



# Internet Journal of Restorative Justice

An International Multi-disciplinary Journal of Evidence-based Research, Policy, and Practice across all areas of Restorative Justice.

ISSN:2056-2985

Online Journal Platform: <https://www.theogavrielides.com/ijri>



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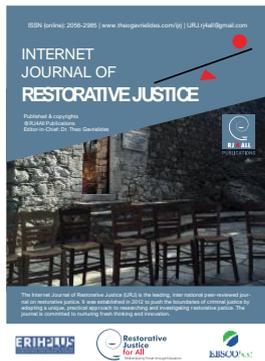
## RESEARCH PAPER

# Using Single-Subject Design as a (Changing) Lens to Evaluate School-based Restorative Justice as a Means to Countermand the School to Prison Pipeline

Darren Aitchison

**To cite this article:** Aitchison, D. (2018). [\*Using Single-Subject Design as a \(Changing\) Lens to Evaluate School-based Restorative Justice as a Means to Countermand the School to Prison Pipeline\*](#), *Internet Journal of Restorative Justice*, ISSN (online): 2056-2985

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## Using Single-Subject Design as a (Changing) Lens to Evaluate School-based Restorative Justice as a Means to Countermand the School to Prison Pipeline

Published in the Internet Journal of Restorative Justice,  
August 2018

<https://www.theogavrielides.com/ijri>

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Submission date: May 2018

ISSN(online): 2056 – 2985

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### Darren Aitchison<sup>1</sup>

#### Abstract

In prior research, Restorative Justice has been implemented to reduce conflict and produce positive behaviour change in the American school and criminal justice systems. Peace Circles and victim offender reconciliation programs (VORP) are used in place of traditional, punitive-based systems. Performance feedback has been implemented to produce skill improvement at the organisational level. Monitoring, coaching, and feedback on an employee's performance are given at regular time intervals. In this study, three teachers, one administrator, and three students, were each given feedback and coaching on how they managed chronic misbehaviour in a delayed multiple baseline design. Results suggested that when exposed to performance feedback and coaching on Restorative Justice at full implementation, student discipline referrals decreased significantly, suggesting that the independent variable may have been responsible for the measured behaviour change.

#### Keywords:

Performance feedback, restorative justice, multiple baseline, school to prison pipeline, victim-offender mediation, discipline that restores

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## Part I. Introduction

Restorative Justice is moving further into the American public school system. The models of school implemented Restorative Justice are utilising not only the more established traditional peace (sometimes called restorative) circles, but group and individual mediations as well. One of the more developed of these methods is the Four Options Model used in conjunction with the Peacemaking Process for Reconciling Injustices. This two techniques are some of the centerpieces of the Discipline That Restores Model, which is a direct application of Restorative Justice designed specifically for schools. The peacemaking, or mediation, process grew out of the landmark Victim-Offender Reconciliation Program, or VORP, which was first used by a Canadian officer of the court, Mark Yantzi, in Kitchener, Ontario, during the Elmira Case of 1974 (Duffy, Grosch, & Olczac, 1991). This process of having the victim and the offender come to a reconciliation evolved over time. The most notable examples come from the works of Zehr, Claassen, & Umbreit (Claassen, Claassen, & Reimer, 2013). Dr. Ron Claassen would then go on to continue to use and refine this process for more than three decades at the Center for Peacemaking and Conflict Studies at Fresno Pacific University in Fresno, CA (2013; Victim Offender Reconciliation Program, 2016).

A valid behavioural analysis study, in turn, should be applied, behavioural, analytical, technological, (conceptually) systematic, effective, and have some degree of generality (Baer, Wolf, & Riesly, 1968). This study places primary emphasis on the application and generalisation dimensions. The principles of applied behaviour analysis, more specifically performance management, has been successfully used to make positive behavioural changes in large-scale workplace environments (Gilbert, 2007, Marker, 2007). One of the most prevalent and tested independent variables in the established literature is performance feedback. This is when an interventionist or supervisor meets with the employee on an ongoing basis to discuss their performance. The interventionist then makes suggestions and coaches the employee, on a cycle that continues for a period of weeks, months, or even years. DeVries and his colleagues used such an intervention to increase a group of nurse's compliance with medical safety procedures (DeVries, Burnette, & Redmon, 1991). Anderson and his

colleagues used performance feedback to improve the cleaning habits of college students at a university bar (Anderson, Crowel, Hantula, & Siroky, 1988). A more recent application is the use of feedback and training provided during in-home or clinic based discrete trial teaching sessions for parents of children diagnosed with Autism Spectrum Disorder (Dogan, King, Fischetti, Lake, Matthews, & Marzak, 2017). Perhaps the most famous behaviour engineering practitioner is Thomas F. Gilbert, whose works and methods have also demonstrated the efficacy of such interventions, ranging from small, local companies to large, corporate entities (Gilbert, 2007). Gilbert's work laid the groundwork for many others, inspiring a whole new generation of interventions and applications of the science of Human Performance Technology across both private and public sectors. Perhaps the most notable of these advancements is the direct improvement and upgrade of Dr. Gilbert's Behaviour Engineering Model (or BEM) developed at Boise State University. This is now known as the SAM, which stands for Synchronized Analysis Model (Marker, 2007). In recent years, the HPT community has begun to apply more of these powerful applications of the science of behavioural analysis to the American public schools. A credential delineating competency in this area now exists, the Certified School Improvement Specialist (CSIS) (Page & Hale, 2013). The idea of the importance of proper supervision and feedback to individuals implementing ABA interventions has become a major focus among practitioners of behavioural analysis who work with individual clients as well. The governing board expects all board certified behavioural analysts use what has come to be known as behavioural skills training (BACB, 2017) This is not so dissimilar to the aforementioned performance management. BST involves four basic steps. First, instructions are given to the learner. Second, the skill is modelled by a qualified trainer or supervisor. Third, the new learner performs the skill side by side with the trainer, sometimes referred to as a rehearsal. The fourth step involves the trainer stepping back and observing the learner, and then giving specific positive and corrective feedback. This process is then repeated (instructions, modelling, rehearsal, feedback) until the individual is both fluent and proficient at the designated skill or skills. Typically, the individual being trained does not move on to the next skill until

they have passed a designated level of competency on the current skill. This process is often used with shaping as well (Buck, 2014).

The other half of our independent variable is the use of Restorative Justice, specifically the mediation protocols from the Discipline that Restores (DTR) model (Claassen & Claassen, 2008). Restorative Justice, not unlike applied behaviour analysis, encompasses a large and vast umbrella of techniques, including but not limited to: victim offender mediation, conferencing and mediation, circles, victim assistance, ex-offender assistance, restitution, and community service (Van Ness & Strong, 2010). For this particular study, performance feedback was delivered on how to implement victim offender mediations, based primarily on the landmark works of Zehr, Claassen, & Umbreit (Claassen, Claassen, & Reimer, 2013). The Claassen Discipline That Restores (DTR) model, with its classroom protocols serving as antecedent measures, and mediation protocols serving as reactive measures, were used in place of the school district's traditional, heavily punitive discipline system (Claassen & Claassen, 2008). Such traditional American public schools discipline systems have been widely proven to be highly ineffective and inefficient at carrying out the missions that they are tasked with. In fact, when one takes into account all the side effects of punishment, such policies can actually make schools less safe (Mallet, 2015; Meier, 2011). They also set up contingencies of negative reinforcement between school and students, and also disproportionately target impoverished, minority, LGBT, and IEP students, sending many of them on the direct path to the criminal justice system. This phenomenon is better known as the school to prison pipeline (Alberto & Troutman, 2012; Mallett, 2015).

## **Part II. Commentary on Restorative Justice and Applied Behaviour Analysis**

This experimental study is an attempt to utilise single-subject design to look for evidence of a functional relation with Claassen's school Restorative Justice techniques serving as an independent variable. These types of experimental designs are where the subject serves as his or her own control, and visual analysis, as opposed to statistics, is the primary method used to understand the outcomes

of the independent variable on the dependent variable (O'Neill, McDonnell, Billingsley, & Jenson, 2011). There are some in the ever growing community of behaviour analysis that have questioned whether or not Restorative Justice is nothing more than mentalistic thinking. Others dismiss Restorative Justice as merely the next fad in American education. This is a position that rational facts do not support. Restorative Justice is at times considered a fad in the continental US simply because it is something new that they have no prior experience from which to base their conclusions. However, Restorative Justice is now a near world-wide movement (Gavrielides, 2017). The United Nations first recognised the power, promise, and potential of Restorative Justice nearly two-decades ago, and restorative practices are now used in some organised capacity in more than twenty-five sovereign nations (United Nations, ECOSOC., 2000).

This research is part of an emergence over the last ten years to apply single-subject designs to Special Education techniques and interventions (Council for Exceptional Children, 2015; Horner, Carr, Halle, McGee, Odom & Wolery, 2005). Research across different disciplines: applied behaviour analysis, educational psychology, Restorative Justice, and Special Education have drawn similar conclusions about the use of aversive, corporeal, and coercive derived consequences. Their side effects include student aggression and imitation, reinforcing elements for those in positions of authority, the fact that it doesn't generalise well, the disruption of social relationships, its inability to solely solve issues, it overworks building administration and support staff, the consequences often become public knowledge, and it is biased on poverty, gender, and racial grounds. They also largely agree on the preference of reinforcement over punishment (Alberto & Troutman, 2012; Claassen, Claassen, & Reimer, 2013; Meier, 2011).

Two other things that one should consider as more restorative practices are integrated into the American public school system: 1) how does Restorative Justice interact with the single largest and most wide spread application of behaviour analysis in American public schools, positive behaviour intervention and supports (PBIS), and 2) what is Restorative Justice's relevance as an evidence-based practice (Gresham, 2005). This is brought up for discussion because there are many differing views on

how Restorative Justice fits into the multi-tiered system of supports, or MTSS, model. The following categorisations are gaining acceptance in American public schools. The peace (or restorative) circle is Tier I, as is ninety percent of the Discipline That Restores model. Individual mediations and community justice conferences are Tier II. And those who do not respond to the mediations and respect agreements are those bottom five percent that necessitate a Tier III behaviour change plan (JKLJ).

Finally, the issue of the evidence base for Restorative Justice used in American public schools must be addressed. The use of Restorative Justice in schools is growing, but the research supporting its efficacy in education is still considered by many experts to be in the early stages of development (Fronius, Persson, Guckenburg, Hurley, & Petrosino, 2016). To be “evidence based” is now a requirement of the Elementary and Secondary Schools Reauthorization Act of 2015, better known as PL114-95, the Every Student Succeeds Act, or ESSA 2015 (U.S Government Publishing Office, 2015). If Restorative Justice is to survive and thrive as many around the world would hope that it will, and Restorative Justice practitioners believe that it should, then the case must be made to the country and to the Earth that school Restorative Justice technologies are in fact “evidence-based.” The question then becomes what metric does one use to know whether or not something is evidenced based? The U.S. Department of Education has issued some “non-regulatory guidance” on this issue (U.S. Department of Education, 2016). A more conclusive and specific definition of an EBP in education is published by the Council for Exceptional Children. Their metric is as follows. For an intervention to be evidence-based, it must meet these established criteria (Horner et al, 2005). The CEC states that the practice is to be operationally defined, meaning that the study needs to be descriptive and specific enough that someone else can do the same study. They also say that the context in which the practice to be used is defined. They also note that the intervention should be implemented as designed. The experimental design should look for, and also document, evidence of a functional relation. They then look for a sufficient amount of studies on the intervention. This means a minimum of five single-subject studies that meet minimally acceptable methodological criteria and document experimental control have been published in peer-reviewed journals. The studies should be conducted by at least

three different researchers across at least three different geographical locations. Finally, the five or more studies include a total of at least twenty participants (Horner et al, 2005). Clearly, school Restorative Justice models, like Discipline That Restores, have not yet met this high standard. And until it does, there is much work to be done. However, after an extensive review of the literature, one cannot find any other school discipline models, especially those based on coercive and punitive methodology that meets such a standard either.

### **Part III. Purpose**

The purpose of the study was to see whether or not, when three students were each exposed to the independent variable (performance feedback coaching the school staff on the use of restorative mediation), that they would decrease the number of discipline referrals (per month). The number of discipline referrals (per month) served as the primary dependent variable. Performance feedback was to be given on a regular basis, discussing the daily implementation of victim-offender mediation(s) between staff and student. The study intended to see if frequent feedback and access to victim-offender mediation would result in a decrease in the frequency of student discipline referrals.

### **Part IV. Method**

#### **i. Participants and Setting**

The participants in this experimental study were three ten year old male elementary students: one Caucasian, one Hispanic, and one African-American. The students were from three different racial demographics. This was not done intentionally. Each of the three participants were selected by the school district because they had the highest number of documented discipline incidents. The setting for the study was a public elementary school in Anywhereville's eastern suburbs for a period of thirty-one months. The three classrooms each had eighteen to twenty-five students, ages ten to eleven, all of which were predominantly Caucasian and in poverty. Each of the three students had individualised education programs (IEP's), meeting the federal eligibility criteria of being identified as a student with

a disability under the Individuals with Disabilities Education Improvement Act of 2004 (PL 108-446, IDEA 2004). It was also reported that they were viewed as the school’s biggest disruptions. The public school district central office staff referred them to the researchers.

Participant	Name	Age	Race	Socio-economic Status
1	“Ron”	10	Caucasian	Below poverty line
2	“Billy”	10	Hispanic	Below poverty line
3	“Ryne”	10	African-American	Below poverty line

Table 1: Participant Demographics

### ii. Recording and Reliability

Sessions were one month (twenty-eight to thirty-one days) in duration. The number of written documented discipline referrals that resulted in removal from the classroom were recorded every month and graphed accordingly. Total count inter-observer agreement (IOA) was conducted and calculated. This is the simplest indicator of agreement for event recording data; based on comparing the total count recorded by each observer per measurement period; calculated by dividing the smaller of the two observers' counts by the larger count, and then multiplying by one hundred (Cooper et al, 2007). The interobserver agreement was used to determine competence of new observers, detect observer drift, judge clarity of definitions and system, and to increase believability of data (Bailey & Burch, 2016; Mayer & Sulzer-Azaroff, 2014).

### iii. Functional Assessment

A series of ABC event recording sessions, combined with modified structural descriptive assessments (with reversals) were conducted. They indicated that the problem behaviours of both staff and student, were likely maintained primarily by social negative reinforcement, or escape (Anderson & Long, 2002; Axelrod, Spreat, Berry & Moyer, 1993; O’Neill, Horner, Albin, Sprauge, Storey & Newton, 2014). An analog functional analysis was considered, but not conducted due to inability to manipulate the environment (the general education classroom) and insufficient staff level of training

(Iwata, Dorsey, Slifer, Bauman & Richman, 1982). The teachers indicated that they did not feel that they were sufficiently trained on dealing with low-level problem behaviours, which may have served as a motivating operation for the removal of the students (Martin & Pear, 2011). The functional assessment indicated that the teachers may have been sending students out of class so they did not have to deal with them for a given period of time. The assessments also suggested that the students, in turn, were acting out to be removed from class, in order to escape the negative classroom environment where arguments and power struggles were daily occurrences.

The graphs from each modified descriptive assessment are presented in the results section (Anderson & Long, 2002). Sessions were each five minutes in duration. The number problem behaviours that occurred were recorded every five minutes and graphed accordingly (as responses per minute). The problem behaviours were operationally defined as: non-contextual elopement from seat, non-contextual elopement from the classroom, non-contextual talking lasting longer than ten consecutive seconds, non-contextual questions, throwing materials, and verbal insults. The topographies of the behaviours, and the suspected function to be tested (social negative reinforcement) were chosen based on the information compiled during the ABC recording sessions. The conditions on the graphs are labelled “easy” and “hard.” These refer to conversations and not academic work. It was ascertained that the function of their behaviours was primarily to escape conversations that involved conflict. Examples include being told “no,” a teacher giving a redirection, or challenging their thinking directly.

#### **iv. Baseline**

The target behaviours were defined as follows. The goal was to decrease the number of discipline referrals for each student. A discipline referral is defined as a written documented incident that resulted in removal from the classroom. The behaviours were deemed as significant enough of a problem to warrant necessity for intervention. Baseline for frequency of discipline referrals were recorded for five to six months before implementation of the performance feedback and victim-offender mediation intervention. School office staff compiled all baseline data.

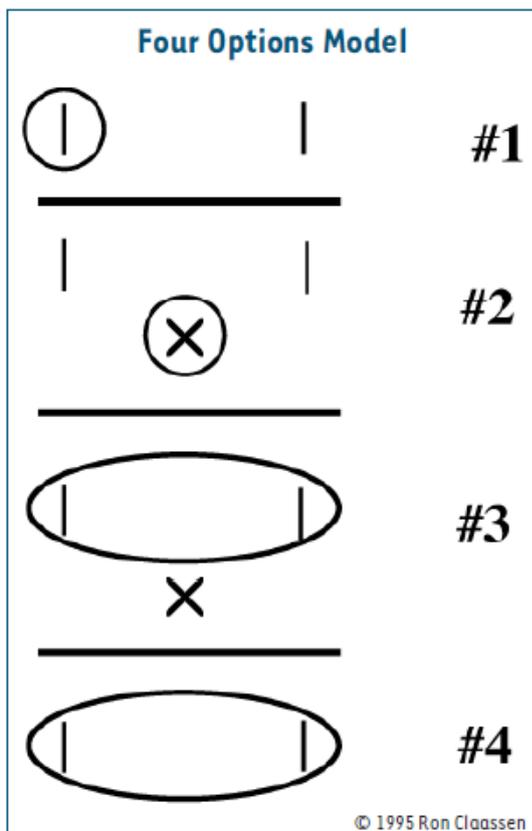
## **v. Intervention**

The intervention was performance feedback on using victim-offender mediation, similar to the one used by DeVries and his colleagues, to address student / teacher conflicts. The independent variable was biweekly performance feedback on the implementation of victim-offender mediation (Claassen et al, 2013; DeVries et al, 1991; Sprick, 2006). The premise was to intervene by teaching mediation Restorative Justice protocols. This would in theory give the students the tools they needed to navigate the difficult conversations they were avoiding by being removed from class. The act of learning and applying such conflict resolution skills would hopefully result in less discipline referrals. Also, in this model the students did not receive a discipline referral if they successfully completed a mediation and keep up their end of the crafted agreement. This is standard practice in the DTR model (Claassen & Claassen, 2008).

Three teachers were trained in VORP procedures, and were monitored and supported with the performance feedback intervention component. All mediations were initially facilitated by outside trained clinicians. The teachers were initially given a rationale for using victim-offender mediation on schools. This rationale includes a greater rehabilitation rate, avoiding the harmful side effects of punisher and coercive procedures, and giving everyone involved a chance to speak their mind before any final decisions are made. The teachers were provided with written copies of the mediation scripts from DTR. The clinical staff then walked the teachers through the process of conducting a mediation, and modelled a mock mediation session. After the modelling session, the teachers were monitored conducting their own mock mediation, and they were given feedback on their performance. Once this initial training was conducted, each teacher was placed on a bi-weekly feedback loop. Each teacher was monitored at least twice and was given feedback at least once on their performance during that timeframe.

The victim-offender mediations were implemented as follows. The specific mediation protocols used were those designed for the Discipline That Restores restorative discipline program, derived from the victim offender reconciliation program (VORP) (Claasen & Claasen, 2008). The

mediations began with the Four Options Model used in conjunction with the Peacemaking Process for Reconciling Injustices. This is one of the centerpieces of the Discipline That Restores Model. If the student was being highly disruptive or if the student felt like he was about to make a poor choice, they were given time to cool down in a designated room. This is called a “Thinkery” in the DTR Model. This is a room where trained staff assist the student in processing what happened that resulted in their eventual removal from the classroom. The student was then presented with the Four Options Model, as shown below (Claassen, 2004).



**Figure 1 - The Four Options Model (used with permission)**

In the model, the person or persons in the circle are the ones who wield the power to make decisions. The “I’s” are persons directly involved in the conflict. The “X’s” are outsiders who are there to assist. Option 1 is an authoritarian contingency. This is akin to being pulled over for a traffic stop. The officer alone has the decision of whether or not the person gets a ticket. The other person has no say. This is the typical way schools handle discipline in the U.S. The problem student is sent to a dean or other administrator who “gives them a consequence.” Option 2 is also rather authoritarian, where one person decides the fate of two or more others. This is like going to court, the judge has the final say. DTR’s goal is to use Options 3 and 4, which relies more on cooperative as opposed to coercive power. In Option 3, the victim and the offender come up with a cooperative resolution with the aid of a trained (restorative justice) mediator. Option 4 is the same cooperative situation, but without the aid of a mediator.

When the students arrive at the Thinkery, the only questions posed to them are as follows. 1) Is the student ready for mediation (Options 3 or 4), and if he or she is not, then what can be done to help one get there? The student is given time to complete a brief oral reflection, and then the mediation begins. The mediation consisted of the peacemaking process for reconciling injustices authored by Dr. Ron Claassen, which is a six step process. In the first step, introductions are made, the students are prepared for mediation, and the ground rules are presented and agreed upon. Before the mediation ever begins, the mediator speaks to each person, both victim and offender, and invites them to mediation. Both must accept the invitation or the mediation does not proceed. If one or more of the parties involved does not agree to Options 3 or 4, additional measures are taken to get them there. Step two is the recognition of injustices. This is done by having the victim and offender each give their side of the story, and then the other person summarises. This exchange goes back and forth until both people have summarised the other person's words to their own satisfaction. The process then moves on to a brainstorming session for two categories: "restoring equity" and "future intentions." Restoring equity are things that both parties can do in the here and now to improve the situation. Future intentions are things that may, or may not, be done so that this same problem does not happen next time. Once all the ideas are written down, each side then has to agree on a few points in each column, and from there a respect agreement is drafted and signed by all participants. A follow up meeting is then scheduled to check up on how the students followed through with the agreement. If they honored the agreement, there is celebration. If not, then further mediation ensues. The main point that this process stresses is this: trust grows when agreements are made and kept.

#### **vi. Design**

The experimental design for the study was a concurrent delayed multiple baseline across subjects design (Carr, 2005). This design begins with the concurrent measurement of two or more subjects in a baseline condition, followed by the application of the treatment variable to one of the subjects while baseline conditions remain in effect for the other subject(s). After demonstrable change has been noted in the first subject, the treatment variable is applied in sequential fashion to each of

the other subjects in the design. A functional relationship is demonstrated if each subject shows similar changes, when and only when, the treatment variable is introduced (Bailey & Burch, 2002; Cooper et al, 2007). Some of the positives of such a design are that it does not require the independent variable to be withdrawn, it can be used when studying irreversible target behaviours, it can be used to treat multiple behaviours, it can be used to assess generality of behaviour, and finally it is easier to conceptualise than other single-subject designs, especially for untrained staff (Cooper, et al, 2007). Its drawbacks include that it may not allow a clear demonstration of experimental control, even with the existence of a functional relation, it presents a weaker case than a reversal (ABAB, BAB) design for the effectiveness of the independent variable, and it provides more information about the effectiveness (or lack thereof) of treatment than on function(s) of behaviour (Cooper et al, 2007).

## Part V. Results

Reliability of measurement ranged between seventy-five and ninety percent observer agreement (using total count IOA). Inter observer agreement was eighty percent for participant one, seventy-five percent for participant two, and ninety percent for participant three.

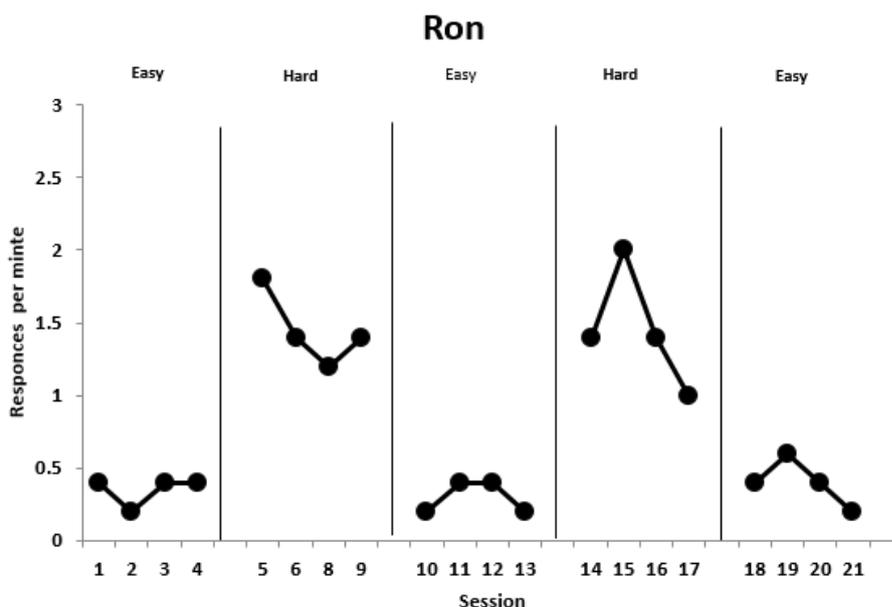


Figure 2 – Participant 1’s Modified Descriptive Assessment

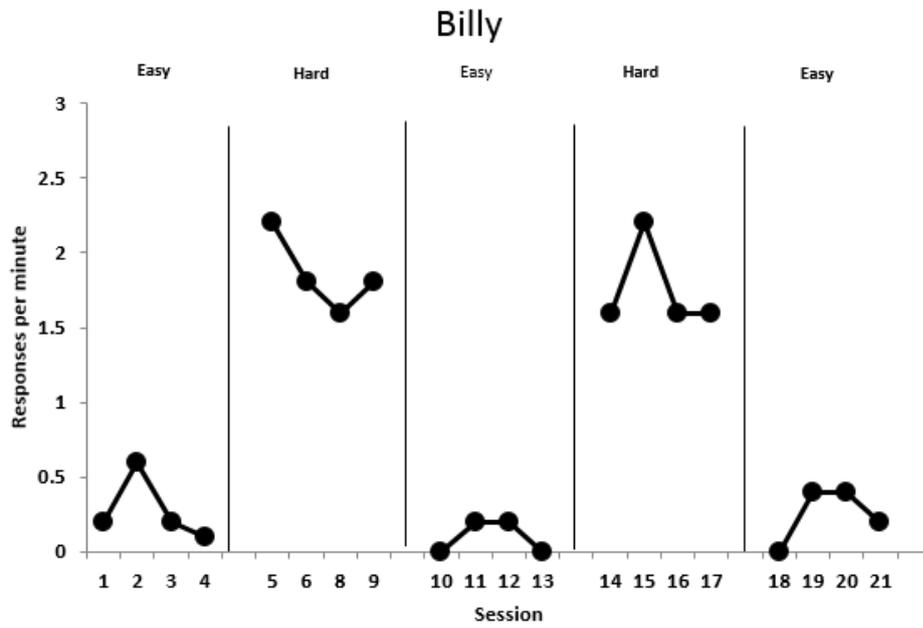


Figure 3 – Participant 2’s Modified Descriptive Assessment

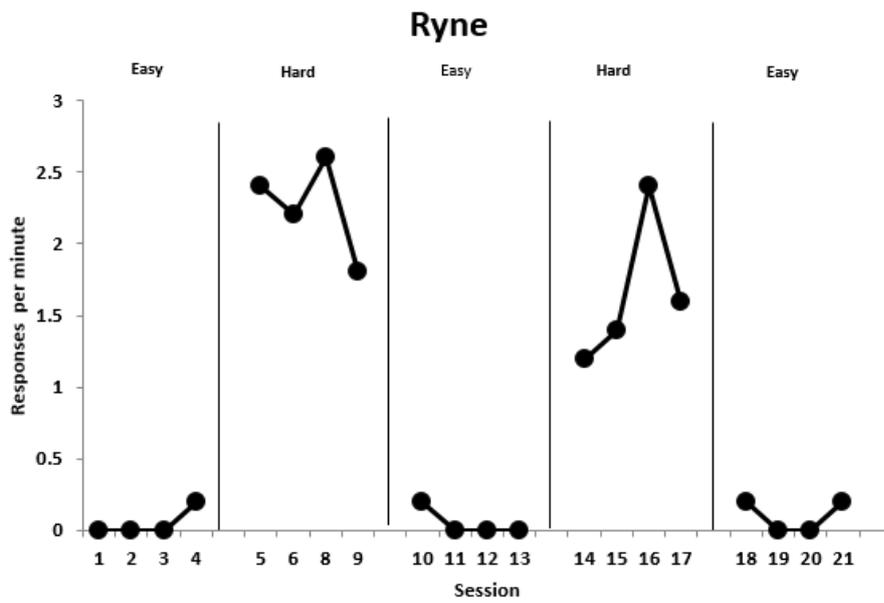


Figure 4 – Participant 3’s Modified Descriptive Assessment

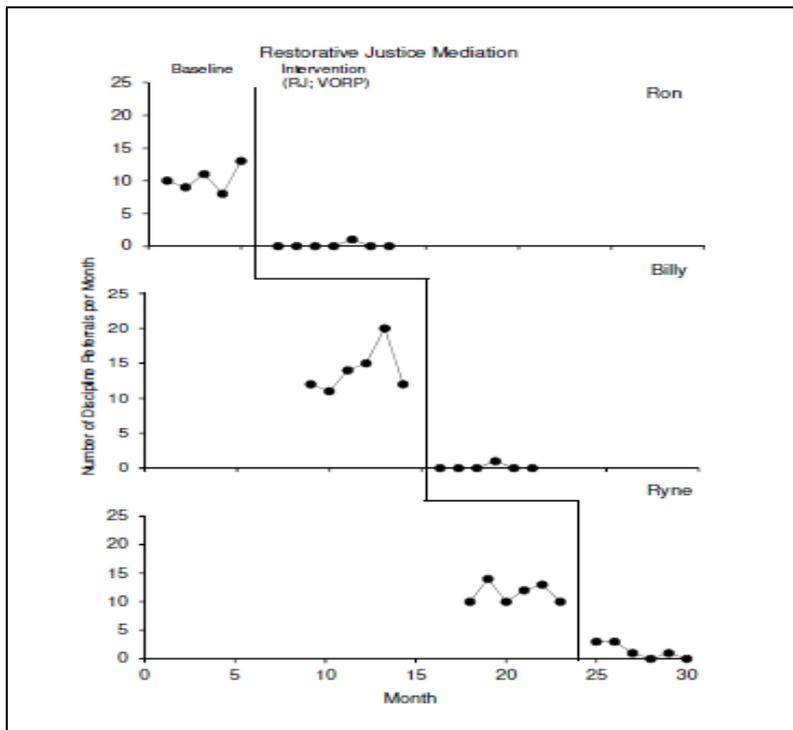


Figure 5 – The results of the treatment for the study’s three participants.

The baseline for participant one was used to *predict* that continued measures would result in a similar level of responding under similar environmental conditions, according to steady state strategy. The stable rate of responding in the baseline of participants two and three *verify* the prediction made for participant one. The number of discipline referrals per month for participants two and three changed in a similar manner to that of participant one in the treatment phase, which serves as evidence of *replication*. The independent variable had similar effects on all three participants (a socially significant in the number of referrals per month) and therefore serves as a suggestion of evidence of a functional relation according to the principles of visual analysis (Bailey & Burch, 2002; Cooper et al, 2007). The evidence from the multiple baseline model suggests that the intervention was responsible for the change in the number of discipline referrals per month for each of the students.

### i. Social Validity

Social validity measures were taken this time from four populations: teachers, school administrators, students, and guardians of the students. The teachers were happy to receive the

coaching, feedback, and observations. They were happy with the overall outcomes, but one of the teachers commented that the mediation protocols were difficult to use because it was such a dramatic departure from what they were used to doing. She indicated that it was challenging to depart from the current discipline code, which was almost entirely punitive. Another teacher said that he always knew that sending students out of class and suspending them did not work very well, but he didn't know what he could do differently. He said that the DTR approach was not only more effective, but more humane as well. The administrator also reported satisfaction with the study, as she said she was called less for discipline issues, which in turn freed up more of her time to devote to other supervising duties. The most compelling evidence came from the students and their families. The families reported that they were receiving far less calls from the school, and that they felt the intervention was a far more humane and effective way of handling their children than the district's current discipline code. The students reported that, when the intervention was in place, they felt better about coming to school because they were allowed to speak their minds. One student also reported school was no longer a place that made him anxious. A great man once said that if one believes in one's own identity, then one can say things to the people around the world that they don't actually believe makes sense. One can then get other people to do things that they don't think they can do. (Stevenson, 2012).

## **Part VI. Discussion**

### **i. Limitations**

There were several limitations to this study. First of all, this study was limited to only three participants. Also, due to constraints outlined by the school district, the researchers had to start working with students in a staggered fashion. This is the reason that the delayed multiple baseline experimental design was used. Although the results thus far are positive, they are with a sample size that is small. This study should be expanded to more teachers and more students on a grander scale, perhaps using multiple baseline across settings to intervene on one school building at a time instead of individual students. Some possible confounds should also be noted at this time (Cooper et al, 2007).

There may have been some observer reactivity. The students (and teachers) could have changed their behaviours because their administrator was present during some of the data collecting sessions in the classroom. Finally, two of the students were also receiving small group social work services as part of the IEP's. It was not feasible to generate a contingency plan to address, or study the effects of, the comorbidity of these two treatments. Future studies should be conducted to tackle such issues.

## **ii. Implications and Future Considerations**

The primary implications of this study was that it added to the existing body of research that has shown performance engineering to be a positive factor for change at the organisational level. It also joins the emerging body of research that has shown that the technologies of Restorative Justice are an effective means of managing conflicts in the public school system, and that such techniques are superior to the typical, heavily punitive, discipline codes used in most American schools (Gresham, 2005; Sherman & Strang, 2007). As was noted earlier, the students in these classrooms were viewed by the majority of school staff as unmanageable. The study showed that a new way of thinking was effective in changing their behaviour. One will also recall that the three students were of three different racial backgrounds. The restorative practices employed in this study were successful for all three participants. This is not enough information to draw any reasonable or parsimonious conclusions. However, one must keep in mind that the current punitive systems present in most U.S. public schools are not equitable on racial grounds. On the average, an African-American male student is about four times more likely to get a harsher consequence than his white counterpart, even if they perpetrate a similar offense. Many of these students who have troubling careers in elementary school come into contact with the criminal justice system. One out of three American black men between the ages of 18 and 30 is in jail, in prison, on probation or parole. In more urban communities across this country, more than fifty to sixty percent of all young African-American men are in jail or prison or on probation or parole (Stevenson, 2012). This tragic phenomenon is known in American academic circles as the School to Prison Pipeline (Mallet, 2015). It is hoped by many that Restorative Justice can intervene as a more "color blind" system, due to the fact that restorative practices usually involve an

encounter between all parties involved in the situation. These principles of encounter, amends, reintegration, and inclusion should, at least in theory, make it more difficult for an individual in a position of power to write someone off solely based on race. The offender becomes more of a real person when one has to meet them eye to eye (Van Ness & Strong, 2010).

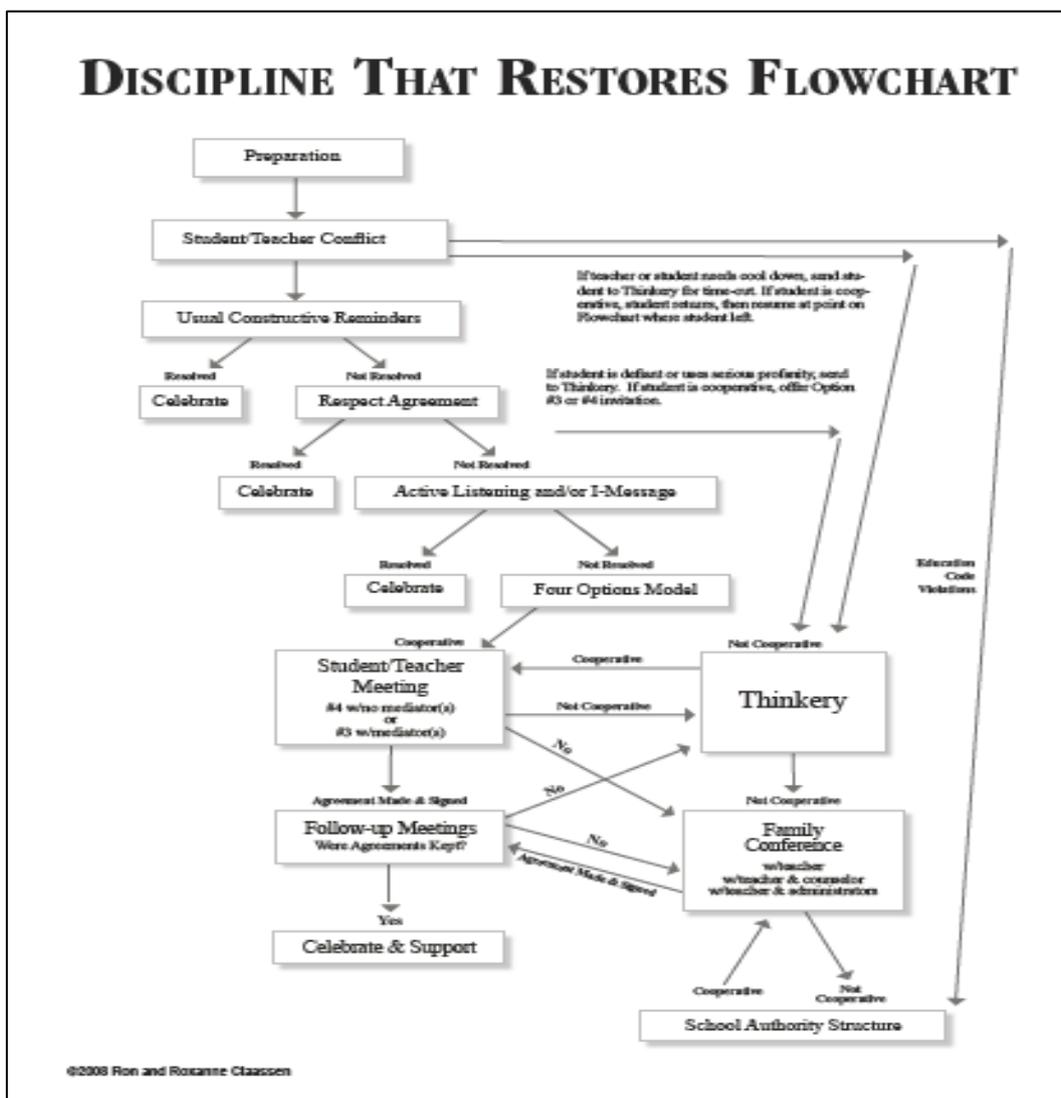
The logical next steps are to move to a large-scale application of the performance feedback mediation intervention into more general education classrooms with larger student populations. A multiple probe or multiple baseline across settings design could be used, but these designs take lots of time to come to fruition when compared to other experimental designs (Cooper et al, 2007). As was noted before, it was the unique circumstances, and not clinical judgement, per se, that led to the selection of a multiple baseline across participants design. An expansion of the intervention could also entail a more diverse set of locales. Such examples would include correctional facilities, group homes, or therapeutic school settings (Claassen & Claassen, 2008; Lindsey, Robbins, & Terel, 2009). Another possibility could be to use behavioural skills training (BST) instead of performance feedback, or to do a comparison analysis of the two approaches (Buck, 2014; Martin & Pear, 2011). This could entail using other single subject designs, such as alternating treatments, or the standard or range bound changing criterion. One might also use an alternating treatments design to specifically study how punitive systems and restorative systems operate differently in real time. This would be interesting to observe from an academia perspective, and could likely prove some important points, but selling this to the public might prove very difficult. The same could be said for using the most conclusive design of all, the ABAB reversal (Martin & Pear, 2011; Bailey & Burch, 2002). Another exciting intersection of Restorative Justice and Applied Behaviour Analysis would be to use Relational Frame Theory as a means to analyse derived stimulus relations, or combinatorial mutual entailments, that emerge from conflict resolution discussions during victim-offender mediations (Törneke, 2010). The use of relational frames could also provide a new approach to look at systemic and interpersonal racial bias in matters of school discipline.

### **iii. Ethics and Possible Conflicts of Interest**

Although the outcomes of the multiple baseline design are positive, there are ethical concerns that accompany it as well. The multiple baseline design was used because the school officials were very hesitant to try restorative practices, and therefore only allowed for treatment with one student at a time. It was agreed upon when success was demonstrated with the first student, the next student would be able to participate, and so on. An impartial observer, looking at the graph, could easily deduce the fact that participants two and three were struggling significantly while treatment was conducted on participant one. Then participant three continued to struggle while staff intervened on behalf of participant two. The question then becomes why would someone delay something, in this case restorative practices, that could help a troubled young child? If this were done deliberately, and not out of necessity, then there would be agreement that this would be a difficult ethical position to defend (Bailey & Burch, 2016). The only other alternative presented was no treatment for any of these three young children. When conducting research in natural environments, one must sometimes make accommodations and adaptations to our practices (Alberto & Troutman, 2012). This is not unlike the challenges behaviour analysts face when creating behaviour plans for individual clients. They are advised and trained to take into account the context and environment in which that plan is being enacted, and to use that knowledge to write the most effective plan for that client in that environment (O'Neill et al, 2014).

Every effort was made to abstain from any conflicts of interest. It should be noted that the lead behaviour analyst on this project was trained by Dr. Ron Claassen himself, who is one of the coauthors of the Discipline That Restores model, which served as one of the components of the intervention. Dr. Claassen provided some guidance to us on how to conduct mediations, as well as how to engage education professionals in conversations about using Restorative Justice. However, our team had no monetary affiliations or contractual agreements with Dr. Claassen, other than pursuing certification as a school Restorative Justice and DTR trainers. This project was designed to further the cause of Restorative Justice in American public schools, and to move restorative practices a step closer to consideration as an “evidence-based” practice as outlined by the Council for Exceptional Children’s

published criteria (Horner et al, 2005). In the future, it is intended to evaluate other models of restorative discipline in schools as well. At the time of this writing, those studies are already in the beginning stages. Finally, the clinicians sought to hold themselves up the following standards of conduct: the United States National Education Association’s (NEA) Educators Ethics, the Council for Exceptional Children’s (CEC) Special Education Professional Ethical Principles, the Behaviour Analyst Certification Board’s (BACB’s) Professional and Ethical Compliance Code for Behaviour Analysts, and the Basic Principles on the use of Restorative Justice Programmes put forth by the United Nations Economic and Social Council.



The DTR Flowchart (used with permission).

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