative element was identified in this study.
21. Dembo, et al. (2005) “Evaluation of the Impact of a Policy Change on Diversion Program Recidivism,” used the termination of the program Juvenile Alternative Services Program (JASP) to compare net widening effects and recidivism rates for different diversion programs based on previous research that showed court-based diversion programs improved compliance and program completion, a factor often associated with recidivism. The county’s Juvenile Assessment Center receive offenders from the police and systematically process the juveniles and if appropriate make referrals to diversion programs such as JASP. JASP was a diversion program that incorporated community service, restitution, and counseling. Samples of youth from each program were randomly selected for this study, eliminating any that were in multiple programs. Stepwise multiple regression analysis was used and results indicated that the cancelled JASP program showed less recidivism than the other four compared programs. ANCOVA mean rearrest showed a significant decrease in recidivism for JASP participants (N= 180, F= 3.60, p< .01). One restorative element was identified in this study. 

*No Comparison Group.*

22. Hayes and Daly (2003) “Youth Justice Conferencing and Reoffending,” examined various conference variables to see if and what impact they have on recidivism rates (N=89). The hypothesis was that conferences that showed more restorative principles in the process would result in lower recidivism rates for those offenders. Data from in-depth interviews, conference observations, and surveys from the SAJJ project collected in 1998 and 1999 were used in this study, as well as data collected by the police
for offending behavior. Reoffending was defined as any new arrest or apprehension after
the date of the conference. They analyzed bivariate relationships between selected
variables and reoffending and used logistical regression. They found that youthful
offenders who were observed to be remorseful and whose outcomes were reached by
consensus were less likely to reoffend. Offenders showing remorse had a beta= -1.12 and
outcomes reached by consensus a beta= -1.30, p=.05. Seven restorative elements were
identified in this study.

attempted to establish the relationships that offender characteristics and conference
variables have on recidivism (N= 200). The hypothesis was more restorative conferences
would reduce recidivism rates. Data was collected from conference case files, including
evaluation surveys, and offending history records for juvenile offenders. Recidivism was
defined as any new official incident post-conference. They were not able to determine
conference variables that affected recidivism due to a lack of variance between
conferences, but analysis showed that offender characteristics had a significant impact on
reoffending rates. Prior offending showed a hazard ratio of 2.29 (p=.001), gender a
hazard ratio of 6.41 (p=.000) and age showed F= 5.7 (p<.01). Males, those with prior
offenses, and ages fifteen and sixteen all showed significantly higher rates of recidivism.
Six restorative elements were identified in this study.

Justice, and Defiance as Predictors of Reoffending of Participants in Family Group
Conferences” examined what characteristics of family group conferences result in a
reduction of reoffending and tested if reintegrative shaming, procedural justice, and
defiance theory are key variables in recidivism reduction. The hypothesis was that the
more a family group conference displayed characteristics derived from reintegrative
shaming, procedural justice and defiance theory, the less recidivism there would be. The
study used juveniles that participated in the Indianapolis Juvenile Restorative Justice
Experiment (N= 215). At six months, offense type and conference restorativeness
affected recidivism; at twenty-four months offense type and race showed influence over
recidivism. Bivariate analysis indicated that restorativeness was significantly related to
failure at twenty-four months (Pearson’s r= .108, p=.15, chi-square= 40.670, p<.05).
Logistical regression analysis showed violent offenses (beta= 2.031, p< .05) and race
(beta= .572, p<.10) were significantly related to recidivism rates. The results suggest that
the more the conference appeared to follow the principles of restorativeness and
procedural fairness and avoided defiance the less recidivism. However, the effect seemed
to lose influence as more time elapsed from the intervention. Six restorative elements
were identified in this study.

Within these twenty-four studies there is a great diversity of methods, outcome
measures, and sample and process types. Many of the studies showed statistically
significant reduction in recidivism from a comparison group but not all. There is also
variation in how recidivism was tracked and for how long. Several studies tracked
survival rates (how long the offender went before reoffending) of the treatment and
control group. The treatment group typically had longer survival rates, even when there
was no significant difference in final recidivism. There is great variation between the
studies in the level of restorativeness of the researched programs. Table 3 lists the studies
arranged by recidivism rates. Beginning with the study demonstrating the lowest percentage of reoffending, the articles are listed in order from least to greatest.
<table>
<thead>
<tr>
<th>Study</th>
<th>Recidivism</th>
<th>Inclusion</th>
<th>Balance of Interests</th>
<th>Voluntary</th>
<th>Problem-Solving</th>
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<td></td>
<td>% Recidivated</td>
<td>Victim Contact</td>
<td>Community Presence</td>
<td>Trained Facilitator</td>
<td>Consensus Opportunity</td>
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<td>Umbreit and Coates, 1993 (N= 2,659)</td>
<td>18.00</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dembo, Wareham and Schmeilder, 2005 (N= 584)</td>
<td>18.89</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>de Beus and Rodriguez, 2007 (N= 9,255)</td>
<td>20.39</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hayes 2005 (N= 222)</td>
<td>21.88</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Baca et al. 2000 (N= 5,238)</td>
<td>24.00</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mieth, Lu, and Reese, 2000 (N=602)</td>
<td>26.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3: Presence of Variables Indicative of Restorative Process For Each Study

<table>
<thead>
<tr>
<th>Study</th>
<th>Recidivism %</th>
<th>Inclusion</th>
<th>Balance of Interests</th>
<th>Voluntary Practice</th>
<th>Problem-Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Victim Contact</td>
<td>Community Presence</td>
<td>Trained Facilitator</td>
<td>Consensus Opportunity</td>
<td>Offender Choice</td>
</tr>
<tr>
<td>Walker 2002 (N=102)</td>
<td>28.43</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Walker and Hayashi, 2009 (N=38)</td>
<td>28.95</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Walker and Greening, 2010 (N=52)</td>
<td>30.43</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rodríguez, 2007 (N=4,970)</td>
<td>34.02</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hayes and Daly 2003 (N=89)</td>
<td>40.45</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hipple, Gruenwald, and McGarrell, 2011 (N=400)</td>
<td>41.86</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Bergseth and Bouffard, 2007 (N=782)</td>
<td>42.07</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>McGarrell and Hipple, 2007 (N=782)</td>
<td>48.25</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hayes and Daly, 2004 (N=200)</td>
<td>56.00</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Little et al., 2004 (N=24)</td>
<td>87.50</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Key:** Victim Contact = Offender had some contact with a victim. Community Present = Community members participated in process. Trained Facilitator = Trained facilitator was used in process. Consensus Opportunity = All participants had a say in agreements. Offender’s Choice = Offender had ability to opt of program. Victim Satisfied = More than 80% of victims indicated satisfaction. Offender Satisfied = More than 80% of offenders indicated satisfaction. Perceived Fairness = Offender perceived process as fair. Program completion (Program Complete) = Offender completed all terms of program/agreement.
The results of the individual studies tended to show positive effects of the evaluated restorative justice program, including many that are listed here as being minimally or moderately restorative. Seventeen of the studies showed some type of decrease in reoffending behavior, even if not all were at a statistically significant level. The only study that showed an increase in recidivism also noted that, although the program was restorative in theory, in practice it was stigmatizing instead of reintegrating.

The studies reveal a great diversity of programs that are considered to be restorative justice. These twenty-four look at mediation, conferencing, alternative courts, and diversion programs. Each program displayed restorative justice in a different way, and each study emphasized different variables and outcomes. Each study also characterized its variables differently, which makes comparison across studies difficult. Research on survival rates of offenders indicates that although restorative justice participants often survive longer, eventually the effect of the program wanes and total recidivism rates even out between groups. This is an important element when comparing studies that use varying follow up periods. There is also a difference when the studies began tracking recidivism so results of one study may look less promising if the researchers started tracking at arrest or assignment to treatment group rather than after the actual treatment. A meta-analysis of these studies can account for some of the variation between them and lend greater understanding to how restorative justice processes actually affect recidivism rates of offenders.

As previously noted, there is evidence of many benefits of restorative justice. However, in the current political atmosphere where cost is one of the leading reasons for
seeking change in criminal justice policy, recidivism may be the most relevant and persuasive outcome. It appears that restorative justice generally results in reduced recidivism but it does not do so infallibly. The results of this meta-analysis seek to answer the question of why some programs showed success in reducing recidivism, and others did not.
Chapter 4: Analysis

Is restorative justice more effective than traditional justice in reducing recidivism?

Does the nature of the justice process matter? What aspects of that process matter more?

What type of impact do demographics and other variables unrelated to the nature of the justice process have on the success of programs?

Because of the diversity nature of the twenty-four studies in this meta-analysis and the number of variables considered in an attempt to gain insight into the value and impact of the nature of the justice process in restorative justice applications in relation to recidivism, multiple statistical tests were employed to analyze the literature. These include: effect size calculations, principal components analysis, t-tests, Pearson’s chi-squared tests, and ANOVA. I intend to examine each of the process related categories of restorativeness outlined by Van Ness (2002) through the operationalized variables shown in Table 2. However, few studies included information for every variable, and there was little variability between studies. Therefore the analysis for the following four variables should be considered cautiously: program completion information was provided in twelve studies but only one indicated participants did not complete the program; victim and offender satisfaction were presented in five and six studies, respectively, but only one study for each variable indicated dissatisfaction; and offender perceptions of a fair process was included in five studies and only one indicated the offender did not find the process to be fair. Twenty-one variables (process and demographic) were examined and

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statistically analyzed in various ways. This chapter will report the results of these tests and interpret the findings within the context of the current literature on restorative justice and recidivism, addressing the following questions. (1) Is restorative justice more effective than traditional justice methods in reducing recidivism? (2) Is the extent of a restorative justice system (i.e. more factors suggested by Van Ness) related to recidivism? (3) What is impact of the nature of the justice process? (4) What is the importance of other variables not related to the nature of the justice process?

1. Restorative Justice vs. Traditional Justice

Effect size is used in meta-analyses as a way of understanding the standardized difference between treatment groups and control groups. These allow researchers to see the impact a treatment has. One of the most common methods of determining an effect size is Cohen’s d, the method used here. In this analysis a negative effect size indicates results in the expected direction – that the restorative justice program reduced recidivism compared to the control group. The larger the effect size, the greater the reduction in reoffending behavior by offenders in the treatment group. Effect sizes were computed using the overall recidivism rates for the study when possible and the mean number of official contacts when overall rates were not available. Three studies (Hayes and Daly, 2003; Hayes and Daly, 2003 and Tyler et al. 2007) did not provide enough information in the analysis to compute relevant effect sizes so only twenty-one effect sizes are presented. The range of effect sizes was -0.97 to 0.10. The average effect size was -0.07. The Hipple, Gruenewald, and McGarrell study showed an effect size that was .55 larger than any other study, indicating that it is an outlier. This study did not compare a
treatment group with a control group but rather compared the level of restorativeness within each conference and the effect it had on recidivism. When removed from the analysis, the average was reduced to -0.06. Eighteen of the studies showed negative effect size, one demonstrated no effect size, and two indicated positive effect size.

Although both means are presented in this study, it could be argued that the outlying study should be included despite its extremely high effect size because of the nature of its comparison group. This was one of the few studies that measured the actual level of restorativeness and compared the effects on reoffending instead of assuming all processes were equally restorative, or even restorative at all. The assumption that all restorative justice programs actually exemplify a restorative process is shown to be flawed by another study that considered process, Miethe, Lu, and Reese (2000). Results of the study demonstrated those in the treatment group were 10% more likely to reoffend than the control group; upon examination of the process, it was revealed to be less restorative and more stigmatizing than traditional court. This study demonstrated the largest effect size in the unexpected direction (0.10).

The twenty-one studies with effect size are organized beginning with the study with the largest effect size demonstrating restorative justice process decreased recidivism, followed by successively smaller effect sizes, an effect size of zero, and effect sizes that demonstrated increasingly large effect sizes in the opposite direction. Also included are the variables examined through comparison of means. If the study took place in the United States or another country, study design employed random assignment or a referral system, focus was on adults or juveniles, process included contact with the direct victim of the crime, and how restorative was the process. Methodology of group assignment
was the only variable to show significance in a t-test comparing effect size means. (See Table 4)
<table>
<thead>
<tr>
<th>Study, Date</th>
<th>Effect Size</th>
<th>Country</th>
<th>Methodology*</th>
<th>Age</th>
<th>Contact w/Direct Victim</th>
<th>Restorative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hipple, Gruenwald, and McGarrell, 2011 (N= 400)</td>
<td>-0.97</td>
<td>US</td>
<td>Random</td>
<td>Juvenile</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Bonta Wallace-Capretta and Rooney, 1998 (N= 99)</td>
<td>-0.42</td>
<td>Other</td>
<td>Referral</td>
<td>Adult</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>Walker and Hayashi, 2009 (N=38)</td>
<td>-0.031</td>
<td>US</td>
<td>Random</td>
<td>Adult</td>
<td>No</td>
<td>Medium</td>
</tr>
<tr>
<td>Walker and Greening, 2010 (N= 52)</td>
<td>-0.27</td>
<td>US</td>
<td>Unknown</td>
<td>Adult</td>
<td>No</td>
<td>Low</td>
</tr>
<tr>
<td>Little et al. 2004 (N= 24)</td>
<td>-0.19</td>
<td>Other</td>
<td>Random</td>
<td>Juvenile</td>
<td>No</td>
<td>Low</td>
</tr>
<tr>
<td>Rojek, Coverdill, and Fors, 2003 (N= 404)</td>
<td>-0.18</td>
<td>US</td>
<td>Referral</td>
<td>Adult</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>Bergsath and Bouffard, 2007 (N= 330)</td>
<td>-0.17</td>
<td>US</td>
<td>Referral</td>
<td>Juvenile</td>
<td>Unknown</td>
<td>Medium</td>
</tr>
<tr>
<td>Forgays and DeMilio, 2005 (N= 26)</td>
<td>-0.15</td>
<td>US</td>
<td>Referral</td>
<td>Juvenile</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>de Beus and Rodriguez, 2007 (N= 9,255)</td>
<td>-0.12</td>
<td>US</td>
<td>Referral</td>
<td>Juvenile</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Dembo, Wareham and Schmeilder, 2005 (N= 584)</td>
<td>-0.08</td>
<td>US</td>
<td>Referral</td>
<td>Juvenile</td>
<td>No</td>
<td>Low</td>
</tr>
<tr>
<td>McGarrell and Hipple, 2007 (N= 782)</td>
<td>-0.07</td>
<td>US</td>
<td>Random</td>
<td>Juvenile</td>
<td>No</td>
<td>Medium</td>
</tr>
<tr>
<td>Baca et al. 2000 (N= 5,238)</td>
<td>-0.04</td>
<td>US</td>
<td>Referral</td>
<td>Adult</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>Hayes 2005 (N= 222)</td>
<td>-0.04</td>
<td>US</td>
<td>Random</td>
<td>Juvenile</td>
<td>Yes</td>
<td>High</td>
</tr>
</tbody>
</table>
Table 4: Effect Size and Selected Variables

<table>
<thead>
<tr>
<th>Study, Date</th>
<th>Effect Size</th>
<th>Country</th>
<th>Methodology*</th>
<th>Age</th>
<th>Contact w/Direct Victim</th>
<th>Restorative Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luke and Lind, 2006 (N= 4,420)</td>
<td>-0.04</td>
<td>Other</td>
<td>Referral</td>
<td>Juvenile</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Armour, et al. 2008 (N= 102)</td>
<td>-0.02</td>
<td>US</td>
<td>Referral</td>
<td>Adult</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>Rodriguez, 2007 (N= 4,970)</td>
<td>-0.02</td>
<td>US</td>
<td>Referral</td>
<td>Juvenile</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Walker 2002 (N= 102)</td>
<td>-0.01</td>
<td>US</td>
<td>Random</td>
<td>Juvenile</td>
<td>Yes</td>
<td>High</td>
</tr>
<tr>
<td>Davis, 2009 (N= 465)</td>
<td>0.00</td>
<td>US</td>
<td>Random</td>
<td>Unknown</td>
<td>Yes</td>
<td>Medium</td>
</tr>
<tr>
<td>Polacsek et al. 2001 (N= 813)</td>
<td>0.04</td>
<td>US</td>
<td>Random</td>
<td>Adult</td>
<td>No</td>
<td>Low</td>
</tr>
<tr>
<td>Mieth, Lu, and Reese, 2000 (N=602)</td>
<td>0.10</td>
<td>US</td>
<td>Referral</td>
<td>Juvenile</td>
<td>No</td>
<td>Low</td>
</tr>
</tbody>
</table>

Key: Effect Size- Negative sign indicates less recidivism for treatment group than control. Country: study took place in the United States or another country. Methodology: assignment to treatment group was through random allocation or a nonrandom method. Age: Majority of treatment group were adult or juveniles. Contact w/Direct Victim: Treatment group had contact with the victim of their personal crime. Restorative Level: High- study demonstrated 7-9 restorative variables, Medium- study demonstrated 4-5 restorative variables, Low- study demonstrated 1-4 restorative variables. *statistically significant at p< .10
When considering the results of different studies it is important to take into account methodology because this often explains variation. I organized the studies according to whether or not random assignment was used and then averaged the effect sizes. Twenty of the twenty-one provided information on random assignment; eight studies used random assignment and twelve did not. Randomly assigned studies showed a larger decrease in recidivism. The average effect size for those studies that used random assignment was -0.19 (SD= 0.33) compared to -0.10 (SD= 0.128) for those that did not. This was significant (p= 0.089). Similarly, Garrard and Lipsey (2007) found in their meta-analysis of research on conflict resolution and education that random assignment accounted for a significant amount of variation in effect sizes and randomly assigned studies showed larger effect sizes. Many studies in this analysis that did not use random assignment employed a type of referral system to dictate the treatment and control samples. Considering random assignment demonstrated better effects on recidivism than referral systems, overall recidivism rates could be improved by allowing all offenders who are willing and admit guilt to participate in restorative justice programs, rather than having members of the police or justice system choose candidates.

Based on comparative tests performed in this study that reached significance, the average effect sizes were compared for specific variables. The first variable was programs that focused on either adults or juveniles. Adult programs showed a larger effect size of -0.17 and juvenile programs -0.14. When the outlying study was removed from the analysis the mean effect size for juvenile programs dropped to -.07. This result is consistent with an independent t-test (discussed later) that indicated adults were significantly less likely to reoffend than juveniles.
The other variable that showed significance in an independent t-test when all studies were included was if participants of restorative processes had contact with the direct victim of their offense. Comparing effect sizes for the thirteen studies that indicated direct victim contact with the seven that did not showed a difference of .05 in the averages. Those with direct victim contact showed a mean of -0.16, those without -0.11. When the outlier study was removed, studies with direct victim contact dropped to a mean effect size of -0.09.

The conventional values of effect sizes (Cohen, 1962) list effect sizes of .20 as small, .40 as medium, and .60 as large. All of the average effect sizes found in this study were small. Of the individual effect sizes, one was high (the outlying study of Hipple, Gruenewald, and McGarrell, 2011), three were medium, and seventeen were small.

These values are general guidelines based on mean effect sizes in abnormal and social psychology and may not be the most appropriate for evaluating the effect of criminal justice processes (Yu, 2010). Within the current literature, two studies (Bradshaw and Roseborough, 2005 and Bradshaw, Roseborough, and Umbreit, 2006) showed mean effect sizes for recidivism of 0.26 and 0.34, respectively, and noted that these averages were two and three times higher than the average effect size of 0.10 found for the traditional justice system.

The overall average effect size in this study is -0.07 or -0.06 if the Hipple, Gruenewald, and McGarrell (2011) study is removed. Both of these means are similar to the one cited in the two previously mentioned studies for traditional justice. Unlike other meta-analyses on restorative justice, this one does not show a marked difference for restorative justice effect sizes when compared to traditional justice. Although only one
significant variable was found when analyzing effect sizes, other statistical analyses indicated important factors.

2. Restorativeness and Recidivism

In order to understand the impact of the level of restorativeness on reoffending, average effect sizes were compared for studies based on the number of restorative elements each study demonstrated. Those with 7-9 were considered high, 5-6 moderate, and 1-4 minimal. Two of the effect sizes were for studies classified as high, nine as moderate, and ten as minimal. The average effect size for the studies classified as highly restorative was -0.03, moderately -0.19, and minimally -0.12. The outlier study was part of the moderate category and when removed the average effect size dropped to -0.10. Contrary to the hypothesis of Van Ness (2002) when all effect sizes are considered, moderately restorative programs demonstrate the greatest ability to reduce recidivism, and when the outlier is removed, minimally restorative show the greatest impact.

Because of the limited number of highly restorative studies, high and moderate effect sizes were combined and compared to the nine minimally restorative studies’ effect sizes. The mean for the first group was -0.16 and the second -0.12. However, when the outlying study is removed from the mean for the first group drops to -0.08. Means were not significantly different between any levels of restorativeness. No significance was identified in other statistical analyses, including Pearson’s chi-squared and ANOVA tests.

No significant relationship was found between the level of restorativeness of the nature of the justice process and recidivism. Contrary to the theory proposed by Van Ness (2002), more restorative justice processes were not more effective in reducing
recidivism rates of offenders, regardless of the statistical test employed. Ten of the twenty-four studies indicated a significant decrease in recidivism compared to a traditionally processed control group indicating that restorative justice processes can decrease reoffending behavior; if the decrease in recidivism is not related to the overall restorativeness of the justice process, than individual variables related to the nature of the justice process, as well as other variables not related need to be examined.

3. Process Impact

A series of independent t-tests, Pearson’s chi-squared, and ANOVA tests were run. All tests were run with SPSS. First, independent t-tests compared the average rates of recidivism for studies based on the presence or absence of variables. Contact with the direct victim, contact with any victim, community present, trained facilitator present, consensus opportunity, offender satisfaction, victim satisfaction, program completion, if the offender perceived the process as fair, and if it was the offender’s choice to participate are all dichotomous variables; a study was coded as either exhibited the variable or not. The articles were then combined based on the presence or absence of each variable, average recidivism rates determined, and statistical significance found through the independent t-tests. This process was repeated for each of the previously stated variables. Analyses also compared the level of restorativeness of each study as decided by the number of restorative process elements were professed in the study. Level of restorativeness and its significance to recidivism was determined with both Pearson’s chi-squared and ANOVA tests. In order to run the Pearson’s chi-squared tests, recidivism rates were binned into < .20, .20 - .53, and .54+. Studies were divided based
on the number of restorative elements identified: 1-4 were minimally, 5-6 were moderately, and 7-9 were highly restorative. Neither the ANOVA or Pearson’s chi-squared tests showed any significant relationship between recidivism rates and level of restorativeness.

Sherman et al. (as cited in Hipple, Gruenewald, and McGarrell, 2011) argued that when dealing with policies it maybe better to use a less restrictive cutoff level in order to reduce the more likely risk of making a Type II error and reject a beneficial intervention. Because of that, a significance level of 0.15 was employed in this meta-analysis.

Contact with the direct victim of the offense showed a significant decrease in recidivism. The analysis was able to use all twenty-four studies as each included enough information for the coding of this variable. Nine of the studies were coded as not having contact with the direct victim and fifteen of them were coded as having it. The mean recidivism rate for those without was 0.36 and 0.24 for those with direct victim contact (p = 0.10). This is consistent with the larger effect size of -0.16 compared to -0.11, seen earlier. Early modern restorative justice considered victim contact to be extremely important; this is demonstrated by the number of victim-offender mediations and victim-offender reconciliation programs seen in the beginning of the movement. As processes and programs have developed many have omitted this element; however, in order to capitalize the most on potential reduction in recidivism, perhaps more efforts to include victims should be made, without violating victim rights or reducing the principles of voluntariness. It should also be noted that there was not a significant difference between programs that included both direct victims and surrogate victims and those that included
none. Effects appear stronger when the offender has contact with the actual victim rather than a surrogate victim.

*Opportunity to develop consensus, community present, and victim satisfaction;* all indicated statistically significant *increases* in recidivism in studies demonstrating the presence of these variables. Considering these variables are all indicative of a more restorative process, the results are surprising.

*Participation in developing the reparation plan,* using consensus as the form of decision-making, should reduce recidivism rates of offenders. This hypothesis is based on the idea that decisions made by consensus increase the likelihood for acceptance and the motivation to complete agreements (Levi, 2011). All twenty-four studies were coded as either having the opportunity for the offender to participate in the development of the outcome of the process or not. Seventeen were coded as yes and seven as no. The mean recidivism rate for those with opportunity to develop consensus was .33 and those without was .17, a significance level of .04 was achieved. Comparing program/agreement completion rates and recidivism with whether or not the agreement was reached consensually may have provided interesting results but only one of the twelve studies that included completion information was coded as not completed, making this an unfeasible moderating variable.

*The inclusion of community* in a process showed a mean of 0.16 for the nine studies that did not include community and 0.36 for the fifteen that did, achieving a significance level of .004. This analysis coded supporters for the offender as community members; although in a study on the Australian Reintegrative Shaming Experiment (Tyler et al., 2007) unconnected community members were more forceful in shaming the
act of driving drunk, researchers found that oftentimes the shaming by family and friends was lukewarm. The meta-analysis by Bradshaw and Roseborough (2005) noted a significant difference (p < .05) in average effect sizes between victim-offender mediation (.34) and family group conferencing (.11). The first process type typically does not include community members, the second does. Community involvement may not inherently offer the benefit purported by restorative justice advocates. Evaluation of the success of community members in applying reintegrative shaming and the effect it has on recidivism could better demonstrate the potential benefits of community involvement in restorative justice.

*Victim satisfaction* showed significant increases in recidivism. Only five studies provided information on the satisfaction of victims: three indicated victims satisfaction and two dissatisfaction. One of the two studies coded as not having victim satisfaction reported a 2.76% recidivism rate. Since the sample size for this variable only included five studies it was likely sensitive to this outlier.

4. Non-Process Variables

The analyses compared recidivism rates based on the presence or absence of the non-process variables of random assignment, adult or juvenile focused, race, gender, if the study took place in the United States, first-time offenders, violent offenses, at what point recidivism was tracked, how long offenders were followed for reoffending, and if there was a statistically significant decrease in recidivism compared to a control group.

Currently restorative justice is most acceptable for juvenile offenders (Hudson, 2002). However, when recidivism rates between the studies were compared based on
whether the program focused on adults or juveniles, results indicate that restorative justice may actually be more beneficial for adults. Nine studies had adult samples and fifteen had juvenile samples. The mean rate of recidivism for adults was .19 and .36 for juveniles (p = .031), according to the independent t-test. Similarly, the average effect size for studies on adults was -0.17 compared to -0.14 for juveniles. Recidivism rates were binned into three categories in order to run a Pearson’s chi-square test. Results indicated that adults were less likely to recidivate than juveniles ($X^2 = 4.561, p = .102$). There are several possible reasons why adults are less likely to reoffend than juveniles after experiencing a restorative justice process. Adults are typically less influenced by peers, may have better understanding of the consequences of their actions, have a greater desire to be reintegrated, etc. Whatever the reasons, the significantly larger decrease in reoffending rates for adults compared to juveniles indicates that restorative justice has a much larger viable application than is popularly considered and the expansion of its use needs to be evaluated.

Studies that took place in the United States showed a statistically significant decrease (p = .032) in recidivism rates compared to studies that took place in other countries. Eighteen of the studies took place in the United States and six were located internationally. Differences in average effect sizes were not consistent with these findings; however, only three of the studies that took place outside of the United States gave enough information for effect size calculations. The average effect size for studies within the United States was -0.13 and outside the United States was -0.22.

In order to run a Pearson’s chi-square test studies were divided into two categories: first-time offenders and offenders with prior offenses. Studies were divided
based on which group the majority of offenders (over 50%) fell into. Seventeen studies provided information on this variable, twelve were considered as first-time offenders and five were considered as repeat offenders. Consistent with the literature, the tests show that studies focusing on repeat offenders showed significantly higher recidivism rates than first time offenders ($X^2 = 6.885, p = .032$).

ANOVA tests demonstrated that the point at which offenders were initially tracked for reoffending behavior was statistically significant. Those tracked after treatment were significantly less likely to reoffend ($p = 0.032$) than those who were tracked after the referral arrest. This actually lends credibility to the idea that the restorative justice process actually causes any impacts on recidivism, not a placebo effect of being assigned to the process.

I ran a factor analysis with SPSS to extract factors that could account for the majority of the variation between the studies. Variables that were missing information for most of the studies or which had almost no variation between the studies were eliminated; these variables were program completion, trained facilitator, offender satisfaction, victim satisfaction, and offender perceived the process as fair. Variables included in the analysis were random assignment, gender, adult/juvenile, race, prior offenders, violent offenses, contact with direct victim, community, voluntary, opportunity to develop consensus, when recidivism was tracked, how long recidivism was tracked, if there was a significant decrease compared to the control group, how restorative the process was, and the percent in each study that reoffended.

I conducted a Kaiser-Meyer-Olkin test to establish if my sample size was adequately large enough to use in a factor analysis and a Bartlett’s Test of Sphericity to
test the null hypothesis and identify if there was an identity matrix. Principal components
method of extraction, a correlation matrix, and the mean for missing data were used. The
KMO score produced a .477 and Bartlett’s test of Sphericity indicated a 1.000 level of
significance- both tests signified that the data was not appropriate for a factor analysis.
This is possibly due to the amount of missing data.

All analyses that indicated a significance level equal to or less than 0.15, have
been presented above with the results. All variables not discussed did not achieve this
significance level and therefore have been omitted. Studies using random assignment
achieved significantly greater effect sizes and the average effect size for all studies was -
0.14. The basic findings from this meta-analysis are: 1. Less recidivism was shown in
studies that began tracking it after the treatment when compared to those who began
tracking at arrest. 2. First-time offenders were less likely to reoffend than those with
prior offending history. 3. A decrease in recidivism rates were also found in studies that
looked at programs within the United States compared to those in different countries. 4.
Contact with the direct victim of the crime decreased reoffending. 5. Adults were more
successful than juveniles. 6. Community involvement, opportunity to participate in
development of agreement, and victim satisfaction all showed an increase in recidivism.
7. Restorative level of the process did not reduce recidivism.

**Data Analysis Limitations**

The intention of a meta-analysis is to synthesize a large amount of research in
order to determine important, influential variables on the subject of study. Meta-analysis
allows researchers to compare studies that used different methodologies, sample types,
and processes in order to explain variations between study results. In order to do this well a large body of research would be available, variables of interest would be clearly defined, and complete data would be present in each article. This meta-analysis did not enjoy an idyllic situation. Perhaps due to the relative newness of restorative justice as a viable alternative justice system, the number of studies available was limited. Definitions of processes for restorative justice are ambiguous creating significant variation between the studies and complicating the coding process. Studies tended to focus on a limited number of variables within the research causing a lack of relevant data.

Common to most meta-analyses in the field of restorative justice this study suffers the limitation of the small number of included studies. The collection only includes studies published in academic journals that could be found using the search methods I employed. Based on references within several of the studies, there are other studies that were not published in journals but were conducted for government or other uses that could have provided valuable data for this meta-analysis. Searching for unpublished studies, program evaluations, other Master’s theses, or Doctoral dissertations also could have expanded my collection to a more adequate sample size. This also would have reduced the likelihood of making a Type II error; there is a potential for bias when only using published studies based on the inclination to publish studies with significant findings. Although I tried to be as thorough as possible in my search and collection of studies, there is the possibility that those missed could have significantly altered the results of this analysis.

Another limitation within the meta-analysis was the amount of information that was missing within studies. If the offenders were adults or juvenile, victim contact, if a
form of community was a part of the process, if the offender had opportunity to participate in developing a consensus for their reparation/consequences, if the study took place in the United States, and the length of time the offender were followed were the only variables that were known for all twenty-four studies. The restorative elements coded for each study were based on factors presented in the studies. This means that studies classified as being minimally or moderately restorative may actually have been highly restorative in practice but the necessary information was not offered in the study. Lack of data from the various studies forced me to eliminate several variables that are considered extremely influential in the level of restorativeness of a program, such as the presence of forgiveness or the offering of an apology. Only three studies reported information regarding apologies and none of the studies discussed how many victims expressed forgiveness toward the offender in a quantifiable manner.

Missing data was also problematic in relation to those variables that are often considered as control variables. Comparing recidivism rates for variables such as gender, race, crime seriousness, and first time versus prior offenders was difficult because of a lack of information was given regarding those controls and their recidivism rates within the studies. Latimer, Dowden, and Muise (2005) also found this to be problematic in their meta-analysis where they recommended that future studies report outcomes regarding these types of variables, as well as more details on program processes.

Many of the variables within the different studies were coded based on how the program was intended to be, not necessarily the way it was. Only a few studies conducted analysis of the variations within the program to establish how well the program actually exemplified the restorative characteristics it espoused. This required
the data to be coded based on what the study reported about the program and its restorative characteristics, not necessarily what the program demonstrated. As mentioned previously, Mieth, Lu, and Reese (2000) illustrate this problem in their study on drug courts when they found the treatment to be more stigmatizing and less restorative than the traditional court. Hipple, Gruenewald, and McGarrell also found process variation in their analyses, demonstrating a -0.97 effect size that shows how important actually restorative processes are, versus those restorative in name only.

Because there was often a lot of variation between studies in how variables were presented, coding the data had to be based on personal judgments of the information presented. Opportunity for the offender to develop consensus is a good example of this. The study on teen court (Forgays and DeMilo, 2005) did not directly give information on that variable so I decided to assume that the offender did not have the opportunity because the program is based off of the more traditional justice model, which typically does not encourage or even allow offender participation in sentencing. Some studies had mixed or uncertain data for specific variables, such as community involvement. The program being looked at sometimes offered multiple types of processes, such as victim-offender mediations and conferencing, presenting a dilemma around whether or not to mark that study as having community present. The limited richness of data within the studies and may have resulted in skewed outcomes. Using a second coder could have alleviated some of the coding issues, allowing the use of inter-rater reliability to resolve conflicts and discrepancies in coding.

This meta-analysis also did not code the variability between how different studies defined reoffending. Any police contact, arrests, court appearances, referrals to a
criminal justice representative or organization, and conviction are examples of the
various ways studies determined recidivism. This distinction is very important and could
change the results of the analysis, but was unable to be reliably coded with any accuracy.
If a study tracked police contact, one of the broadest definitions of recidivism, there
was no way for me to determine which of those that ‘reoffended’ continued on to be
arrested, appear in court, or convicted. Although I endeavored to ensure as much fidelity
and accuracy in my coding as possible, the variation in what and how the studies reported
information necessitated some personal judgment.

Lack of variability between certain analyzed factors also made it difficult to
properly assess the impact of those factors. For example, satisfaction levels of offenders
and victims, if the offender perceived the process as fair, and program completion
showed the presence of those variables in all but one (or two in the case of victim
satisfaction) study for which the information could reasonably be assessed. This meant
that when the factor analysis was these variables had to be excluded because there was
not enough variation to analyze; this is unfortunate since they are often considered
important aspects for the level of restorativeness a program demonstrates and some
studies (McGarrell and Hipple, 2007 and Dembo, Wareham, and Schmeidler, 2005) show
program completion is indicative of a significant reduction in recidivism.

Because not enough information was available for the principal component
analysis to reveal underlying factors that are important within restorative justice
processes, determining the most important factors in restorative justice was difficult.
Either a larger sample size or more information on the programs studied could have
alleviated this problem and given a better score on the KMO and Bartlett’s tests. Without
an adequate sample, it will be difficult to extract those factors that are the most influential within restorative justice processes in not only reducing recidivism, but also in all of the other espoused benefits of this philosophy of justice. When I ran the principal component extraction I tried handling missing information by excluding list wise and this resulted in all but four of the studies being eliminated from the analysis, demonstrating how few studies included enough information to infer reliably the presence of variables.

Consistent with criminal justice expectations, those with prior offenses were more likely to reoffend than first time offenders in Pearson’s chi-square test. This did not take into account the number or severity of prior offenses, which could have an impact on recidivism rates, due to lack of available data. Prior offenses were not significant after an Independent t-test but the means were consistent with expectations: those studies with samples primarily of prior offenders had greater recidivism than those with first time offenders. This indicates that when working with a population of prior offenders high recidivism rates should be expected and the program may want to consider other measurements of program success, such as increased length of time until failure, fewer offenses, and reduced severity of offenses. These other criteria for reoffending rates were considered in several of the studies used in this analysis. Little et al. (2004) had the highest recidivism rate of all the studies, yet demonstrated the fifth largest effect size. This study used these alternative methods of tracking recidivism because it targeted chronic reoffenders. When considering a process as complex as a criminal justice system, expanding definitions of success may be necessary.

Restorative justice programs place a lot of emphasis on juveniles and gear their programs toward this demographic (fifteen of the currently analyzed studies featured
juvenile offenders). Although juveniles can probably benefit from restorative processes, the results of this analysis suggest that restorative justice may be just as or more beneficial for adults. Adults were statistically less likely to offend even at the .05 level in the t-test both including and excluding studies with outlier rates of recidivism, and approached significance at a .10 level in the chi test, although age did not appear to be related to the level of restorativeness programs demonstrated. Studies have shown that recidivism tends to decrease as juveniles get older suggesting that much of their offending behavior is related to maturity and that they will “grow out” of that behavior. Adult offenders may be more receptive to the reintegrative aspect of restorative justice, understand and be more willing to accept responsibility for their actions, and have the self control to resist reoffending after the treatment effect has worn off.

Supporting the idea that some type of treatment is effective in reducing recidivism, the ANOVA test showed that those tracked after treatment were significantly less likely to reoffend compared to those that began their tracking after arrest. However, this aspect did not show any significance when used as a control for recidivism and level of restorativeness. This suggests that some type of treatment is better at reducing recidivism than no treatment at all, regardless of how restorative or not restorative that program/treatment is.

Approaching significance at a .10 level with an Independent t-test was contact with the direct victim versus no victim contact or contact with a surrogate victim. Any victim contact was not statistically significant indicating that the impact of the actual victim may be larger than surrogate victims. Victim involvement is a key aspect of true restorative justice processes because the goal behind restorative justice is the restoration
of the victim and the community. This analysis indicates that it also maybe a significant factor in reducing recidivism. Because the voluntary nature of the process is also a central factor to restorative justice, victims should never be forced to participate in processes but it might be worth extra effort in attempting to include victims in some form, even if it is a representative or written communication expressing the impact the offense had on them and their lives. Since community showed a statistically significant increase at a .004 level in recidivism when it was present, involving victims maybe more important than previously believed. Community members not only appear to not provide the same impact when expressing the effect the offense had on the community as a whole, they actually have a negative effect on reducing recidivism.

What was interesting in this analysis was the number of restorative elements that showed significant relationships with recidivism but in the unexpected direction. When all studies were examined not only community, but the opportunity to participate in developing consensus for reparation, and victim satisfaction (if using a significance level of p=.15) showed a relationship to an increase in recidivism. Opportunity to develop consensus especially required the use of personal judgment when coding and as such is highly subjective to being mis-coded. With more clarification of program execution the variables may have been coded differently, supplying different results. As it stands, this analysis would indicate that programs that deny or limit offender participation in decision making will have lower recidivism rates than those that have greater participation. This particular variable is a key component of restorative justice philosophy so more objective study and analysis of it as programs are evaluated is necessary in understanding its
impact and function in restorative justice. From this meta-analysis, this variable appears to be rarely studied.

Victim satisfaction showed significant relation to an increase in recidivism at the p= .15 level, however this result should be considered cautiously as only five studies had information on this factor, and two of those indicated that less than 80% of the victims were not satisfied. Better understanding of this variable can probably be drawn from the individual studies that assessed it since the sample size for this analysis for victim satisfaction was so small. Satisfaction of both offender and victim can also be slightly problematic in assessing their impact as often times there is very little variation within the program of satisfaction levels (Hayes and Daly, 2004).

Finally, the effect that statistically significant decrease in recidivism compared to the control group had on recidivism is also interesting when compared to recidivism rates within this meta-analysis. It would be expected that those studies that showed a decrease in recidivism compared to their control group would also show less recidivism than those that did not have a decrease in recidivism. Logically, those that did would seem to be more effective programs would have overall less recidivism, but according to these results, those ‘more effective’ programs had higher rates of recidivism. This likely has to do with differences between the populations of each study, which were not controlled for in this analysis.

Something of interest is the lack of significant difference between violent and non-violent crimes. This could indicate that restorative justice is just as effective for both. Traditionally, many restorative justice programs have focused on non-violent and non-personal crimes and avoided more serious violent crimes. Sixteen out of twenty of
these studies focused on non-violent offenses and nine of them had less than twenty-five percent violent offenses. This number could also be high as I coded any person offense as a violent crime, something that not all studies considered to be violent offenses. In a study that analyzed differences between recidivism and type of offense (Hayes, 2005) it was indicated that violent offenders responded more positively to the intervention in regards to recidivism rates.

Much of the analysis in this meta-analysis showed surprising results in regard to restorative elements and recidivism. Without a factor analysis it is difficult to truly understand what variables are most instrumental in successful restorative justice programs and without adequate data it is difficult to conduct a successful factor analysis. Coding data, especially more qualitative data, takes some judgment on the coders part and therefore leaves room for error within the study. I tried to make logical and consistent judgments in regard to the data found in the studies collected but it is difficult to ascertain how the necessary judgments in coding the data actually affected the results. This fact may explain why several variables were significantly related to recidivism in unexpected directions. Or it might be that these variables that are often considered integral to actually restorative justice programs are not as beneficial as has been assumed in the past, and in cases where they have been present and recidivism has still shown a decrease from the control group it is because another variable, or combination of variables, had enough strength to compensate for the detrimental effect of the variables identified here.

There is also indication in these results that restorative justice may have more or just as many benefits for groups not targeted as often, such as adults and violent
offenders. Restorative justice advocates and program implementers should consider the use of such programs for what has typically been considered less ideal or more risky groups. This is especially true with adults who showed a significant decrease in recidivism at the .05 level compared to juveniles, regardless of how restorative the program appeared to be.

These results highlighted the lack of information often found in studies and the need for researchers to intentionally include process details when writing their studies. The amount of missing information on characteristics so closely associated with restorative justice shows a need for future studies to emphasize what it is about the program that makes it restorative so that more thorough analyses can be done to establish what factors are most important in the success of restorative justice programs, for whatever definition of success the study is using. Without more information on what aids in the success of programs it will be difficult to design more successful processes and increase the prevalence of restorative justice. Including in studies variation analysis as advocated by Hayes (2005), as well as comparative analysis would allow researchers to identify and define the most important and influential variables.

Despite the limited number of studies, the variability in processes definition, and lack of information available within the studies this meta-analysis was able to add to the literature on restorative justice and recidivism. This study supports the theory that the nature of the justice processes matter and indicates which aspects matter more. Contact with the direct victim of the offense, community presence, victim satisfaction, and the opportunity to develop consensually the reparation agreement all showed significant relationships to recidivism. Only one of these variables is consistent with current theory;
the other three contradict the expectation that they will lower recidivism rates. The meta-analysis challenges the commonly held belief that the more restorative the nature of the justice process is, the more effective it will be. The consistently non-significant results for restorativeness and recidivism indicate that advocates and policy-makes should focus on more specific factors when designing a program. It also suggests that the restorative justice approach may have larger applications than previously thought; it appears to be equally successful with violent and non-violent crimes and more effective in reducing adult recidivism than juvenile. The meta-analysis also highlighted the lack of data available on certain variables associated with the approach (i.e. victim satisfaction, perceptions of fairness, role of the community, etc.) and the need for consensus on definitions of processes and factors associated with restorative justice.
Conclusion

Restorative justice has been promoted as a new and better criminal justice system that will provide benefits for victims, communities, and offenders. But are these claims true? Research on restorative justice has increased in both the number and the quality of studies in an attempt to ascertain the validity of advocates’ claims. Meta-analysis methodology has been used to synthesize available data and provide insight into the effects of restorative justice. This chapter will review the findings of this study, connections to literature on restorative justice benefits and critiques, contributions of this research, and suggest avenues for future research.

Meta-Analysis Findings

The meta-analysis used twenty-four studies drawn from seventeen different sources, academic journals in the fields of Conflict Resolution, Education, Psychology, and Criminology. The dates ranged between 1993 and 2011. Each article evaluated research on a program that claimed to be restorative justice and contained information on the recidivism rates of the offenders who participated. Variables associated with the nature of the justice process (victim contact, community present, trained facilitator, consensus opportunity, offender’s choice to participate, offender satisfaction, victim satisfaction, offender perceived process as fair, overall level of restorativeness, and program completion) as well as other variables (age, race, severity of crime, prior
offending behavior, location of study, random assignment to treatment group, how long offenders were followed, point at which tracking for recidivism began, and if the treatment group showed a significant decrease in recidivism compared to a control group) were coded and analyzed to examine their potential impacts on recidivism rates. The results of the meta-analysis research are arranged below according to the specific areas highlighted in the analysis section.

Restorative Justice vs. Traditional Justice. One of the major goals of criminal justice is to reduce reoffending behavior. Restorative justice advocates have promoted the approach as superior to the traditional system in various ways, one of which is its ability to reduce recidivism. This meta-analysis looked at the reoffending rates for twenty-four studies and found mixed results in the programs’ ability to impact recidivism. The overall effect size of the studies was not significant when compared to traditional justice approaches. While variation in the rigor of methodological techniques may account for this result, studies that used random assignment and control groups demonstrated significantly higher effect sizes, indicating greater impact on reducing recidivism. The ability of more rigorous quality studies to decrease recidivism rates supports claims that restorative justice processes actually affect reoffending behaviors.

Restorativeness and Recidivism. There are claims that the justice system becomes more effective as the nature of the justice process becomes more restorative. This study analyzed that hypothesis using the criteria outlined by Van Ness (2002), differentiating the level of restorativeness between studies based on the number of restorative elements the article mentioned. Repeatedly, the level of restorativeness of a study was shown to be
non-significant in relation to recidivism. However, the restorative level claimed by the literature and the actual restorative level may not have been equal.

Only four of the twenty-four studies (Mieth, Lu, and Reese, 2000; Hayes and Daly, 2003; Hayes and Daly, 2004 and Hipple, Gruenewald, and McGarrell 2011) looked at the level of restorativeness of the process. Mieth, Lu, and Reese (2000) found the process to be not restorative, both the studies by Hipple, Gruenwald, and McGarrell (2011) and Hayes and Daly (2003) found that more restorative processes reduced recidivism, and Hayes and Daly (2004) did not find significant differences in the level of restorativeness between conferences. Very little information was presented in the research on the exactly role community members played or how well they fulfilled their purpose. Eleven different forms of restorative justice were found in the twenty-four studies used in this analysis. In addition to the traditional processes of mediation, conferencing, and circles, several diversion programs, “hybrids” (programs comprised of different elements of other restorative justice processes), teen court, drug court, and victim impact panels were also identified as restorative justice. The results of the meta-analysis did not find differences in the impact on recidivism based on the level of restorativeness of the nature of the justice process claimed by the studies.

Process Impact. Advocates assert that restorative justice is more beneficial than traditional justice because of the differences in the nature of the justice process. Aspects of the process that showed significant impact on recidivism include: contact with the direct victim of the crime; the opportunity to develop consensus; community present; and victim satisfaction. Contact with the direct victim of the offender’s crime decreased reoffending. Opportunity to develop consensus, having community present, and victim
satisfaction all indicated significant increases in reoffending, contradicting current theory that these factors increase the restorativeness of the process thereby decreasing recidivism.

There is evidence that victims want to be involved in the resolution of the crimes against them (Herman and Wasserman, 2001). Of the twenty-four articles in this study, fifteen of them involved contact with the victim of the crime in some way, either face-to-face, by letter, or shuttle mediation. Because almost two-thirds of the studies involved direct victim contact, the idea that victims want to be involved is supported. The satisfaction of victims also substantiated these claims. Three of the five studies indicate high rates (over 80%) of victim satisfaction. Victim satisfaction could be indicative of some level of emotional healing, another purported benefit of restorative justice, forgiveness serving as the instrument of that healing (Zehr, 1985). There was not enough data provided in the studies to assess the effect of forgiveness on either victim satisfaction or recidivism, but the results did indicate that victim satisfaction increased recidivism. However, the small number of studies reporting satisfaction of victims makes the data sensitive to outliers and could be reversed with the addition of more research.

Although recidivism reduction is not considered a direct benefit of restorative justice processes, theoretically the nature of the justice processes will reduce reoffending behavior (Zehr, 2002 and Van Ness, 2002). Victim contact is fundamental in creating a restorative justice process and should decrease reoffending behavior. The emphasis on victim involvement was part of Victim Offender Mediation Program in the early days of restorative justice application. However, many programs have moved away from victim-offender encounters, becoming more offender-focused and focusing on other processes.
In an attempt to retain the principle of victim involvement, some processes have supplemented with surrogate victims. The results of this analysis show that the original emphasis on bringing participants together is the most relevant process variable in reducing recidivism.

Victim involvement has been shown to reduce recidivism (Hurley, 2009) and results of this study indicate that the type of victim is important in achieving that reduction. Seven studies used surrogate victims in the process and fifteen involved the direct crime victim. Studies that used victim contact of any kind showed non-significant results compared to studies that did not have victim contact, whereas studies that used direct victim contact achieved statistically significant reductions in reoffending behavior when compared to studies with no victim contact or surrogate victims.

Increased involvement by the community is allegedly beneficial for the community (giving them ownership of the crime, returning a sense of control, and decreasing fear of crime) and the offender (increasing accountability, reintegrative shaming, and expanding support systems), and should result in a reduction of recidivism, but results of the meta-analysis show that involvement of the community actually increased reoffending behavior. Results on consensus development for agreements (the variable used to assess theoretical claims that increased acceptance of accountability decreases recidivism) were contradictory to previous literature (Hayes and Daly, 2003) and indicated higher recidivism rates.

*Non-Process Variables.* Within criminal justice literature non-process variables have been identified as having significant impact on the success of interventions. The results of this analysis identified several non-process variables that had significant
relationships to recidivism, among them, whether offenders were juveniles or adults, and the frequency of their prior arrests (ranging from none to forty-five). Seriousness of offense was not associated with an increase in recidivism rates. Results from this study did not show a significant difference in the effectiveness of reducing recidivism for offenders committing person or property crimes. This is consistent with the study by Hayes (2005) that found violent offenders who participated in restorative justice conferences reoffended significantly less than violent offenders who went through the traditional court system, and Walker (2010), who looked at circle processes for incarcerated individuals and found only 30% who had been released for two years or more reoffended, compared to the state average of 55%. The results of this analysis support the advocates seeking to expand the use of restorative justice methods to a wider variety of crime. Violent offenders who experienced restorative justice processes were no more likely to reoffend than non-violent offenders.

Low to moderately serious offenses for juveniles is the most acceptable demographic for this justice approach (Hudson 2002). Fifteen of the twenty-four articles in this study focused on juvenile populations. Contrary to popular sentiments, adults benefited significantly more in terms of reoffending than juveniles. The results support the broadening of restorative justice to adults and endorse the proclamation of the National Commission of Restorative Justice in Ireland that this justice system should be implemented nationally for adults. As more programs target this population, more research will become available to better assess the effects of the nature of the justice process on adults.
In conclusion, the main findings from this meta-analysis relate more to the impact of specific process and non-process variables on recidivism than the overall restorative level of the nature of the justice process. Consistent with the literature, victim contact showed decreases in recidivism. Contrary to the literature, community involvement and opportunity to develop consensus showed increases in reoffending; adults reoffended less than juveniles; and there was not a difference in recidivism between violent and property offenders; and the level of restorativeness of the nature of the justice process was not associated with changes in recidivism rates.

**Contributions to Research**

The main focus of the meta-analysis was to determine if the nature of the justice process has an impact on reducing recidivism rates. If it does matter, than what aspects of the process are the most influential? What non-process variables contribute to decreases in reoffending behavior? Does the level of restorativeness affect recidivism?

The idea that the nature of the justice process can be more or less restorative depending on the extensive representation of interested parties (the victim, the offender, members of the community, supporters for the victim, supporters for the offender, trained facilitator), the evaluation of the restorative justice procedures by the victim and the offender (as a fair or unfair process), has been suggested by both Zehr (2002) and Van Ness (2002). Although specific elements of the process demonstrated an effect on recidivism, beneficial effects did not accumulate or multiply as the number of restorative factors increased. Claims that highly restorative processes are more effective were not substantiated; instead, this study indicates attention should be given to specific variables.
associated with the nature of the justice process that have a significant impact on recidivism.

Results show that it is specifically the interaction with direct victims of the offender’s crime that provides the desired effect on recidivism. Early programs focused on these types of interactions but evolution of restorative justice has included more surrogate victims in the justice process, perhaps because of reluctance of victims to participate. This analysis emphasizes the need to incorporate actual victims of the crime in the justice process in order to reduce offenders’ future criminal behaviors. Community members are often used to emphasize the consequences of the offense but this study indicated that they are associated with a higher, not lower, rate of recidivism, contrary to theory.

The meta-analysis challenged the idea that restorative justice is most appropriate for juveniles and non-violent offenders. No significant difference was found between studies including violent offenders and those that did not. This indicates that restorative justice practices may be just as effective for all types of crimes, not just less serious offenses. A significant difference was found between studies of adults and juveniles, with adults showing less recidivism. This difference was apparent regardless of how restorative the program was. This is not to say that restorative justice should not be employed with juveniles, just that more effort should be directed toward expanding its use into the adult world. Restorative justice advocates and program implementers should consider the use of such programs for what has typically been considered more risky groups, such as adults and violent offenders.
Suggestions for Future Research

*Focus on a Larger Number of Process Variables.* While the nature of the process is viewed as a central part of restorative justice impact, this meta-analysis revealed a lack of detail on process variables. In order to identify with certainty factors that decrease recidivism, more research need to include information on variables hypothesized to impact reoffending behavior (i.e. contact with the victim, presence of community, satisfaction of participants, fairness of the process, etc.) and how well the program achieved its restorative goals, such as a reintegrative not stigmatizing process. When examining a family group conference, if researchers include variables such as the number of apologies given, instances forgiveness was offered, and level of stigmatization within conferences, better evaluations could be made on how these factors impact recidivism rates.

*Focus on the Impact of Restorative Justice Outcomes for Adults and Violent Offenders.* Future research needs to look into the effect of restorative justice on adults and violent offenders. Only nine of the studies in this analysis dealt with predominately adult samples, and sixteen focused on non-violent offenses. Considering the prevalence of this justice approach for juveniles and non-violent offenders, more research needs to be done on the impact restorative justice has on adults and violent offenders.

*Focus on the Role of Community within Restorative Justice Settings.* Because of the disconnect between theory and the results of this meta-analysis, more research is needed on the role of community. Does community presence actually increase recidivism, or are there factors influencing this variable? Perhaps the level of training the community member receives, his/her connection to the victim or offender, or his/her
behavior during the process matter in reducing recidivism. Community may be more important for some offenders than for others based on the type/seriousness of the crime, the age of the offender, his/her ethnicity, or level of support the offender has available.

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Although there is variation in how effective Restorative Justice appears to be, there is very little evidence that restorative processes are more harmful or less effective than current justice systems. It still remains an under researched area in which theory dictates processes rather than analytic data, but as researchers continue adding to the body of literature with process details the ability of program designers and policy makers to implement restorative justice effectively will continue to grow.
Bibliography


