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College of Juvenile Justice & Psychology
Texas Juvenile Crime Prevention Center**

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The Juvenile Adjudicative Competence Interview (JACI): Current Usage in Juvenile Competence to Stand Trial Evaluations

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Mental health experts are often asked to assist the courts in making relevant legal decisions, such as a defendant's competence to stand trial. Many competence assessment instruments have been developed for adults, however, the Juvenile Adjudicative Competence Interview (JACI) is the only measure developed specifically for a juvenile population. Currently, there has been no research done to evaluate the effectiveness of this tool. The purpose of this study was to explore the use of the JACI and to assess its usefulness in aiding examiners' opinions of competency. Data was drawn from 110 forensic evaluations, 55 in which the JACI was utilized and 55 without. A coding scheme was used to assign passing/failing scores for all items on the JACI. Findings indicate that the JACI responses strongly influenced practitioner's ultimate opinions with Section 1, *Assessing Knowledge of the Juvenile Court and its Consequences*, being the most influential of the four sections and Content Area 5, *Role of the Prosecutor*, being the most influential individual topic. Both understanding and appreciation items were strong predictors of final outcome. A diagnosis of Mental Retardation was a strong predicate to incompetence; and, while general psychological testing was used with equal frequency in evaluations with and without the JACI, additional forensic instruments were used significantly more in evaluations without the JACI. Overall, the results of this study show the JACI to be a strong predictor of final competence recommendations and that this instrument is likely to be a valuable tool in juvenile competency examinations.

Keywords: adjudicative competence, competence to stand trial, juvenile justice, forensic assessment

To be competent to stand trial a defendant must have a factual and rational understanding of the charges, court proceedings, and possible consequences, as well as the ability to consult with his or her lawyer (*Dusky v. United States*, 1960). While competence to stand trial for juveniles was historically irrelevant, the shift within the juvenile justice system away from a rehabilitative focus and toward a more formal and punitive focus has increased the need to ensure that juveniles are competent to stand trial (Grisso, 1998; 2005). While debate still exists over the definitions and standards of competence to be used, most states have acknowledged the right to competence within the juvenile court system (Redding & Frost, 2001). Further, research in the recent past has begun to illuminate factors that are likely to place a juvenile offender at a greater risk for incompetence. Such factors include: being below age 15, having a serious mental illness or significant deficits in cognitive functioning, or the presence of developmental immaturities that interfere with competence-related abilities (Cooper, 1997; Grisso, 1981; 2003; 2005; Grisso et al., 2003; Hoge et al., 1997; McKee, 1998).

Evaluating Competence to Stand Trial

Mental health experts are often called upon by the courts to conduct evaluations that assist in determining whether an offender is competent to stand trial. In their evaluations, practitioners are tasked with determining whether an offender has any deficits in competence-related abilities as specified in the legal standard for competence. In doing so, it is common for evaluators to use a variety of assessment tools including objective personality instruments, projective personality tests, cognitive and intelligence tests, neuropsychological tests, and forensic instruments (Borum & Grisso, 1995). Unlike standard psychological tests, forensic instruments aim to bridge the gap between clinical and legal constructs and are designed to more directly evaluate the legal capabilities of a defendant. Over the past 40 years, more than a dozen competence assessment instruments (CAIs) have been developed to assist practitioners in evaluating one's competence related abilities (Grisso, 2003; Pirelli, Gottdiener, & Zapf, 2011). These CAIs range from informal checklists to manualized interview schedules to criterion-based assessments combining both formats (Pirelli, Gottdiener, & Zapf, 2011). It is thought that having these instruments available will help practitioners assess clinical characteristics of a defendant, while also staying focused on the legal issue at hand.

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The increased demand for competence evaluations for juvenile offenders has led practitioners to employ many of these measures in juvenile proceedings. In fact, research indicates that many clinicians conducting competence evaluations for juveniles believe in the importance of using CAIs in their assessments (Ryba, Cooper & Zpaf, 2003). However, a study conducted by Christy, Douglas, Otto, and Petrila (2004) revealed that out of 1,357 reports conducted by 257 forensic examiners, the use of these tests was very inconsistent. These contradictory findings are likely explained by the fact that none of these CAIs were designed for, or normed, on children and/or adolescents (Christy et al., 2004; Roesch, Zapf, Golding, & Skeem, 1999; Viljoen & Roesch, 2008). While there is some evidence to support the use of these tools with juvenile offenders, questions remain over how to apply the results from these tools to the standard of competence used in juvenile court as well as how to account for the lack of available norms for young offenders (Grisso, 2003; 2005; Viljoen, Odgers, Grisso, & Tillbrook, 2007; Viljoen & Roesch, 2008; Viljoen, Slaney, & Grisso, 2009). As a result, Grisso (2005) advises that these measures should be used in conjunction with other tools, specifically those that address deficits related to developmental immaturity (Grisso, 1998). At present, the only CAI that has been developed specifically for use with the juvenile population is the Juvenile Adjudicative Competence Interview (Grisso, 2005).

Juvenile Adjudicative Competence Interview (JACI)

The JACI is a structured interview that aims to guide the clinician in assessing the juvenile's understanding, appreciation, and reasoning abilities in twelve content areas related to juvenile proceedings (Grisso, 2005). In doing so, the JACI seeks to ensure that all relevant information regarding competence related abilities is collected and that clinicians consider key constructs and issues that are often overlooked in competence assessments originally developed for adults. The wording and format of the JACI are designed to be both flexible and easy to understand, enabling the evaluator to garner all information necessary to evaluate the youth's capabilities. The interview format encourages the evaluator to take into account varying ages, intellectual capabilities, and developmental issues and, therefore, is appropriate for use with a wide range of youth who may be referred for evaluation (Grisso, 2005; Viljoen & Roesch, 2008). Due to its comprehensiveness, Grisso (2005) recommends using the JACI as a standard practice for all juvenile evaluations. While it is unknown how many examiners are currently utilizing this tool, it is likely that the measure is used frequently, as some jurisdictions - such as in Los Angeles County, California - specifically name the measure as standard practice in juvenile competence to stand trial evaluations (Burrell & Kendrick, 2010; California Welfare and Institutions Code Section 709, 2010). To date, however, there have been no empirical investigations of the JACI to explore how the tool is utilized in juvenile adjudicative competence evaluations. This lack of research is likely because the instrument is not scored and does not lend itself easily to empirical assessment.

The Present Study

The purpose of the present study was to explore the application of the JACI in juvenile competence to stand trial evaluations and to evaluate its usefulness in aiding examiners in their evaluations. Because the JACI is the only measure developed specifically for use with juveniles, it would be valuable to know how the instrument is used in juvenile adjudicative competence evaluations and whether it is an effective aid to practitioners. In order to learn more about the use of the instrument, reports from a California psychologist who frequently conducts juvenile competence to stand trial evaluations were reviewed to determine how the JACI was used and whether or not the interview influenced the examiner's opinions. In this study, competence was defined by the standards set forth in California where a juvenile offender can be found incompetent if the "minor lacks, due to a mental disorder, developmental disability, immaturity or other condition, sufficient present ability to consult with counsel and assist in preparing his or her defense with a reasonable degree of rational understanding" (*Timothy J. v. Superior Court*, 2007). In Los Angeles County Superior Court, the jurisdiction from which the reports were drawn, the courts have specifically recommended that all experts who conduct juvenile adjudicative competence evaluations administer the JACI interview as standard procedure (Burrell & Kendrick, 2010; California Welfare and Institutions Code Section 709, 2010).

This study sought to examine several questions in regards to both the general procedures used in juvenile CST evaluations as well as the influence of the specific JACI responses on opinions of competence. Specifically, it was of interest if, when the JACI was used, general psychological tests and other forensic tests were used less frequently than in juvenile competence evaluations without the JACI. Second, this study aimed to determine whether responses on the JACI influenced the practitioner's opinions of competence. Responses to the JACI interview were evaluated at multiple levels including individual items, groups of items related in content, and overall responses to the instrument. The last area of interest in this study revolved around whether factors shown in past research - such as age, mental illness or Mental Retardation - were related to findings of incompetence.

Method

Participants. Data for this study were drawn from a sample of psychological evaluation reports addressing competence to stand trial within the juvenile court. These evaluations were from the juvenile branch of the Los Angeles (LA) County Superior Court and were conducted between January 2009 and May 2012. Of these cases, only referrals made under Section 1368 of the California Penal Code (competence to stand trial, 2011) were included. All evaluations were conducted by one examiner who is on the Approved Panel of Psychiatrists and Psychologists for the LA County Superior Court.

During the identified time period, a total of 244 juveniles, referred by the defense, prosecution, or court, were evaluated for competence to stand trial. Of these cases, 55 evaluations in which the JACI protocol was used, responses were recorded, and evaluations were conducted in English were available. A comparison group of 55 evaluations where the JACI was not conducted were also collected. To eliminate any bias regarding why the JACI was not used in these evaluations, the 55 most recent reports prior to July 2010 (when the examiner began utilizing the JACI) were collected. Thus, this study examined 55 competency evaluations where a JACI protocol was utilized and 55 where the JACI was not used.

Participants in these evaluations included juvenile offenders ages 18¹ years and younger for whom adjudicative competence was deemed to be an issue. The JACI group consisted of 41 males and 14 females with ages ranging from 10-18 years ($M = 14.33$; $SD = 1.87$). The non-JACI group included 44 males and 11 females with ages ranging from 11-18 years ($M = 14.38$; $SD = 1.85$). Thus, the groups were quite similar with regard to sex and age. Data on the race of the youth was collected, but was missing in a large number of the reports (38% for non-JACI group, 83% for JACI group), so no summary is provided.

Charges were grouped into categories and were similar across groups, although many reports failed to provide information on the current charges (33% for JACI group, 18% for non-JACI group). In the JACI group, the most frequent charge was person-violent (34.5%), followed by property (27.3%), person-non-violent (14.5), and drug and status offenses (1.8% each). The most frequent charge in the non-JACI group was also person-violent (36.4%), followed by property (34.5%), person-non-violent (7.3%), drug (5.5%), and status offenses (3.6%).

Past and present diagnoses also ranged across the two groups. Formal diagnoses from the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000) were coded first and were then categorized as an absent/mild or moderate/severe mental illness in a manner consistent with past research (Hoge et al., 1997; Nicholson & Kugler, 1991). As such, Schizophrenia, other psychotic disorders², and affective disorders comprised the moderate/severe group. Further, Mental Retardation was analyzed separately (Hoge et al., 1997), with 23.6% of the JACI group and 20.0% of the non-JACI group receiving this diagnosis. In the JACI group, 85.5% had an absent or mild mental illness, whereas 14.5% were considered moderate to severe. Disorders were not given for 47.3%, yet of those with diagnoses the most frequent was Attention Deficit/Hyperactivity Disorder (25.5%), other³ (9.1%), Bipolar and Depressive Disorders (7.3% each), and Oppositional Defiant Disorder and Anxiety Disorders (3.6% each). In the non-JACI group, 81.8% of the di-

agnoses were considered absent or mild, whereas 18.2% were considered moderate to severe. Diagnoses were not given for 54.5% of participants; however, the most frequent diagnoses reported were other (23.6%), Depressive Disorders (10.9%), Attention Deficit/Hyperactivity Disorder (7.3%), Bipolar Disorder (3.6%), and Oppositional Defiant Disorder (1.8%).

In regard to the frequencies of competence versus incompetence, the two groups significantly differed, $\chi^2(1, N = 110) = 7.674, p = .006$. In the JACI group, 37 participants (67.3%) were opined to be competent and 18 (32.7%) incompetent. Of the non-JACI group, 49 participants (89.1%) were opined to be competent and six (10.9%) incompetent.

Juvenile Adjudicative Competence Interview (JACI)

The JACI is a structured interview that aims to guide the clinician in assessing a juvenile's understanding, appreciation, reasoning, and participation abilities in 12 content areas related to juvenile proceedings. The content areas are grouped into four sections that were carefully selected in accordance with long-standing definitions of the legal capabilities associated with competence (Grisso, 2005). Table 1 lists each section and content area. Content areas one through ten of the JACI each have questions that help to evaluate two competence-related skills based on the Dusky standard: understanding and appreciation (*Dusky v. United States*, 1960). Questions based on understanding are asked first in each content area and focus on a juvenile's factual understanding of the case. Next, the examiner asks questions related to appreciation, which involves a youth's ability to apply their factual understanding of a topic and to evaluate the implications of an action. Content Area 11 aims to specifically assess a juvenile's reasoning abilities, while Content Area 12, the only topic contained in Section 4, requires no additional questions, but gives the examiner the opportunity to note impressions regarding the juvenile's ability to participate in the proceedings faced. An optional section, "*Role of the Jury*," can be used when the youth is being tried in criminal court, although all juveniles in this study were tried in juvenile court and thus, this section was not utilized. The JACI also contains three Capacity Checks within the content areas that aim to assess whether or not the youth has comprehended the information discussed or taught throughout the interview, as well as one "*Re-Testing for Retention*" section that can be given several days after the original interview to determine whether the youth actually learned the information assessed in these Capacity Checks.

To assess a juvenile's performance on the JACI, a coding scheme was devised to provide ratings to serve as makeshift scores for all of the items within each of the 12 content areas and the Capacity Checks. All items were coded as passed, failed, or not given based on the defendant's response. After all

¹Participants who were 18 years of age at the time of the evaluation were included because they had committed the alleged crime prior to their eighteenth birthday and thus, were still being tried within the juvenile system.

²No participants in either group presented with a past or current diagnosis of any psychotic disorder.

³Diagnosis falling under the "other" category included: Adjustment Disorder, Pervasive Developmental Disorder, Reactive Attachment Disorder, Disruptive Behavior Disorder, Parent-Child Relational Problem, Mixed Receptive Expressive Language Disorder, Moderate to Severe Traumatic Brain Injury, Substance Use Disorders, and Impulse Control Disorder.

the items within each content area were coded, a number of summary scores were created. First, an overall JACI score was produced by totaling responses on all 48 items on the JACI. Second, scores were produced for each of the 12 Content Areas by summing the capacity checks and understanding and appreciation items for Content Areas 1-10, the reasoning questions for Content Area 11, and the trial participation items for Content Area 12. Third, scores were produced for each of the four sections of the JACI by summing the total scores for each of the Content Areas and Capacity Checks contained in that section. Finally, scores were produced for the ten items assessing understanding and from the 18 items assessing appreciation⁴.

Procedure. To obtain the data for this study, first, the reports of interest were identified based on the evaluation date and whether or not the JACI was used and responses were available. Next, all evaluations were coded by the primary examiner. Once completed, a trained research assistant who was blind to the primary examiner's ratings and the proposed hypotheses of the study coded all evaluations for a second time. Once both ratings were complete, codes were compared and any discrepancies were identified. Out of the 3,795 items coded on the sample of 110 evaluations, there were a total of 305 discrepancies between the raters, indicating strong inter-rater agreement of 91.2%. To resolve any discrepancies and finalize the ultimate list of codes, simple coding errors were first identified and resolved. This included errors such as coding "yes" for medication, when it was clearly stated in the report that the minor was not prescribed psychotropic medication. Thus, these errors were not open to interpretation, but were merely coded incorrectly. Once these discrepancies were rectified, a total of 167 discrepancies still existed, improving inter-rater agreement to 95.6%. These final discrepancies included items that were open to interpretation of the rater. To resolve these ratings, a third blind rater coded the 167 identified questions to serve as a tiebreak. If all three raters disagreed on a code, zero for "not given" was assigned. However, this coding strategy was employed infrequently, as disagreements between all raters occurred for less than 1% of the items.

Results

Each of the three research questions is addressed below. First, the frequency of the use of general and forensic instruments in evaluations with and without the JACI is reported and compared. Second, due to the nature of the data (dichotomous and continuous variables) point biserial correlation and logistic regression analyses were used to determine which components of the JACI were related to practitioner's opinions of competence. Finally, X^2 analyses were employed to determine whether age, mental illness, and mental retardation were indicative of differences in opinions of competence or incompetence.

⁴While scores were created for this study, the actual JACI interview does not include any scoring system, nor is it appropriate to use one in practice. As such, traditional reliability and validity statistics are not available to report.

Frequency of Test Use

In the JACI group, general testing was used in 49.1% of evaluations compared to 52.6% in the non-JACI group. Chi square analysis shows that the use of general testing among the evaluation groups was not significantly different, $X^2(1, N = 110) = .146, p = .703$. Of the general testing utilized, the most frequent in the JACI group was intelligence testing (34.5%), followed by personality testing (18.2%), adaptive behavior scales (14.5%), behavior checklists (5.5%), and neuropsychological testing and other, unclassified tests (1% each). In the non-JACI group, intellectual and personality tests were used most frequently (27.3% each), followed by adaptive behavior scales (21.8%), behavior checklists (16.4%), and other unclassified tests (1.8%). While the frequencies of the different types of tests varied across the groups, the same pattern of usage was observed. In examining the use of additional forensic tests, 0% was used in the JACI group compared to 7.3% in the non-JACI group. Despite the very small overall frequency of usage of forensic testing across the two groups, usage was found to be significantly different, $X^2(1, N = 110) = 4.151, p = .042$, indicating forensic test usage was higher when the JACI was not used.

JACI Responses and Competence Opinions

Each level of scores was analyzed to determine the importance in regard to practitioner's opinions of competence. Because it is not required to give every question on the JACI, missing data were first reviewed. The percentage of time that the questions for each content area were asked is noted in Table 1 and shows that the content areas asked first on the measure were generally given more often. Content Area 12 (the only topic in Section 4) contains no formal questions on the protocol, but affords the examiner the opportunity to note impressions regarding the defendant's potential for participation in the proceedings. No notes were made for this item in any of the evaluations; therefore, no correlation or regression analyses were conducted.

Point biserial correlations were derived between each level of JACI scores (overall score, section scores, content area scores, and understanding/appreciation scores) and the practitioner's opinion regarding the competence or incompetence of the juvenile. See Table 1 for a summary of the correlations. The overall score on the JACI was strongly related to opinions of competence ($r = .812, p < .001$), as were the three section scores available, with Section 1 having the strongest correlation ($r = .776, p < .001$), followed by Section 2 ($r = .594, p < .001$), and Section 3 ($r = .547, p < .001$). While most Content Areas were significantly associated with final opinions of competence, Content Areas 9 (*Assisting the Defense Attorney*) and 11 (*Reasoning and Decision Making*) were not. Content Area 5 (*Role of the Prosecutor*) had the highest correlation ($r = .789, p < .001$), followed by Content Area 8 (*Role of the Juvenile Court Judge*, $r = .756, p < .001$). Both Understanding and Appreciation item types were strongly related to competence recommendations, and were quite similar to one another (Appreciation, $r = .740, p < .001$; Understanding, $r = .737, p < .001$).

Table 1.
Correlations to CST Recommendations and Missing Data among the Four Levels of the JACI

Variables	Item,/Section Name	Competency Recommendation	Percentage of Time Asked
Overall Score		.812**	
Section 1	The Juvenile Court and Its Consequences	.776**	
Section 2	Roles of the Participants	.594**	
Section 3	Assisting Counsel and Decision Making	.547**	
Section 4	Participating in the Juvenile Court Hearing		
Content Area 1	Nature and Seriousness of Offense	.620**	79.4
Content Area 2	Nature and Purpose of the Juvenile Court Trial	.619**	63.6
Content Area 3	Possible Pleas	.620**	81.2
Content Area 4	Guilt and Punishment/Penalties	.487**	55.8
Content Area 5	Role of the Prosecutor	.789**	53.9
Content Area 6	Role of the Juvenile Defense Lawyer	.614**	45.9
Content Area 7	Role of the Probation Officer	.432**	24.5
Content Area 8	Role of the Juvenile Court Judge	.756**	43.6
Content Area 9	Assisting the Defense Attorney	.240	19.4
Content Area 10	Plea Bargains/Agreements	.694**	30.5
Content Area 11	Reasoning and Decision Making	-.032	4.7
Content Area 12	Participating at Juvenile Court Hearing		0.0
	Understanding Items	.737**	
	Appreciation Items	.740**	

Notes. Section 1 includes Content Areas 1-4, Section 2 includes Content Areas 5-8, Section 3 includes Content Areas 9-11, Section 4 includes Content Area 12; Understanding Items drawn from Content Areas 1-10; Appreciation Items drawn from Content Areas 1-10; $n = 55$; + denotes correlations not run due to lack of data; * $p < .01$, ** $p < .001$.

To further examine which components of the JACI were most influential, logistic regression analyses were conducted with the examiner's opinion (competent or incompetent) as the dependent variable and the various types of JACI scores as the predictors. Prior to the analyses, multicollinearity was considered and while there were some significant correlations, none were high enough to warrant the creation of any composite variables. Thus, the analysis was performed with each individual item in the equation. The first regression equation, evaluating

the effect of the 11 Content Areas on competence opinions, was found to be significant [$F(11, 43) = 14.425, p < .001$] with 78.7% (73.2% adjusted) of the variance explained (See Table 2). Content Area 5 (Role of the Prosecutor) was the most significant predictor of the competence opinion [$\beta = .385, t(54) = 3.101, p = .003$], followed by Content Area 10, Plea Bargains/Agreements, [$\beta = .297, t(54) = 2.843, p = .007$], with Content Area 9, Assisting the Defense Attorney, approaching significance [$\beta = -.170, t(54) = -1.989, p = .053$].

Table 2.
Summary of Regression Analyses for Predicting Competence to Stand Trial (n = 55)

Variables	Item./Section Name	B	SE B	B
Content Area 1	Nature and Seriousness of Offense	.020	.012	.163
Content Area 2	Nature and Purpose of the Juvenile Court Trial	.023	.018	.133
Content Area 3	Possible Pleas	.007	.018	.061
Content Area 4	Guilt and Punishment/Penalties	.006	.014	.040
Content Area 5	Role of the Prosecutor	.057*	.018	.385*
Content Area 6	Role of the Juvenile Defense Lawyer	.012	.017	.073
Content Area 7	Role of the Probation Officer	-.036	.032	-.119
Content Area 8	Role of the Juvenile Court Judge	.018	.016	.136
Content Area 9	Assisting the Defense Attorney	-.040	.020	-.170
Content Area 10	Plea Bargains/Agreements	.046*	.016	.297*
Content Area 11	Reasoning and Decision Making	-.012	.021	-.043
Section 1	The Juvenile Court and Its Consequences	.021*	.006	.475*
Section 2	Roles of the Participants	.019*	.007	.371*
Section 3	Assisting Counsel and Decision Making	.003	.011	.034*
Understanding Items		.022*	.006	.418*
Appreciation Items		.016*	.005	.432*

Notes. * $p < .01$, ** $p < .001$.

The second regression equation evaluating the three JACI section scores was also significant [$F(3, 51) = 34.117, p < .001$]. In this equation, 66.7% (64.8% adjusted) of the variance in competence opinions was accounted for by the section scores; however, only Sections 1, The Juvenile Court and Its Consequences, [$\beta = .475, t(54) = 3.817, p < .001$] and 2, Role of the Participants, [$\beta = .371, t(54) = 2.527, p = .015$] were significant predictors. Section 3, Assisting Counsel and Decision Making, was not.

The third regression equation examining the Understanding and Appreciation items was also significant [$F(2, 52) = 43.856, p < .001$] with 62.8% (61.3% adjusted) of the variance in the competence opinions explained. Both types of items were significant predictors [Appreciation, $\beta = .432, t(54) = 3.447, p = .001$; Understanding, $\beta = .418, t(54) = 3.340, p = .002$].

Age, Mental Illness, Mental Retardation

To determine, whether age, mental illness, or Mental Retardation were important determinants of competence opinions, several chi square analyses were conducted. Results indicated that participants identified as competent versus incompetent did not differ by age⁵, $\chi^2(1, N = 110) = 1.37, p = .24$, or diagnosis, $\chi^2(1, N = 110) = 1.45, p = .229$. However, participants identified as competent versus incompetent did differ based on a diagnosis of Mental Retardation for both the entire sample, $\chi^2(1,$

⁵Age was divided into two categories: 15 years and below and 16 years and above.

$N = 110) = 36.20, p < .001$, and the JACI group, $\chi^2(1, N = 55) = 36.20, p < .001$. Because Mental Retardation was shown to be significantly related to ultimate opinions of competence, an additional regression analysis was used to determine whether the overall JACI score would be more influential in predicting competence versus incompetence opinions over that of a diagnosis of Mental Retardation. Results indicated that the regression equation was significant [$F(2, 52) = 58.680, p < .001$] accounting for 69.3% (68.1% adjusted) of the variance in competence opinions. Both JACI Score [$\beta = .683, t(54) = 7.298, p < .001$] and diagnosis of Mental Retardation [$\beta = -.225, t(54) = -2.403, p = .020$] were significant predictors, with the JACI score being the stronger predictor of the two variables.

Discussion

Despite the availability of numerous forensic instruments used to assess competence to stand trial abilities for adults, the JACI is the only measure that has been created specifically for juveniles. However, no research has been conducted thus far to explore the use of this tool. This study aimed to explore the application of the JACI in juvenile competency evaluations and to evaluate its usefulness in making competence recommendations.

Differences in Evaluations with and without the JACI

Results indicated that the reports written in evaluations where the JACI was used differed from the non-JACI reports in

several ways. First, there appeared to be a difference in how demographics were reported across groups. Perhaps the failure to report race in the majority of the JACI group is due to the JACI's very structured focus on psycholegal issues the minor will encounter. Rather, when utilizing one's own clinical interview as the primary assessment, demographic and social history may be considered, or simply recorded, more often. As with race, the charges faced by the juvenile were noted much less frequently in the reports of the JACI group. Because information on charges is collected during the JACI protocol (in Content Area 1), perhaps it is often omitted in the report. Also, when a clinical unstructured interview is utilized, an examiner may be more likely to address such details in the report to verify that they were considered. Although reporting of these variables was less frequent when the JACI was conducted, stating the juvenile's mental health diagnoses within the reports did not fit with this pattern. The similarity across groups might be attributed to the fact that the JACI does not collect diagnostic impressions and reflects the need to consider diagnoses above and beyond the use of this tool. Lastly, while not a procedural difference, it is of interest to note that the two groups also significantly differed in recommendations of competence, with the JACI group containing more juveniles opined to be incompetent. Although this may be purely a reflection of the evaluations reviewed, it is possible that the JACI's comprehensive format uncovers more competence-related information than an examiner's own clinical interview or a tool designed for adults and, thus, results in more opinions of incompetence. This is a finding that needs further investigation before any conclusions can be made about the source of the differences.

As with the demographic and clinical data, the frequency with which other tests were used across evaluation types differed. General psychological test use was similar across report type and the frequency with which different types of clinical instruments were used was consistent with past surveys of CST evaluations, with intelligence and personality tests the most frequently used (Borum & Grisso, 1995; Ryba et al., 2003). This provides evidence that the JACI does not replace measures focusing on clinical issues. On the other hand, results did reveal that forensic testing was conducted significantly more often in evaluations without the JACI, suggesting that using the JACI may supersede the need for other CAIs or other forensic instruments. Yet, it is also important to recognize that forensic testing was utilized in less than 10% of non-JACI evaluations. These findings provide replication of past research where forensic assessments were used infrequently and inconsistently in these types of evaluations (Christy et al., 2004).

Evaluation of the JACI

In evaluating the influence of the JACI, the totality of the information derived from the instrument clearly had an important influence on competence opinions, as did the collection of items assessing both Understanding and Appreciation, two of the abilities drawn from the *Dusky* standard (*Dusky v. United States*, 1960). Of the four sections of the JACI, results empha-

size the importance of having a basic understanding of the court processes (as assessed by Section 1, *The Juvenile Court and Its Consequences*) and the key players involved in legal proceedings (as assessed by Section 2, *Role of the Participants*) to competence abilities, as both were highly correlated and significant predictors of opinions; however it was interesting that Section 3, *Assisting Counsel and Decision Making*, was related to competence opinions, yet not a significant predictor. It's likely that the infrequency with which these questions were asked contributed to these findings and it may be that these types of higher-order cognitive abilities are harder to address in a formal instrument and therefore, were skipped more often or viewed by this particular examiner as less important determinants of competence. Additional research including reports from other examiners would help clarify this issue. Lastly, the fourth section, *Participating in the Juvenile Court Hearing*, included only Content Area 12 and was never completed in this sample. The complete lack of use of this topic may stem from the fact that issues leading to behavioral problems in court would have been easily observed throughout the interview and thus, would not need to be formally evaluated in the JACI. However, it could also be that this section has a looser connection to the legal standard of competence and was considered less important by the examiner. Additional research can help clarify this finding as well.

When looking at the twelve content areas, results demonstrated that Content Area 5, "*Role of the Prosecutor*," and Content Area 10, "*Plea Bargains*" were the most influential predictors. This emphasis on the prosecution is a surprising finding because although the role of the judge was highly correlated, other content areas examining the roles of participants (judge, probation officer, and the defense attorney) were not significant predictors of opinions. Yet, it seems logical that an opinion of incompetence would result when a juvenile defendant does not understand the adversarial nature of the role of the prosecutor. Additionally, the importance of Content Area 10 may stem from the fact that this item focuses on all three abilities drawn from the *Dusky* standard: understanding, appreciation, and reasoning. Not only must a juvenile know what a plea bargain is, but they must also be able to reason between their options and appreciate the long term consequences of taking a plea versus going to trial. Further, research has shown that younger defendants are less likely to consider future consequences, which is a necessary element of plea bargaining (Grisso et al., 2003).

Influence of Age, Mental Illness, and Mental Retardation

Other factors shown in past research to be related to findings of competence were assessed in this sample. Age and a diagnosis of a moderate/severe mental illness were not found to be significant predictors of opined CST. Therefore, in this study, juveniles both younger and older and with a variety of diagnoses were equally likely to be found competent or incompetent. However, the usually strong correlate of age is likely washed out by the time frame of referrals, as older children may only be referred when something raises the suspicion of incompetence

compared to younger children who may be referred sooner due to age alone. Additionally, in this sample the outcomes were likely affected by the infrequency of moderate to severe diagnoses present.

Mental Retardation was shown to be an important predictor of competency opinions. This result supports past research findings (Grisso, 1981) and also explains the frequent use of intelligence testing. While the JACI information was a more powerful predictor of competence opinion and focuses directly on competence-related skills, it does not yield information on the underlying cause of the deficits. Tests of intelligence and adaptive behavior scales, both frequently used by this examiner, support a diagnosis of Mental Retardation, which can help explain the presence of any competence-related deficits revealed by the JACI.

Limitations and Implications

Clearly, there is a need for additional studies that use more than one examiner's JACI responses and competency reports. While the results of this study provide a first look at how the JACI is used, these results cannot be generalized to other practitioners and additional research is needed to confirm the findings of this study. Further, the present results are wholly dependent on the coding scheme used to turn this unscored interview tool into a scored measure. While multiple raters were used to attain the most accurate coding of responses, interpretation is largely based on how the raters classified each item response and it is important to consider that scores given by raters cannot involve consideration of the full clinical picture presented during an evaluation. Despite these limitations, this study maximized external validity by drawing JACI protocols and reports from actual juvenile proceedings. Unlike in a study where evaluators know their test results will be evaluated, this examiner completed his assessments for the court prior to the conceptualization of this study. So, although not every question was asked on the JACI, these results provide a "true life" glimpse at how one examiner uses this tool and how effective the items, content areas, and sections were in coming to his conclusions. Obviously, this study could be repeated with more constraints that would maximize internal validity, yet this approach would provide less information about what is occurring in a real world setting.

It is also useful to know that the JACI aligned well with the common conceptualizations of the *Dusky* standard as having three components: factual understanding, rational understanding, and ability to assist one's attorney. In this study, understanding and appreciation (rational understanding) played a more important role as determinants of competence opinions and questions remain about why reasoning and courtroom participation were less relevant despite their application to the third component of *Dusky*. It is yet to be determined whether this aspect of the standard was simply not adequately captured by the JACI or whether it is just seen as less important in comparison to understanding or appreciation. Further, it is unknown whether the items assessing behavior were skipped because they do

not need to be formally tested or because they were seen as less relevant. These questions warrant further investigation.

Until further research is done, however, the present study provides a first look at how the JACI is being used and provides support for the usefulness of this tool in juvenile competence to stand trial evaluations. Validation for the instrument is useful, as this measure is being increasingly used, especially in jurisdictions where it is written into the law as a recommended standard procedure, as in California (Burrell & Kendrick, 2010; California Welfare and Institutions Code Section 709, 2010). Thus, it seems, with the availability of a tool designed specifically for juveniles, with state statutes promoting its use, and with research supporting the JACI's efficacy, the JACI can serve to promote the consistency and accuracy of opinions provided by practitioners in juvenile competence evaluations.

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Implications for the Topological and Vector Management of Schizoid Dynamics

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During the initial stages of psychological inquiry, inferences are drawn regarding certain aspects of behavior and mental life. It then becomes necessary to organize and integrate these inferences through the formulation of logically sound, internally consistent explanatory propositions, which are to be coordinated, as closely as possible, with assigned properties in the observable world. (Millon, 1967). Only in this manner can theoretical formulations become the valid subject matter of experimental procedures with the aim of achieving explanatory significance in the search for lawful representation. With this in mind, a non-Euclidean form of mathematics known as topology may enhance traditional forms of verbal therapy by supplementing their content with a conceptual system designed to engage the visuospatial code (Woods, 2013). Glass and Holyoak (2004) have cited cognitive research which indicates that the visuospatial processing of information leads to increased recall of material over extended recall attempts, while recall of verbal material alone is less effective over extended recall attempts. Although mere recollection of the material worked through in therapy is not sufficient for change, all psychotherapies require that the individual recall and assimilate time and again material from the therapy hour and impart to it a certain meaning in the course of daily life (Wedding & Corsini, 2005). During therapy, a structured, visuospatial component may facilitate this process as information will be routed through a greater portion of the cognitive-perceptual complex (Mather, 2011). This paper addresses the effectiveness of the Topological Representation Tool, or TRT, (Woods, 2010) as a visuospatial supplement to traditional verbal therapies with persons manifesting schizoid pathology. Specifically, boundary properties of the schizoid psychological field are addressed, and field force dynamics impacting the psychological environment are discussed. The nature of the inner-personal region in schizoids is also treated. Perceived patient-therapist benefits and logistical considerations for use of the instrument are presented.

Keywords: Topological Psychology, Life Space, Psychological Environment, Kurt Lewin, Visuospatial Structure

The effective management of issues confronting each of us during the course of living from day to day represents a ubiquitous and complex challenge. When one considers the same plight within the context of clinical populations, complexity in this regard is amplified by the presence of symptoms. Symptoms may find expression primarily at the level of personality organization or may emerge in combination with strong, pathophysiological defined substrates. The latter condition often involves more severe psychopathology. Whether symptom presentation is of a relatively moderate nature or its manifestation more severe, the ability to effectively manage issues remains challenged to some meaningful and significant extent beyond issue management in normal populations. From a psychotherapeutic and, at times, iatrogenic treatment perspective, schizophrenia spectrum disorders represent a particularly challenging management endeavor (Bartak & Andrea, 2011). This chal-

lenge arises, both phenomenologically and clinically, due to the limiting effects of positive and negative symptoms on personality and its functioning, and due to cognitive-emotive processes that emerge primarily from unfavorable physiogenic conditions.

Many instruments have been developed and are currently in use to assist in a diagnosis involving schizophrenia spectrum pathology and as an aid to better understanding the various manifestations of psychopathology that emerge within this spectrum of mental disorders. The Rorschach Inkblot Test, Thematic Apperception Test, and Millon Clinical Multiaxial Inventory- III are but a few examples. However, no formal instrument has been developed to assist directly in the process of counseling and psychotherapy with persons suffering from schizophrenia spectrum pathology. The Topological Representation Tool (TRT) is potentially sensitive to this concern (Woods, 2010). This paper presents a visuospatially based, quantitatively articulated analysis of schizoid dynamics so as to assist in the psychotherapeutic management of patients exhibiting social withdrawal, a restricted range of emotional expression and other negative signs and symptoms that may be

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consistent with a diagnosis of Schizoid Personality Disorder or Schizophrenia in which negative symptoms appear¹ (American Psychiatric Association [APA], 2013).

The TRT makes use of topological and vector concepts derived by field theorist and Gestalt psychologist Kurt Lewin (1933, 1935, 1936, 1938, 1943, 1944). Lewin's Psychology is descriptive and attempts to build visuospatial constructs by means of which one can represent the organization and dynamics of psychological phenomena diagrammatically through a form of mathematics known as topology (Lewin, 1935, 1936). Topology refers to the study of spatial relations and is essentially a non-quantitative form of geometry for describing intercommunication, continuity, separation and connectedness among spatial regions (Cartwright, 1941; Cartwright & Festinger, 1943; Garret, 1939; Tolman, 1932, 1948).

The TRT utilizes Lewin's construct of a "life space" within which the person exists to account for all experiences, cognitive, emotional, physical and social, that are represented by variations in the relatedness of sub-regions comprising the total life space. This is the topological distinction of the TRT. The vectorial distinction would involve the distribution of force throughout the life space and the dynamic role of tension among regions in this process.

In addition to a rather extensive review of the literature, DSM-5 Cluster A Personality Disorders and diagnostic criteria for Schizophrenia (APA, 2013) served as empirical coordinates for the application of Lewin's topological and vector concepts in deriving the TRT. This process involved dynamic description and conceptual representation of the disorders, which Lewin believed essential to the advancement of all psychological investigation (Heidbreder, 1937; Leeper, 1943; Lewin, 1938).

The TRT consists of twenty-four structures printed onto twenty-four plates. Each structure serves only as a conceptual framework in promoting a viable, realistic understanding of various issues, symptoms and concerns that arise during a course of verbal therapy with those persons who suffer from psychopathology manifesting along the schizophrenia spectrum. It should be noted that the TRT is very much a practical instrument that may be employed with persons exhibiting certain prodromal characteristics very often consistent with a schizophrenia spectrum disorder diagnosis (e.g. deterioration in hygiene and grooming, odd beliefs, unusual perceptual experiences, unwarranted outbursts of anger, alogia, affective flattening, asociality, avolition, and significant anhedonia). From the perspective of the treating psychologist, the TRT bears many of the advantages of projective assessment; however, a key difference is that the psychologist aims to support, counsel, interpret and formulate lines of inquiry while using the TRT with important dynamic input from the patient as therapy actually proceeds. It is not necessary that psychologists seeking to incorpo-

rate the TRT into a course of therapy be familiar with the entirety of theoretical constructs upon which the instrument is based. Rather, knowledge of only a few key topological and vector concepts will prove sufficient for initial TRT use.²

Key Topological and Vector Concepts

1. Person (P): refers to everything lying within a completely bounded area designated P. It is a differentiated region in the life space and contains a perceptual-motor region (P-M). An influence that impinges upon P from the environment involves the sensorium. An influence that originates from P and impinges upon the environment involves the motorium. P also contains an inner-personal region (I-P).

2. Psychological Environment (E): a completely bounded area designated E that encloses the person. A fact must first enter the individual's psychological environment before it is able to exert an influence on P. The boundary of P is permeable to facts contained in E.

3. Life Space (L): a completely bounded area that encloses P and E, $P + E = L$.

4. Fact: may refer to an observable phenomenon as well as to something either sensed or inferred. A fact may be dynamic, hypothetical, phenomenal or empirical.

5. Locomotion: refers to movement from one region to another region within the psychological environment.

6. Valence: refers to a fact within the psychological environment and its corresponding value for a person, either positive or negative. A valence may be weak, medium or strong. Valence provides the direction for locomotion.

7. Vector (): refers to the representation of the properties of force responsible for locomotion, which are direction, strength and point of application. The direction in which the vector points represents the direction of the force. The length of the vector represents the strength of the force. The place where the tip of the arrow impinges on the structure represents the point of application (Lewin, 1938).

Characteristics and Use of the Instrument

Patients are encouraged to relate their thoughts, feelings and other aspects of experience to the structures so that this material becomes organized around the visuospatial content of the structures themselves. The aim of introducing topological concepts into treatment is to assist patients in such a way that the structures begin gradually to transcend the level of mere visual metaphor. The subjective value of the visuospatial constructs will increase as patients come to identify very real aspects of their experience represented symbolically within this conceptual framework, yet played out within the context of their daily lives. As vital symbolic patterns emerge and gain a certain

¹For a discussion of the topological and vector management of positive symptoms, the reader is referred to an article by Woods entitled, The Use of Visuospatial Constructs in the Treatment of Thought Disorder: A Case in Point, appearing in Psychology Journal, 2013, Vol. 10, No 1, Psychological Publishing.

²For more detailed discussion of topological and vector concepts, the reader is referred to an article by Lewin entitled, The Conceptual Representation and Measurement of Psychological Forces, appearing in the 1938 journal, Contributions to Psychological Theory, 4, pp. 1-247, Duke University Press.

prominence and meaning within the psychic life of patients, greater investment in therapy will be facilitated so that the restructuring of maladaptive patterns of experience becomes a central and critical focus of treatment based on these newly internalized symbols. As patients relate their experiences to psychologists in terms of the structures, healthier alternatives to thinking and behaving can be jointly explored within the treatment setting. In time, the viability of alternative approaches to self, others and the world derived through this process can be validated by way of the myriad circumstances that emerge in living from day to day.

Interpretive keenness and a creative disposition on the part of psychologists will play a key role in journeying with patients through the visual metaphors facilitated by the structures. The extent to which responses are elicited from patient to patient will vary greatly in terms of number, magnitude and form. During the initial stages of treatment, it should be noted that the presence of negative symptoms may yield TRT responses that are sparse in number and seemingly limited in terms of affective content. However, psychologists must be prepared to weave these responses into the fabric of psychotherapy by helping patients to identify a certain resonance between the visuospatial content of the structures and the experiences related to them. All of this should be undertaken within the context of the theoretical model from which the psychologist is most comfortable and accustomed to working.

In general, patterns of personal experience that can be coordinated with a higher degree of frequency to the structures will prove more meaningful during the course of therapy than experiences offered which are representative of relatively isolated incidents or emotional states atypical for the individual. This is because patterns of experience are more easily related to long-standing traits indicative of actual personality functioning. These patterns are less likely to be dismissed by patients as transient, experiential phenomena or mere contextualism. Hence, greater investment in therapy should result as patients come to better understand the repetition of often quite toxic patterns within their lives and as they gain a widening recognition of the extent to which these patterns exert influence.

The ability to operate logically on symbols and information that relate only in an abstract manner to constructs in the natural world is a developmental prerequisite for use of the instrument. It has been suggested that this cognitive ability emerges at approximately twelve years of age as a result of having entered the formal stage of cognitive operations (Piaget, Tomlinson, & Tomlinson, 2012). Therefore, the TRT is appropriate for use with persons twelve years of age and older in which this basic developmental milestone has been achieved. It should be noted that the instrument has been effectively employed with patients functioning at the low end of the average range of overall intellectual ability (Woods, 2013).

Patients must exhibit a certain cognitive-emotional stability before introducing TRT structures into therapy. Although such stability may be tenuous within the schizophrenia spectrum, it remains necessary so as to allow for the effective utilization of visuospatial structure in the effort to increase patient insight

into issues, and for the potential enhancement of patient-therapist communication.

In selecting figures to present to patients during treatment, psychologists should consider that TRT figures 1-10 are designed to address the negative symptoms associated with schizophrenia spectrum pathology and, as such, are derived primarily from DSM-5 diagnostic criteria for Schizoid Personality Disorder and Schizophrenia manifesting in negative symptoms (APA, 2013). However, these structures are also appropriate for the visuospatial management of other mental disorders in which negative symptoms emerge, in that negative symptoms are not pathognomonic for the aforementioned disorders. Derivation of figures 11-24 of the instrument involved the coordination of Lewin's constructs with DSM-5 diagnostic criteria for Schizophrenia in which positive symptoms appear, as well as the remaining Cluster A Personality Disorders (APA, 2013). In that positive symptoms are not pathognomonic for these disorders, TRT figures 11-24 are appropriate for use with patients manifesting other forms of mental illness in which positive symptoms emerge³. Several strategies for the presentation of figures are addressed in the subsection: Logistical Considerations For the Use of Topological and Vector Constructs in Therapy.

Topological and Vector Analysis of Schizoid Dynamics

It is true that many individuals manifesting schizoid pathology do not enter therapy given the largely asocial nature of the condition, and in light of the restricted range of emotional expression that seemingly typifies the majority of their objectified behavioral responses. This truism, however, must not dissuade psychologists from considering the possible efficacy of psychotherapy with those individuals who avail themselves of the process (Gamache, & Diguier, 2012; Kalus, Bernstein & Siever, 1993; Slavik, Sperry & Carlson, 1992; Yalom, 1970). With this in mind, the visuospatial constructs inherent in a topological and vector approach to treatment should effectively supplement a course of psychotherapy with this population, as the often rich fantasy life of schizoid individuals (Arieti, 1969; Suslow & Arolt, 2009) lends itself to the subjectivity required in organizing various associations made to the structures.

According to DSM-5 (APA, 2013), the schizoid disposition involves "a pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings" (p.652). From a topological perspective, the organization and expression of traits that culminate in schizoid pathology are intimately related to the boundary properties of the psychological field. A fact, which may be dynamic, hypothetical, phenomenal or empirical, must gain entrance into the field before exerting influence over the person (P). Therefore, the series of momentary psychical states that characterize the boundary of the schizoid psychological field are temporally ordered and rigidly maintained in such a way as to form a con-

³Individuals who wish to obtain a complete description of each of the twenty-four TRT structures should contact the author.

tinuous, nearly impermeable boundary, whereby social locomotions are largely disallowed entrance into the field. In normal individuals, a change within the psychological field at a certain time, dx/dt , is a function of the psychological situation at that time $F = (s^t)$ (Lewin, 1938). However, the continuous temporal positioning and rigid maintenance of the psychical states that form the boundary of the schizoid psychological field are, in effect, a constant. This state of affairs is represented mathematically by the equation: $S^t + S^{t-n} + S^{t+n} = C$, where S^t = present state, S^{t-n} = previous state, S^{t+n} = future and C = constant (Lewin, 1943). As Figure 1 represents, the temporal continuity (TC) and rigidly erected boundary of the schizoid field characteristically disallows social locomotions (SL) entrance. Figure 1 also represents the rather common situation of others being repelled by the schizoid's seemingly indifferent, aloof posture.

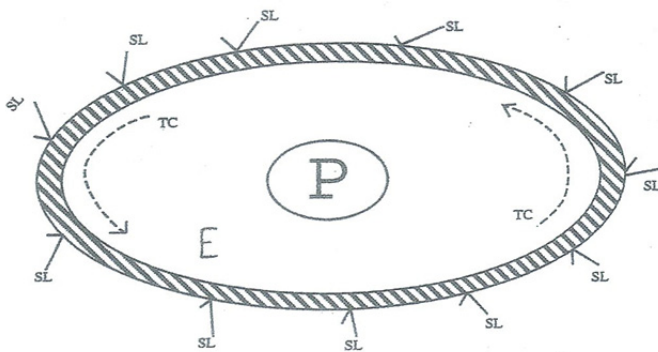


Figure 1. Boundary Properties of the Schizoid Psychological Field

The concept of a rigid schizoid boundary represents only a deficiency in the ability to form social relationships as opposed to an incapacity to do so (DeBerry, 1989; Huang, He, & Chen, 2011). The notion of deficiency rather than incapacity in this regard is supported by DSM-5 (APA, 2013) criteria describing schizoid personality, which favor greatly the social isolation and detachment of the disorder, yet are not absolute. Rather, schizoid individuals "appear to lack a desire for intimacy... almost always choose solitary activities... and have little interest in sexual experiences with another person" (p.653). Topologically, this near yet not absolute detachment is represented by ascribing to a limited region on the field boundary the characteristics of a "boundary zone" (Lewin, 1936, p.20), which offers only resistance to social and interpersonal locomotions, yet does not make such locomotions toward P impossible (Lewin, 1938). Hence, social locomotions meet only with considerable friction within this limited region of the boundary as opposed

to the impermeability characteristic of the remaining boundary, as Figure 2 represents.

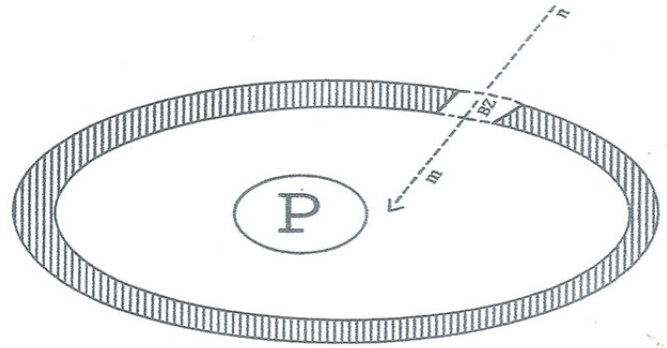


Figure 2. Schizoid Boundary Zone

"We call a boundary zone between two regions, m and n , that region BZ , which is foreign to m and n (Lewin, 1936, p. 21). However, there are boundary points of m which, at the same time, are boundary points of n at the intersection BZ . That is, the regions m and n are indeed foreign, yet with common boundary points represented by the zone BZ . If the concept of intersection is allowed expression by designating a point $(.)$ between two regions, then $m. BZ=0$ and $n. BZ=0$. However, $m + BZ + n$ is a connected region by way of zone BZ . Thus, BZ serves both to separate and connect the two regions m and n , whereby social locomotions can conceivably acquire the necessary vector relationship (or strength, direction and point of application) with respect to P so as to penetrate the field boundary within region BZ . This points toward a certain optimism in the psychotherapeutic management of individuals exhibiting social withdrawal and detachment tendencies. If a limited zone of the psychological boundary is permeable to social and interpersonal locomotions in terms of offering only friction to their establishment within the psychological field, then it is possible that the impermeability characteristic of the remaining boundary may possess fundamental properties that would allow for its modification whereby permeability becomes a conceivable psychotherapeutic goal.

Forces Impacting the Schizoid Psychological Environment

The emotional coldness and detachment of the schizoid condition result from the highly rigid medium characteristic of the psychological environment. This rigid medium renders emotional contact largely checked or stalemated, as Figure 3 represents.

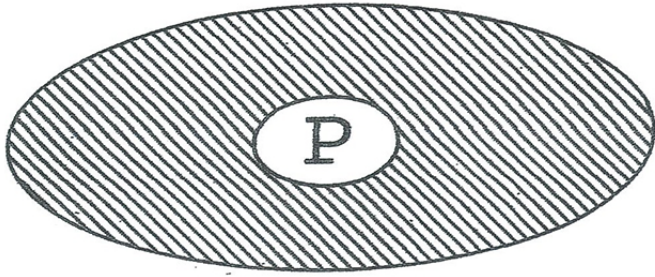


Figure 3. Rigidity of the Schizoid Psychological Environment

As a result of cognitive-emotive and, subsequently, physical locomotions being checked, the social isolation, affective detachment and general insensitivity of the schizoid condition are readily observable. The particular emotional constituents that give rise to the rigid medium of the psychological environment are a masked version of anxiety (Neenan, Felkner & Reich, 1988), and an underlying yet ego-dystonic sense of constricted emotionality. Schizoid individuals do not typically experience anxiety in terms of a greater or lesser degree of uneasiness or vexatious affectivity. Rather, the primary role of anxiety is the organization and reinforcement of rigidity within the psychic life.

Masked Anxiety and Inner-Sensitivity as Schizoid Dynamics

Upon initial consideration, it may seem at variance with schizoid organizational dynamics to qualify these individuals with a certain inner-sensitivity, given the deficiency in their ability to establish social contacts and cultivate self-other emotional attachments (Cannon, 1984; Cornett, 1989; Lenzenweger, 2010; Thompson, 1990; Triebwasser, Chemerinski, Rousos, et. al, 2012). However, numerous investigators have espoused the idea that there exists within the schizoid a certain region characterized by sensitivity (Akhtar, 1987; Kalus, Bernstein & Siever, 1993; Kasanin & Rosen, 1933; Klein, 1975; Lerner, 1985; Martens, 2010; Terry & Rennie, 1938; Thulstrup & Hesse, 2009). According to Lewin (1935), "... the temporal process of locomotion is a change in the psychological position of a person whose course can be represented by a path" (p. 259). Figure 4 depicts this situation where X^1 = psychological sensitivity and X^2 = psychological insensitivity, so that the schizoid's temporal process of locomotion from sensitivity (X^1) to insensitivity (X^2) may be said to occur more swiftly than does the temporal process of locomotion from insensitivity (X^2) to sensitivity (X^1). This dynamic state of affairs in which locomotion away from X^2 is slower, allows one to observe more readily those qualities of the schizoid condition that appear more insensitive.

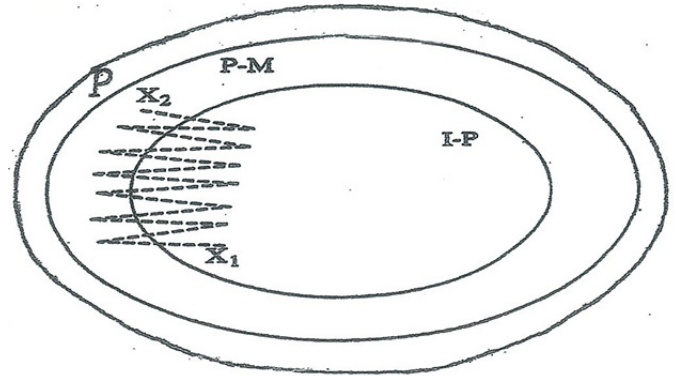


Figure 4. Schizoid Fluctuation in the Temporal Process of Psychological Locomotion

It should be noted that the perceptual-motor region (P-M) allows for the organization and subsequent expression of all motor activity (Lewin, 1938). Hence, the slower dynamic of path X^2 within the region P-M gives schizoid displays of detachment, coldness and indifference a certain saliency of presentation. However, saliency of presentation in this regard is not organized at a core level within the personality. It serves only as a veneer to shield the schizoid from perceived intrusions of social living (Laing, 1969). Likewise, the inner-personal region (I-P) is not characterized by emotional coldness and aloofness. Sensitivity exists within this region. Yet, due to the insufficient tension and connectedness of the systems therein (Lewin, 1935), sensitivity is held in check. Because the presence of masked anxiety within the psychological environment exerts a binding effect on P, any sensitivity isolated deep within the inner-personal region does not, as a matter of course, reach the threshold for adequate physical and emotional expression (Lewin, 1938). Anxiety in schizoids, then, finds outward expression through apathetic attitudinal and behavioral postures and interpersonally unengaged displays (Millon, 2009). If masked anxiety were to be reduced, not only would these impediments lessen, inner-sensitivity would be significantly freed-up so as to spread throughout other regions of the psychological environment. This matter will be addressed further in the subsection: Dynamics of the Inner-Personal Region.

The inwardly sensitive nature of the schizoid condition serves as an ineffective defense against anxiety and its reinforcing tendencies with respect to rigidity of the psychological field. This results in a markedly constricted emotional life in which the person (P) is limited in what Lewin (1936) referred to as the "space of free movement" (p.100). That is, the region in which P is able to carry out locomotions without entering into a region marked by anxiety (A) or constricted emotionality (CE) is limited, as represented in Figure 5, by the thickness of the boundary surrounding P, and the restraining forces of anxiety and constricted emotionality that serve to reinforce the limited space of free movement. The psychological energy expended in the attempt to lend some measure of flexibility to these rigid internal states is often of such magnitude that little energy remains available for channeling into the motorium, so that the emotions may be expressed in outward fashion. Instead, the

psychological energy which normally provides the emotions a medium for physical expression is largely consumed within the private, isolated field of the schizoid's own psychic life. Thus, the schizoid exhibits "a defect in the motivation and capacity for emotional involvement" (Livesley, West & Tanney, 1985, p. 1344) and displays a numb, under-energized affect, replete with social detachment and indifference to the praise or criticism of others.

Cognitive processes may also fall victim to the constricted status of the immediate psychological metabolism. That is, as a result of social and interpersonal retreat, a fantasy dominated inner-self may emerge in which the boundaries that normally separate fantasy from reality begin to lose distinction (Arieti, 1967; Laing, 1969). When social living is neglected in favor of a more purely subjective existence, increasingly severe psychopathology along the schizophrenia spectrum may emerge (Ansbacher & Ansbacher, 1956; Suslow & Arolt, 2009).

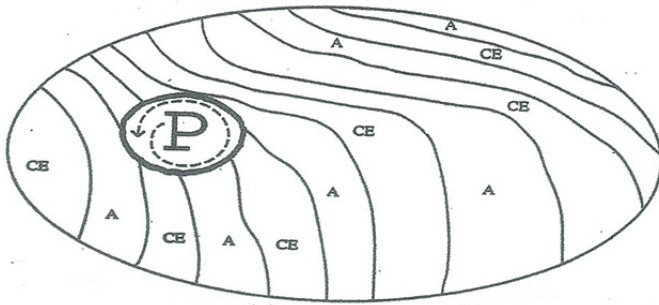


Figure 5. Constrictive Forces in the Limitation of Free Movement

Field Forces and the Schizoid Disposition

A great deal of psychological conflict may result from the positioning of P between like valences (Lewin, 1933; Marrow, 1969). "If a person is located between two like positive valences, he will tend to remain at a region between them which minimizes the [psychological] distance to each" (Cartwright, 1959, p.27). As represented in Figure 6, P is given the restraining properties created as a result of positioning between field forces charged with virtually identical positive valences. In the physical world, this situation would be analogous to an individual having the arm and leg on one side of the body pulled in the opposite direction from the arm and leg on the other side of the body simultaneously and with equal force. Significant movement toward either force field could not occur. The individual would be restrained (or isolated) within the current region. Largely stymied in the capacity to lend emotional weight to situations that would normally warrant a greater degree of emotional attending, persons manifesting schizoid pathology are particularly susceptible to the psychological analogue of this dynamic (Yontef, 2001). As such, affective flattening and avolition are often the result.

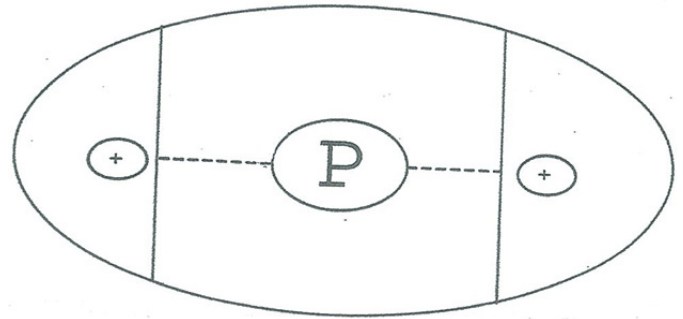


Figure 6. Dynamic of P Between Like Positive Valences

Conversely, the recurring locomotion of schizoid individuals into regions characterized by emotional coldness and detachment derive from the vector relationship created by the psychological positioning of P between equally strong negative valences. It has been maintained that this kind of positioning results in locomotion out of the immediate psychological field in the effort to avoid tension associated with the negative valences (Lewin, 1933, 1936; Marrow, 1969; Tolman, 1932). Maladaptive, inflexible locomotions aimed at escaping tension, then, may be viewed as central to schizoid manifestations of social detachment and movement into regions relatively free of emotional reactivity, as depicted in Figure 7.

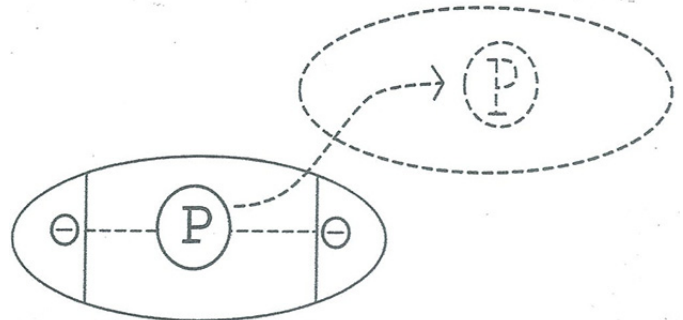


Figure 7. Dynamic of P Between Equally Strong Negative Valences

Prior to movement out of the field, P will acquire a constricted status as a result of attempts to move away from both negative fields at the same time, as represented by shrinkage of the boundary of P in Figure 8.

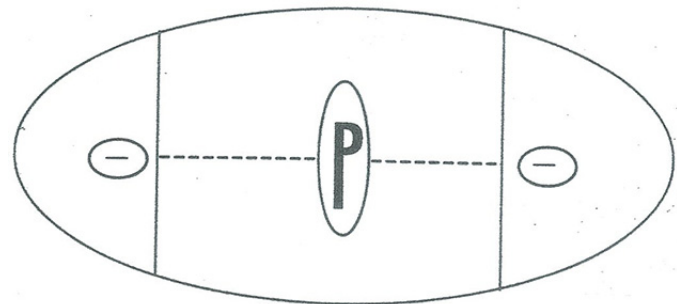


Figure 8. Constriction of P

The special distribution of like positive as well as negative valences within the psychological environment are well suited to describe certain fundamental dynamics typically associated with schizoid emotional organization, realizing that in criterion situations the psychological forces at work on P, at any given time, are likely to differ both qualitatively and quantitatively. In those common situations wherein field forces happen to possess valences that differ in kind, magnitude, number or position which, in the well adjusted personality, result in sufficiently flexible affectivity and behavior, schizoid individuals are ill equipped to respond. The aforementioned dynamics, then, will tend to seek expression through equifinal channels.

Masterson and Klein (1995) have suggested that a certain manifestation of the schizoid disposition involves a highly interactive, socially engaging objective presentation. This dynamic, it should be noted, is most often a façade, and represents only a kind of interpersonal subterfuge. Much of the inward disposition of the schizoid remains emotionally detached and sequestered (Manfield, 1992; Masterson & Klein, 1995). The façade of interpersonal and social availability is likely to present a confusing clinical picture, as it contradicts the classic schizoid presentation of detachment and aloofness (APA, 2013; Seinfeld, 1991; Triebwasser, Chemerinski, Rousos, et. al, 2012). Hence, from a psychotherapy perspective, psychologists would do well to exercise vigilance in anticipation of "schizoid maneuvering", which may involve excessive sociability, yet remain fundamentally poised in favor of emotional detachment and the avoidance of intimacy in multiple, recombinant ways (Ansbacher & Ansbacher 1956).

Differentiation and Lack of Consolidation within the Psychological Field

Adequate responsiveness to the multiform demands of emotional life requires a greater degree of differentiation of the psychological field than schizoid persons are typically capable of generating. Very limited space exists for increases in differentiation of the total field into multiple regions. This results in a sparse range of emotional options and marked limitation of flexible behavioral strategies in social and interpersonal contexts. The sparse, poorly differentiated regions within the psychological field of persons manifesting schizoid pathology are represented in Figure 9A. Figure 9B depicts the abundant, richly differentiated regions within the psychological field of normals.

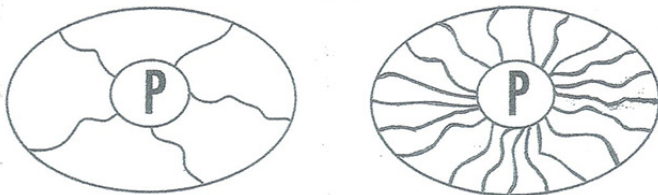


Figure 9A & 9B. Differentiation of the Schizoid Psychological Field in Comparison to Those of Normals

An entirely unified or homogeneous field is required to accommodate emotions of an extreme nature. This becomes apparent when one reflects on the experiencing of an extreme emotion, and the accompanying sense of being wholly caught up and invested in the moment. At such times, little else seems of essence; the range of cognitive-emotive attending seems to consolidate in the service of a singular point of concern. Nothing can come between the inextricable interplay of emotion and event at such times. Topologically treated, this is due to the temporary unification of all regions within the psychological field so as to provide the necessary central space for the full expanse of energy characteristic of intense emotional experiencing (Lewin, 1944). Examples of the sort would be rage, ecstasy, and other extreme emotional states rarely experienced by persons manifesting schizoid pathology (Millon, 1990).

Dynamics of the Inner-Personal Region

The energy necessary to carry out emotional processes derives from the development of tension within the inner-personal region of P. This region is comprised of a network of interdependent psychical systems or cells which tend, normally, to maintain a state of energetic equilibrium so that the full range of expressiveness indicative of a healthy, appropriately flexible affect is sustained (Cartwright, 1959). These psychical tension systems are analogous to will and need. "Certain psychical energies, that is, tense psychical systems which derive, as a rule, from the pressure of will or of a need, are always the necessary condition of the occurrence- in whatever way- of emotional experiencing" (Lewin, 1935, p. 44). There exists a profound lack of tension among systems of the inner-personal region in schizoids. This lack of tension is such that the normal firmness and connectedness among systems is markedly disturbed. The spread of tension throughout the network does not approach a state of equilibrium so that the considerable sensitivity locked away in this region is largely denied expression. Will and need, then, are not absent from the schizoid condition (Masterson & Klein, 1995). Rather, these constituents of the inner-personal region that are so vital in promoting the emotional richness and depth of human experience are, in schizoids, relatively isolated and near depletion. Figure 10 depicts this situation where A= psychical tension systems of the inner-personal region in normals, and B= psychical tension systems of the same region in schizoids.

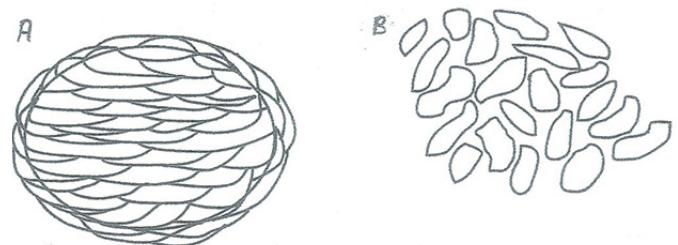


Figure 10A & 10B. Nature of Normal Psychical Tension Systems in Comparison to Those of Schizoids

The degree of communication among systems is greatly diminished, the relation of their insufficient tensions upon one another diffuse, disconnected, and tenuous. In this regard, schizoid functioning manifests in a diminution in communication with others, a social and emotional disconnectedness. Relationships, should they exist at all, are most often of a vague, overly simplistic and shallow nature.

The region P is not depicted in Figure 10 because the inner-personal region, of course, exists within the person. This should be explained to the patient in simple terms upon presentation of Figure 10. The inner-personal region is entirely subjective (Lewin, 1936, 1938, 1943) and, as such, its valence can only be determined and revealed by the patient. Hence, an uncensored, self-reflective process is to be encouraged in which it becomes the patient's responsibility to identify and connect with P in all percepts offered to Figure 10.

Logistical Considerations For the Use of Topological and Vector Constructs in Therapy

Although the TRT provides a certain structure within which patients are able to organize their experiences with the assistance of psychologists, this structure should not be imposed on patients. It is intended to serve only as a method of initial conceptualization by way of which healthier possibilities can be symbolized and then tested in criterion situations. Therefore, patients and psychologists alike are not utterly bound by the particular form of the structures as they appear in the TRT, or by the principles upon which they are based (Lewin, 1936). Rather, the creative restructuring of issues, symptoms and concerns within the general framework of a topological and vector approach should emerge as a necessary and expected standard from patient to patient.

Three domains were formulated to serve as general outcome indicators of patient investment in the structures. The domains are as follows:

1. Evidence of a self-reflective process triggered by material offered to the structures.
2. The facilitation of patient insight into problems and issues in terms of the visuospatial framework provide by the structures.
3. An increased capacity to make appropriate shifts from an interpersonal consideration of problems and issues to a more intrapsychic consideration.

Although it is often difficult for persons manifesting schizoid pathology to develop a sense of trust in others, it remains a possibility (Cooper, 2012; Lerner, 1985; Slavik, Sperry & Carlson, 1992). As patients come to respect the psychologist's level of skill and professional acumen, and as they come to appreciate the sensitivity with which their issues are addressed in treatment, increasing amounts of trust may be invested in the patient-therapist relationship (Kasanin & Rosen, 1933; Klein, 1975). The establishment of these conditions should lead to an emerging sense of acceptance in the sharing of germane material within the treatment setting. It is at such a point that psychologists may choose to introduce the TRT into therapy. Pa-

tients should be asked to view a particular structure and relate one or another aspect of their experience to it, either cognitive, emotive or behavioral. This process provides both patient and therapist with a visual metaphor by way of which certain experiences can be restructured as therapy proceeds.

Although minimal instruction may be required in terms of what certain aspects of the structures are intended to represent, the aim is to have patients organize their feelings and thoughts around the structures as independently as possible. By keeping instructional comments to a minimum, the psychologist opens the way for greater insight into the nature of each patient's personal constructs (Kelly, 1955). For example, the psychologist may state, "I'd like for you to tell me, in your own words, how your tendency to avoid connecting emotionally with other people relates to the structure of this diagram". In this way, psychologists can begin to assist patients in modifying their experiences by observing the manner in which they engage a structure, and noting precisely how it is used in terms of what is verbalized. Clinicians may also elect to present a structure, or series of them, and state, "I'd like for you to think of the P in this diagram as representative of you, and then share with me your thoughts and feelings about what is happening in the diagram". When appropriate, the psychologist challenges assumptions, explores causal factors, examines possibilities, and supports alternative approaches to self, others, and the world by assisting patients with the organization and integration of healthier, growth facilitating symbolic representations. Insight into such vital areas as the patient's self-concept, characteristic defensive maneuvers, cognitive style, and emotional processes can be addressed within the symbolic framework of the structures and integrated into treatment. Again, some degree of conceptual fine-tuning will be required by psychologists employing the topological model so as to more accurately represent the idiographic aspects of material related to the TRT from patient to patient.

Patient Advantages

The use of topological structure in treatment settings should serve to stimulate and enhance patient self-understanding in such critical areas of functioning as:

1. The nature and impact of focused reflection and its role in the process of self and other validation.
2. The effective utilization of interpersonal injections of reality.
3. Quality of cognitive appraisal and decision-making.
4. Viability of social and interpersonal approach from situation to situation
5. Abstract concept management.

Therapist Advantages

It is not intended that the psychologist's preferred theoretical perspective be replaced by incorporating topological and vector concepts into treatment. The fundamental approach to therapy should not and need not change, given that the instru-

ment is intended for trans-theoretical application. To the contrary, if utilized in supplemental fashion, the topological model may:

1. Serve as a benchmark whereby interpretations can be checked for accuracy against a preferred theoretical perspective.
2. Add insight to the psychologist's perspective which, in turn,

- may lead to increased psychotherapeutic movement.
3. Provide the psychologist with a conceptual system by which to better understand a discrete circumstance in accordance with typical response patterns.

The following table suggests various possibilities for the framing and use of visuospatial constructs in light of several theoretical approaches to treatment:

Theoretical Approach	Suggestions for Framing and Use of Visuospatial Constructs
Object Relations	Shifting of energetic cathexes from objects that have become lethal to more supportive objects
Self-Psychology	Identification and integration of self-soothing introjects
Individual (Adlerian) Psychology	Reshaping of mistaken apperceptions and convictions
Cognitive Therapy	Restructuring of anxiogenic, depressogenic or schizogenic thought processes
Analytical (Jungian) Psychology	Nature and impact of archetypes and psychetypes on thoughts, feelings and actions
Humanistic Psychology	Emphasis on symbolic representations of wholeness, self-determination, and organismic valuing
Existential Approach	Philosophical consideration and symbolic representation of freedom, responsibility, isolation, meaning, and other universal themes
Ego Psychology	Scale-space analysis of ego-strength to ego-weakness
Classical Psychoanalytic Orientation	Special emphasis on interpretation; symbolic impact of id impulses on superego directives and mediational dynamics of ego; supplemental analysis of transference phenomena by way of responses offered to the structures

Discussion

The use of topological structure in psychotherapy settings holds significant promise in assisting patients to manage more effectively their issues and symptoms (Woods, 2013). This advantage arises from the meaningful manipulation of visuospatial symbols, and their successful integration at cognitive, emotive, and behavioral levels. The epistemology of David Hume (2008) suggests that knowledge derives from either the analytical or empirical processing of experience. The organization of TRT structures by patients, as well as their application by psychologists, rely heavily on the empirical tradition, with its emphasis on the revelation of knowledge through sensory experience and observation. However, the more purely cognitive-analytical constituents of verbal concept formation and logical reasoning ability represent fiducial constructs whereby effective utilization of the instrument is made possible.

Sloman (2003) has suggested that visual perception involves more than detecting what exists in the environment. It also involves the ability to visualize what does not exist, yet is possible. From a cognitive perspective, visual-spatial reasoning ability requires us to see empty space as containing possible paths of motion, and to see the possibility of a dynamic presentation in fixed objects (Anastasi, 2013; Goldstein, 2011; Sloman, 2003). The use of visual-spatial reasoning ability in psy-

chotherapy settings, by way of the TRT, allows patients to represent the myriad facts and exigencies associated with daily living as clear and distinct alternative conditions, suspended in manipulable scale space, so that psychological health, growth and development become increasingly attainable pursuits.

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The Life Course Perspective of Delinquency: An Empirical Analysis of Female Juvenile Offending from the National Youth Survey

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Extensive literature has been conducted on the stability of problem behavior through longitudinal studies. Historically, males, both adult and juvenile have been heavily studied, due to statistically differences of gender involvement in crime and delinquency. The objective of this study is to examine the effects of the life course perspective on female juvenile offending, utilizing data from the National Youth Survey. The life course perspective strongly suggests that certain behavior in early childhood, middle adolescence, and adolescence are precursors to adult criminal behavior. Traditionally female crime and delinquency have been attributed to many sociological theories, and feminist theories of crime. However, it is important to know the impact of the life course perspective on delinquent behaviors of chronic offending in female juveniles.

Keywords: Life course criminology, life course perspective, juvenile females, and girls

Historically males have been heavily studied from a life course theoretical perspective, due to statistical differences of gender involvement in crime and delinquency. Males engage in more delinquency than females. The Rand Corporation Study on Habitual Criminals Programs surveyed 49 incarcerated armed robbers serving at least a second prison term. Wolfgang (1972) sampled 9,945 individuals born in Philadelphia; he included 10% of the sample in a longitudinal follow up. The third is Shannon (1988) Racine, Wisconsin, birth cohort studies followed three mix-sex birth cohorts, a total sample of 2,676. These actual statistics on juvenile involvement in delinquent behavior confirm that male delinquency the issues most studied.

Age is fundamental in understanding the life course perspective. Extensive literature has been conducted on the stability of problem behavior. Campbell, Shaw, and Gilliom (2000) research on behavioral problems in toddlers, showed "the results of studies of young children with externalizing problems beginning as early as age two or three years indicate moderate to strong continuity when symptoms of disruptive behaviors are frequent, relatively severe, and pervasive" (p. 472).

Traditionally female crime and delinquency have been attributed to social bonds and many sociological theories, and recently feminist theories of crime. These theories do a thorough job in explaining general female criminal and delinquent behavior. General explanation of delinquency and offending behavior does not explain nor explore extreme behaviors. The life course perspective includes the explanation of extreme delinquent behaviors and labels this behavior chronic or life course persistent. The dilemma is that most theories, including life course, have been largely applied to male delinquency.

The life course perspective has very specific variables and characteristics that account for violence and serious behavioral problems that are evident very early in the life course. Precursors such as prenatal trauma, hyperactivity, physical aggression, and low self-control to name a few are attributed to life course offending (Farrington, 2003 & Moffitt, 1993). These attributes along with stability and continuity account for much of the perspective (Sampson & Laub, 1993). All of the above traits are gender neutral both male and female juveniles display them. Loosely applying the life course perspective to juvenile female offending because they fall into a cohort does not adequately explain the extent of serious chronic delinquency of female juveniles.

The objective of this study is to examine the effects of the life course perspective on female juvenile offending. The life course perspective strongly suggests that certain behavior in early childhood, middle adolescence, and adolescence are precursor to adult behavior. This research will identify among juvenile females the delinquent behavioral precursors that explain later criminal behavior which suggest chronic, and violent juvenile female offending. This research suggests that examining early onset of problem behaviors will show that delinquency and crime starts early. This notion of early onset of problem behavior does not apply to all juvenile female delinquents, but does shine a new light on chronic juvenile delinquents.

Literature Review

Life course perspectives are a form of developmental criminology that has grown out of a particular sociological framework of human experiences over time (Howell, 2009). Developmental criminology is the study of offending careers in relation to age. Currently, developmental criminology's theoretical orientation is gaining larger acknowledgements due to its usefulness to view the life course of delinquency and of-

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fending. The developmental angle focuses research in two areas: "the age link to which an individual changes and risk or causal factors that explain changes in offending patterns overtime" (Howell, 2009). Developmental criminology is widely known for its use of longitudinal studies. Longitudinal studies account for our understanding of delinquent and criminal behavior over time.

Longitudinal studies are effective in examining within individual changes in behavior over time using repeated measurements (Thornberry & Krohn, 2003). Kalb, Farrington and Loeber (2001) list and describe nearly 60 leading longitudinal studies on delinquency, substance abuse, sexual behavior, and mental health problems with childhood samples. These studies are known for identifying the cause, or risk factors associated with the onset, escalation, de-escalation, and desistance in individuals' delinquent and criminal behavior.

The life course perspective focuses on development across the life span, with particular interest on people's progress within socio-cultural defined roles and social transitions that are age graded. Elder (1985) describes the terms trajectories and pathways as long term patterns of social development in social institutions. A trajectory or pathway is an avenue of development over time, such as involvement in delinquency (Elder, 1985). Transitions are short term changes in social roles within long term trajectories, such as school misbehavior, dropping out of school, and desistance from delinquency (Sampson & Laub, 1990). Pathways are interrupted by life events (short-term transitions) such as being arrested, graduating from high school or getting married. Social institutions include families, schools, employment, and governments and legal institutions.

Juvenile offending careers differ on several dimensions with age, such as the length of the delinquent career, the frequency of offending, the seriousness of the offenses that are committed, and desistance patterns (Howell, 2009). Howell (2009) examined various types of juvenile offender careers that evolve from the delinquency development process (usually associated with age). This distinguishes everyday juvenile delinquents from serious, violent, and chronic juvenile offenders. In order for the juvenile justice system to target offenders successfully, its officials must be able to distinguish between juvenile offenders who are likely to desist from delinquency and those who are likely to persist in their delinquent careers. "Off-age" transitions can produce disorder in the life course.

Moffitt (1993) life-course persistent offenders begin offending in childhood (4 to 9 years old), and adolescence-limited offenders begin their offending later (typically around 12). For example the life course persistent offender engages in biting and hitting at age 4, shoplifting and truancy at age 10, selling drugs and stealing cars at age 16, robbery and rape at age 22, fraud and child abuse at age 30. Characteristics that distinguish life-course persistent offenders are: early onset offending, active offending during adolescence, escalation of offenses seriousness, and persistence in crime in adulthood. Moffitt (1993) central argument is that the main causes of life course persistent offending are the interaction of neuropsychological defi-

cits with adverse environmental conditions in early childhood. Most children with neuropsychological deficits overcome them and do not become life course persistent offenders (Loeber & Farrington, 2001).

Thornberry (2005) explains that the course of a delinquent career refers to persistence: how long the career path and the association with frequency and seriousness of offenses. This research incorporates four broad developmental stages: the preschool years, childhood, adolescence, and late adolescence and emerging adulthood. These developmental periods (preschool years, childhood, adolescence, late adolescence and adulthood) are not viewed stages as having sharp boundaries. Rather they are regions of the more gradual, continuous process of human development.

Loeber et al. (2008) have debunked a long held notion that juvenile offenders are not selective in their offense pattern and often engage in "cafeteria style" offending. Cafeteria style offending suggest that juvenile offenders pick and choose from a wide variety of offending options. Interestingly, serious violent offenders were more likely than theft offenders to specialize in offense patterns. Half of the violent offenders in both cohorts were specialized offenders, compared with a third of theft offenders.

Huizinga and Jakob-Chien (1998) examined the overlap of persistent serious delinquency and victimization in their Denver Study. This analysis showed that violent victimization is a key risk factor for serious violent delinquency. As the seriousness of offending increases, so does the probability of being violently victimized: 49% of male serious violent juvenile offenders were violently victimized, compared with 12% of non-delinquents. Chesney-Lind (1997) proposed six stepping stones for a subgroup of girls' pathway to serious, violent and chronic juvenile offender careers: child physical and sexual abuse, mental health problems, drug abuse, running (or being thrown) away, youth gang membership and detention or incarceration. Early pubertal maturation might be a precursor for the onset of both depression and antisocial behavior among girls, this is a important screening point (Brooks-Gunn, Graber & Paikoff, 1994; Stattin & Magunsson, 1991). Child abuse, early dating, and precocious sexual activity increase the risk of gang involvement for boys and girls (Thornberry & Krohn, 2003)

Girls in correctional facilities show multiple serious disorders and problem behaviors. In examination of the records of girls held in a secure Colorado facility, Rubin (2000) found that 100% of them suffered from posttraumatic stress disorder. Other disorders in the population included substance abuse (80%); psychiatric disorders (conduct disorder, major depression, bipolar disorder, and oppositional defiant) (67%); and eating disorders (50%). A typical girl's story could be described as follows: at age 13 or 14 she began risky behavior, including running away from home, polydrug and alcohol use, school failure, and truancy, followed by expulsion from school. She became sexually active at age 13 and was the victim of sexual assault in the same year. She was first shot and stabbed at age 14, at the same age at which she delivered her first child (29% of the total sample had been pregnant, 16% while in cus-

tody). About half of the girls in the sample became affiliated with gangs at age 13-15 and more than two-thirds of gang members became very involved in gang life.

Elder (1985) explains that transitions or turning points can modify the life trajectory and redirect life paths such as: social institutions, and triggering life events that modify trajectories including school, work, the military, marriage, and parenthood. According to Sampson and Laub (1993) a large portion of longitudinal evidence on stability comes from psychologist and others who study "antisocial behavior" generally where the legal concept of crime may or may not be a component. Huesmann and colleagues (1984) found that early aggression predicted later aggression and criminal violence. They concluded that "aggression can be viewed as a persistent trait that ... possesses substantial cross situational consistency" (Huesmann et al. 1984 p. 1120). Robins (1991) in earlier studies found a high level of stability in crime and aggression over time. Sampson and Laub (1993) emphasize the importance that informal and formal social control varies across the life span according to age. In childhood the dominant institutions of social control are the family, school, peer groups, and the juvenile justice system.

To date much research has been conducted on male delinquency over time and females' criminogenic risk and needs once the female is incarcerated utilizing risk assessment instruments. Nevertheless, there is limited research that applies the life course concepts in a gender specific manner focusing primarily on female delinquency. Thus, this study seek to understand life course correlates and circumstances for female juvenile offenders that propel them into delinquency.

Method

Data Source. Secondary data analysis was performed on data from Delbert Elliot's National Youth Survey (NYS). The NYS is a longitudinal study that consists of face to face interviews with youth in the United States. A national sample of the American youth population was randomly selected by area probability sampling. Personal interviews were conducted with the youth and their parents at seven waves. The first wave of interviews were conducted in 1976, the second in 1977, the third in 1978, the fourth in 1979, the fifth in 1980, the sixth in 1983, and the seventh in 1987. This data was selected because it is considered by the Bureau of Behavioral Science as a successful longitudinal study. This type of data re-analysis is not uncommon; Sampson and Laub (1993) *Crime in the Making* re-analyzed the Glueck's 1950's data from *Unraveling Juvenile Delinquency* (Glueck & Glueck, 1950).

For each wave, except the seventh, youth and their parents were surveyed for events and behavior that occurred during the previous calendar year to gain a better understanding of both conventional and deviant types of behavior by youth. During the seventh wave data was only collected from the young adult on events and behaviors that occurred during the previous calendar year when the young adults were between the ages of 20 to 29.

The interview surveys collected data on the demographic

and socioeconomic status of the respondent parents and friends, neighborhood problems, education, employment, skills, aspirations, encouragement, normlessness, attitudes toward deviance, exposure to delinquent peers, self-reported depression, delinquency, drug and alcohol use, victimization, pregnancy, abortion, use of mental health and outpatient services, violence by respondent and acquaintances, use of controlled drugs, and sexual activity. Additionally, detailed file-level information, such as record length, case count, and variable count, has been archived at the Inter-University Consortium for Political and Social Research, and accessed for data analysis.

Sample. The participants of interest for this research are the females in the entire population. Therefore, of the 1,725 cases surveyed all of the female cases will be included for data analysis. During the first wave of the National Youth Survey females comprised 47% of the respondents, approximately half of the surveys. This percentage remained the trend of female respondents during all seven waves of the survey because the initial respondents were tracked over 10 years. Historically, when collecting and analyzing longitudinal data on delinquency and deviance, female respondents are the minority due to their relatively low involvement in delinquency and thus excluded from data analysis (Wolfgang et al, 1972; Moffitt, 1993, Farrington 2003). This exclusion exist partly because of the low variance across variables that female respondent data analysis present. However, that is not the case with the National Youth Survey, which made this sample a good match for current data analysis.

Measures. Predictor variables were selected based on the life course literature. Farrington (2003) describes the main components of his developmental and life course theoretical orientation in addition to summarizing key findings of five other important developmental and life course theories. Farrington's work guided the selection of variables. The key concept that guides offending for males is antisocial behavior. The medical community (Diagnostic and Statistical Manual of Mental Disorders, 4th- DSM-IV) describes antisocial behavior as a pattern of behavior that is verbally or physically harmful to other people, animals, or property, including behavior that severely violates social expectations for a particular environment. This description was utilized to determine predictor variables when applying the life course perspective to female juveniles.

All of the survey questions that fall into the category of individual factors serve as the predictor variable. Individual factors include survey questions that related to hyperactivity-impulsiveness and risk-taking, antisocial child behavior, including aggression and bullying. All of the survey questions that fall into the categories of family factors, socioeconomic factors, peer factors, school factors, and neighborhood factors serve as control variables. Family factors include survey questions that related poor parental supervision, harsh discipline and child physical abuse, inconsistent discipline, a cold parental attitude and child neglect, low involvement of parents with children, parental conflict, broken families, criminal parents, and delin-

quent siblings. Socioeconomic factors include survey questions that related to low family income, and large family size. Peer factors include survey questions that related to delinquent peers, peer rejection, and low popularity. School factors include survey questions that related to labeled school behaviors by teacher. Lastly, neighborhood factors include survey question that related to a high crime neighborhood.

The outcome variable was selected based on the life course literature. Farrington (2003) describes main components of crime or delinquency for this purpose is influenced by antisocial behavior, which is influenced by antisocial potential. All of the survey questions that fall into the category of self reported delinquency such as: property damage related questions; theft related questions including vehicle related thefts; curfew violation and truancy related questions; aggression and violence related questions; sex related questions; status and minor act questions were all selected from the National Youth Survey data for analyzing. Because each question on the National Youth Survey was coded as an individual variable, variables were merged in their respective categories and recoded.

Model Specification. Logistic regression analysis was used for the prediction of female delinquency or crime a dichotomous variable (i.e., 2 possible outcomes) by a set of ordinal variables (i.e., 1-not important, 2-somewhat important, 3-very important) that were treated as discrete predictor variables. Gender was dichotomized for male and female, to identify the likelihood of delinquency. The predictor variable was not normally distributed, linearly related nor had equal variance in each group. Neighborhood questions ranged from questions about problems with traffic to problems with assaults and muggings. In the original NYS data sets all of the survey questions were coded as variables and individual responses were coded as cases. From the original NYS data sets self reported delinquency was recoded as a dichotomous variable with 0- as youth who never engaged in a delinquent or criminal act, and 1-as youth who had engaged in a delinquent or criminal act. The responses to the various types of questions were Likert in nature the choices were: 1-Not a problem; 2-Somewhat problem; 3-Big problem. They were coded accordingly.

This research main focus is determining the relationship of early onset delinquency, persistent delinquency and life course factors among juvenile females over time. The regression was utilized to estimate the statistical relationship among delinquency and life course factors over time. The multivariate logistic regression equation controls for individual factors, family factors, socioeconomic factors, peer factors, school factors, and neighborhood factors when analyzing delinquency by females.

Multivariate Logistic Regression Equation 1: Wave I.

$$\text{Delinquency} = \beta + \beta_1(\text{individual_factors}) + \beta_2(\text{family_factors}) + \beta_3(\text{economic_factors}) + \beta_4(\text{peer_factors}) + \beta_5(\text{school_factors}) + \beta_6(\text{neighborhood_factors}) + e$$

Multivariate Logistic Regression Equation 2: Waves II.

$$\text{Delinquency} = \beta + \beta_1(\text{individual_factors}) + \beta_2(\text{peer_factors}) + \beta_3(\text{interpersonal_violence}) + \beta_4(\text{school_factors}) + e$$

Multivariate Logistic Regression Equation 3: Waves IV, V, VI.

$$\text{Delinquency} = \beta + \beta_1(\text{individual_factors}) + \beta_2(\text{peer_factors}) + \beta_3(\text{school_factors}) + \beta_4(\text{interpersonal_violence}) + e$$

These equations were utilized at all waves of the NYS with the exception of wave III and wave VII due to the availability of the data at wave III. At wave VII data was not analyzed because at wave VI there were no predictors of female delinquency and crime, therefore ending continuity.

Results

Descriptive Statistics. Frequencies of ethnicity were conducted at each wave of the National Youth Survey (NYS). The percentages were consistent across each wave of analysis with minor deviation at wave IV. This variation can be explained by the change in sample size, where the sample was equal to 738 females. The majority of the sample was white females (80.2% and 80.6% at wave IV). African Americans comprised 13.5% and 13.4% at wave IV of the sample, while Hispanics made up 4.6% and 4.2% at wave IV and other races and ethnic groups comprised 1.7%. Other races and ethnic groups consist of Asian, American Indian, and unknown races. This demographic on race may skew the data because theoretically blacks and Hispanics commit more offenses. According to Wolfgang (1972) Blacks are four times more likely to have an arrest before the age of 18 than whites. Keeping in mind that the majority 80 to 90% of Wolfgang's population was males, and race factors tend to remain consistent across genders.

All of the females at the time of data analysis ages ranged from 11 through 24 for all waves. As shown in Table 1 age ranges were relatively evenly distributed among each wave with each age group age percentage between 13 and 16 percent. Even at wave IV where there were fewer female respondents. This study did not independently control for age. This study did consider age in relation to offending across each wave of the survey. Age at wave I began at 11 years through 17 years. Age range at wave II increase by one year from the ages at wave I, considering wave II survey one year prior to wave I. Age increased by one year for each wave of the survey I through V. Age at wave VI began at 18 years through 24 years, as wave IV survey was administered in 1983 three year after wave V (1980).

Table 1.
Frequency Distribution of Age: Across Waves (n=807)

Wave I		Wave II		Wave IV*		Wave V		Wave VI	
Age	%	Age	%	Age	%	Age	%	Age	%
11	15.5	12	15.5	14	15.0	15	15.5	18	15.5
12	16.0	13	16.0	15	16.5	16	16.0	19	16.0
13	16.6	14	16.6	16	17.1	17	16.6	20	16.6
14	13.6	15	13.6	17	13.4	18	13.6	21	13.6
15	14.3	16	14.3	18	14.1	19	14.3	22	14.3
16	13.4	17	13.4	19	13.0	20	13.4	23	13.4
17	10.7	18	10.7	20	10.8	21	10.7	24	10.7
Total	100.0	Total	100.0	Total	100.0	Total	100.0	Total	100.0

*n=738

Table 2 below shows that not all six independent variables in the model are significant in estimating delinquency. Data analysis found that socioeconomic factors, family factors, school factors, and peer factors do not have a significant impact on delinquency at wave I of the NYS. However, data analysis found that neighborhood factors, and individual factors are significant in determining the probability of a female engaging in delinquency between the ages of 11 through 17. The logistic re-

gression equation was used to predict delinquency from life course factors. For every one unit increase in neighborhood factors the probability of engaging in a delinquent act increased by 1.580. Moreover, with every one unit increase in individual factors the probability of engaging in delinquent act increases by 9.430. An individual factor significantly increases delinquency at wave I of the survey.

Table 2.
Logistic Regression Estimates of Delinquency: Life Course Comparison, Wave 1

	β	S.E.	Sig.	Exp(β)
Socioeconomic factors	.167	.294	.570	1.182
Neighborhood factors	.457	.221	.039	1.580
Family factors	.125	.214	.558	1.134
School factors	.583	.775	.452	1.792
Individual factors	2.244	.360	.000	9.430
Peer factors	.225	.242	.352	1.252
Constant	.810	.217	.000	2.248

Table 3 below shows that not all four independent variables in the model are significant in estimating delinquency. Data analysis found that school factors and individual factors do not have a significant impact on delinquency at wave II of the NYS. However, data analysis found that peer factors and attitude toward interpersonal violence factors are significant in determining the probability of a female engaging in delinquency between the ages of 12 through 18. For every one unit increase in peer factors the probability of engaging in a delinquent act

increased by .718. Furthermore, with every one unit increase in violent factors the probability of engaging in delinquent act increases by 11.12. Violent factors significantly increase delinquency at wave II of the survey. The key construct underlying offending is antisocial potential which refers to the potential to commit antisocial acts. Violence and the potential to commit violence based on interpersonal attitudes of violence qualify as antisocial potential.

Table 3.
Logistic Regression Estimates of Delinquency: Life Course Comparison, Wave II

	β	S.E.	Sig.	Exp(β)
School factors	-.245	.405	.545	.782
Individual factors	-.263	.149	.077	.769
Peer factors	-.332	.168	.048	.718
Violence factors	2.408	.488	.000	11.115
Constant	-1.669	.502	.001	.188

Table 4 below shows that not all four independent variables in the model are significant in estimating delinquency. Data analysis found that peer factors and violence factors do not have a significant impact on delinquency at wave VI of the NYS. However, data analysis found that family factors and individual factors are significant in determining the probability of a female engaging in delinquency between the ages of 14 through 20. For every one unit increase in family factors the probability of engaging in a delinquent act increased by 2.433.

Additionally, with every one unit increase in individual factors the probability of engaging in a delinquent act increases by 10.869. An individual factor significantly increases delinquency at wave IV of the survey. Antisocial potential depends on impulsiveness, strain, modeling, socialization processes, and life events, while short-term variations in antisocial potential depend on motivating and situational factors. Antisocial potential characteristic are identified through individual factors.

Table 4.
Logistic Regression Estimates of Delinquency: Life Course Comparison, Wave IV

	β	S.E.	Sig.	Exp(β)
Family factors	.889	.367	.015	2.433
Individual factors	2.386	.304	.000	10869
Peer factors	.460	.273	.092	1.584
Violence factors	.820	1.359	.547	2.270
Constant	-.107	1.358	.937	.899

Table 5 below shows that not all five independent variables in the model are significant in estimating delinquency. Data analysis found that family factors neighborhood factors and peer factors do not have a significant impact on delinquency at wave V of the NYS. However, data analysis found that individual factors and violence factors are significant in determining the probability of a female engaging in delinquency between the ages of 15 through 21. Wave V logistic regression estimates were used to predict delinquency from family factors, neigh-

borhood factors, individual factors, peer factors and violent factors. For every two unit increase in individual factors the probability of engaging in a delinquent act increased by 12.16, while for every five unit increase in violent factors the probability of engaging in delinquent act increases by 245.103. Individual and violent factors significantly increase delinquency at wave V of the survey. Delinquency is most prevalent and problems behaviors emerge at wave V.

Table 5.
Logistic Regression Estimates of Delinquency: Life Course Comparison, Wave V

	β	S.E.	Sig.	Exp(β)
Family factors	.502	.396	.204	1.652
Neighborhood factors	.057	.317	.859	1.058
Individual factors	2.498	.352	.000	12.162
Peer factors	.596	.344	.083	1.816
Violence factors	5.502	1.045	.000	245.103
Constant	-4.564	1.005	.000	.010

Table 6 below shows that none of the four independent variables in the model are significant in estimating crime. Data analysis found that transitions, individual factors, neighborhood factors and peer factors do not have a significant impact on crime at wave VI of the NYS. This data analysis found that life course factors are not significant in determining the probability of a female engaging in crime between the ages of 18 through 24 (adulthood). The logistic regressions used to estimate crime at wave VI of the NYS were unable to predict crime from any of the life course variables at this wave.

This finding can be explained by the measures used to account for crime. Measures that were used in previous waves of the study were continuously coded and operationalized to account for crime. While these measures of attitudes and perceptions that lead to antisocial potential and delinquency are not criminal they are significant in examining the life course and the early onset of problem behavior. Therefore, the results are not shocking that none of the measures predicted crime, due to the use of the measure.

Table 6.

Logistic Regression Estimates of Delinquency: Life Course Comparison, Wave VI

	β	S.E.	Sig.	Exp(β)
Transition	-.030	.331	.927	.970
Individual factors	.520	.538	.334	1.681
Neighborhood factors	.030	.455	.948	1.030
Peer factors	18.151	3488.907	.996	76346840.688
Constant	-21.311	3488.907	.995	.000

Table 7 below shows that none of the four independent variables in the model are significant in estimating delinquency. Data analysis found that transitions, individual factors, neighborhood factors and peer factors do not have a significant impact on crime at wave VI of the NYS. This data analysis found that life course factors are not significant in determining the probability of a female engaging in delinquency between the ages of 18 through 24 (adulthood). The logistic regressions

used to estimate delinquency at wave VI of the NYS were unable to predict delinquency from any of the life course variables at this wave. This finding can be explained by the conceptualization of the outcome variable that strongly implies that for this sample delinquency does extend into adulthood. All of the females at this wave of the study were adults. However a juvenile concept was attempted to be applied to adult behavior.

Table 7.

Logistic Regression Estimates of Delinquency: Life Course Comparison, Wave VI

	β	S.E.	Sig.	Exp(β)
Transition	18.751	1692.240	.991	139174688.211
Individual factors	16.842	1128.276	.988	20622679.335
Neighborhood factors	18.867	1173.692	.987	156214467.451
Peer factors	18.669	1062.986	.986	128135048.391
Constant	-2.785	.461	.000	.062

Discussion and Implications

This study examined the effects of the life course perspective on female juvenile offending. The data analysis strongly suggests that certain behavior in early childhood, middle adolescence, and adolescence were predictors of delinquency. The ability to determine or explain later criminal or delinquent behavior was not achieved in this research. Adolescent limited offending tends to apply to this sample. Characteristic that distinguishes life-course persistent offenders such as: early onset offending, active offending during adolescence, escalation of

offenses seriousness, and persistence in crime in adulthood were not conceptualized for data analysis.

This research did identify among juvenile females the behavioral precursors that explain delinquent behavior to predict age graded delinquency. This research suggests that examining problem behaviors will show that delinquency and crime starts early for females but tapers off into adulthood. This notion of early onset of problematic behaviors does not apply to all juvenile female delinquents, and due to limitations in this research chronic female juvenile delinquents were not identified. This study did not look at delinquency based on offense type.

Prior research suggests that mental health and relationship factors including sexual abuse appear to independently contribute to the age of first arrest in girls. In addition to these mental health and relationship factors that contribute to female delinquency, additional factors contribute to early onset of offending in girls. A challenge that has presented itself through the literature and in this study is that mental health and relationship factors alone fail to provide a robust answer to this question about female delinquency persistence into adulthood. Empirically-informed programming for female juveniles is evidence of a growing society. Not responding adequately means a slow incline in female juvenile offending with an increase in violent, drug and property offenses. Each time new policies and sentencing guidelines are implemented or imposed on female juveniles, the probability of them encountering the juvenile justice system increases (Chesney-Lind, 2013). To counter this effect community supervision sanctions are being utilized more. It is important that an empirical examination of female juveniles involved in the juvenile justice system be completed. This examination can attempt to clearly define the scope of female juveniles' offending and clearly define the issues involving female juveniles' adjudicated to probation.

If the juvenile justice system does not offer gender-relevant interventions, society will continue the status quo. Female delinquency will continue to increase and juvenile females will continue to struggle with community sanctions and recidivism. Taking into custody female juvenile delinquents will not address juvenile offending needs. When a female juvenile delinquent is adjudicated to community supervision without the proper interventions, recidivism remains a concern. Juvenile female offending is commonly impacted simultaneously by factors in the juvenile justice system, in the juvenile's home, in communities and in schools. Thus, it is important to analytically examine the scope of the problem to clearly define the issues of juvenile female offending.

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Experimental Community-Based Interventions for Delinquent Youth: An Evaluation of Recidivism and Cost-Effectiveness

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Research has documented negative effects of residential confinement in treating delinquent youth. Negative influences of anti-social peers, the institutional environment, as well as disproportion in the intensity of traditional juvenile incarceration relative to youths' underlying risk levels, may each contribute to these findings in the literature (Latessa & Lowenkamp, 2006). These detrimental factors, as well as serious budget constraints including a 12 percent reduction in tax revenue and cuts in juvenile justice funding throughout the nation, have led many to question the viability and efficacy of institutional treatment for moderate risk juvenile offenders (Andrews & Bonta, 2006; Kam, 2010; McNichol et al., 2010). The current assessment examines the recidivism and cost effectiveness of experiential, community-based programs. Using a quasi-experimental design, the evaluation compares similar risk youth served in day treatment and juvenile residential programs in Florida. Results reveal that the experiential community-based programs achieved statistically significantly lower rates of recidivism and subsequent placements compared to a matched sample of residential youth. Substantial differences were found for subsequent felony offending, with moderate to strong estimated mean effect sizes achieved by experiential non-committed programs in comparison to the residential matched group. With cost savings of \$23,000 per youth, results suggest that community-based programming represents both a programmatic and cost effective alternative to residential incarceration for delinquent youth.

Keywords: community-based; juvenile justice programs; residential commitment; recidivism effectiveness; cost effectiveness

The economic recession in the United States following the subprime mortgage crisis at the end of 2007, left states reeling from the effects of an average 12% reduction in state tax receipts (McNichol, Oliff, & Johnson, 2010). Budget deficits ranged from the hundreds of millions in smaller states to larger deficits of more than \$3 billion in Florida and \$17 billion in California (Kam, 2010; McNichol et al., 2010). As a result, states began exploring ways to reduce spending and increase the efficiency of critical services, including public safety programming. Criminal and juvenile justice expenditures were targeted, with states such as Florida attempting to reduce costs of delinquency interventions by diverting youth from costly residential treatment to community-based programming.

The decisions for these shifts were and continue to be guided by a growing scientific literature of systematically collected

and reviewed outcome research documenting the effectiveness of community-based treatments that address adolescents' risks and criminogenic needs—personal, familial, or social characteristics that place a juvenile offender at risk for recidivism (Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990; Lipsey, 1999). The use of such interventions is a strategy many states are now adopting in an effort to both reduce juvenile recidivism and avoid costs associated with juvenile detention and confinement.

The purpose of the current assessment is to add to this growing body of work by examining the efficacy of experiential, community-based programs in comparison to residential commitment. We explore subsequent juvenile and adult court involvement following program completion from community-based and residential services. Further, the assessment analyzes the relative costs of each intervention option and presents recommendations for future research.

Prior Research

Andrews and colleagues (1990) championed the strategy of matching adolescent risks and needs to treatment as they began

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to assimilate correctional outcome studies using meta-analytic techniques. They began to develop a framework for principles of effective intervention that emphasized individualized treatment and a psychologically informed approach to addressing criminal conduct (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990). The weight of the meta-analytic evidence suggested that greater recidivism reduction effects could be achieved by assessing individuals for risk to recidivate and targeting interventions to those at highest risk (Andrews, 1990; Gendreau, 1996). Treating dynamic risk factors found in the research to be the strongest predictors of reoffending, rather than non-criminogenic needs, was critical to success, especially in view of scarce resources. By matching delinquent youth to services based on their individual risks and needs, rehabilitative treatment could be made more efficient and effective.

In view of continued economic constraints, the question may be asked whether states can implement a strategy using less expensive community-based treatment founded upon this framework and achieve outcomes comparable to or better than institutional programming. Lipsey (1999) found that juvenile probation, parole, and community-based programming tended to have greater effect sizes than institutional programs. Others (Andrews & Bonta, 2006) have reached similar conclusions. Even though differences in efficacy between institutional and community-based programming have been found fairly consistently, the nature and quality of the services make a powerful difference. While Lowenkamp, Latessa and Holsinger (2006) failed to find that community-based treatments were necessarily more effective than correctional programs, they did find that adherence to the principles of effective treatment differentiated ineffective and effective community-based programming. In corroborating research, Latessa and Lowenkamp (2006) reported lowered recidivism rates for programs, whether residential or non-residential, that targeted high-risk offenders with increased supervision, treatment dosage and duration, and referrals to outside resources. Programs incorporating these principles, while monitoring implementation fidelity, appear to lower juvenile recidivism rates (Holsinger, 1999; Lowenkamp, Makarios, Latessa, Lemke, & Smith, 2010).

In a more recent meta-analysis of 545 treatment programs, the Washington State Institute for Public Policy (Drake, Aos, & Miller, 2009) found a number of effective community-based treatment programs that were reasonably priced and demonstrated positive returns. Included among these were Multidimensional Treatment Foster Care, Functional Family Therapy, Adolescent Diversion Project, Multisystemic Therapy, and Family Integrated Transitions. In most of these studies, the characteristics of the offenders and the specific type and quality of treatments provided were generally more powerful predictors of success than the site of the program. However, more positive outcomes were associated with treatments taking place in the community—the enduring environment of the youth (Drake, et al., 2009). In sum, the research suggests that treatments designed to have an effect not only on the individual (e.g., problem-solving skills, criminal thinking, anti-social personality traits), but also on their social environment, (e.g.,

communication--refusal skills, anti-social peer associations) are more likely to be effective.

AMikids Day Treatment Programs

Juvenile justice interventions come in a variety of forms and typically fall within one of seven philosophical approaches: surveillance, deterrence, discipline, restoration, counseling, skill building, and wrap around services (Lipsey, 2009). Of these approaches, skill-building models (which includes experiential learning and challenge programs) show some promise as an effective juvenile intervention (Gillis & Gass, 2010; Lipsey, 2009; Wilson & Lipsey, 2000).

Founded in 1969, the non-profit AMikids, Inc. (formerly Associated Marine Institutes), formed in direct response to ineffective programming in the juvenile justice system. The foundation of AMikids' approach is to provide treatment in an experiential setting, specifically through marine vocational instruction. Over the course of 50 years, AMikids expanded its approach through development of the AMikids Culture which includes six core components: bonding, family atmosphere, non-prison environment, positive learning environment, gender responsiveness, and cultural relevancy (AMikids Personal Growth Model, 2010). Today, AMikids serves at-risk and delinquent youth around the nation through four primary program settings: 1) residential programs for adolescent males, 2) programs for at-risk girls, 3) alternative schools, and 4) community-based experiential learning environments (such as day treatment, marine institutes, and wilderness camps). Focusing on the latter, we sought to evaluate the effectiveness of community-based experiential programs at reducing subsequent offending and providing a cost-effective alternative to residential care for juvenile offenders. Specifically, we examined the extent to which similar risk youth, as assessed through standardized risk assessments, may be served as effectively, if not more effectively, through interventions such as AMikids programming than through traditional juvenile residential commitment.

Methods

Data. Data for the study were compiled from the Florida Department of Juvenile Justice (FDJJ), Juvenile Justice Information System (JJIS), Florida Department of Law Enforcement's Florida Criminal Information Center (FCIC), Florida Department of Corrections (FDOC), FDJJ Office of Management and Budget, and FDJJ Bureau of Quality Assurance. The JJIS was used to identify the youth who completed AMikids and residential services during fiscal year 2007-08. Demographic data for these youth, as well as their offense histories, were obtained from JJIS. Youth who subsequently re-offended were identified through both juvenile offense records in JJIS and through adult records in FCIC and FDOC.

Sample. In a given year, approximately 1,000 male and female juvenile offenders are sentenced to an AMikids day treatment program in Florida. During daytime hours, youth participate in skill-building, vocational treatment services and

return home for the evening; most receive services on the weekends as well. Day treatment is reserved for youthful offenders who need a higher level of care and supervision than traditional, probation supervision (FDJJ, 2009). Although Florida classifies day treatment as a probation intervention, it is programmatically similar to residential services. Youth spend the majority of their time at the facility, are higher risk than traditional supervision cases, and have comparable risks and needs to youth in residential placements. As such, the current analyses compared youth who completed an AMIkids day treatment program (N=1,083) to a matched sample of juveniles who completed secure residential programming (N=6,158) during fiscal year 2007-08.

A completion was defined as any youth designated in the JJIS as having successfully completed the program and been assigned to probation following release or been directly discharged without subsequent supervision, and/or reached the maximum juvenile jurisdictional age or term served (FDJJ, 2010a and 2010b). Completions are the basis of program outcome comparison, as opposed to including all releases, as this follows the methodology used by the FDJJ and examines only those youth deemed to have received and completed services, versus those who received minimal dosage and duration of services (FDJJ, 2010a and 2010b).

Measures. Recidivism, operationally defined as any adjudication or conviction within one year of program completion, was the primary focus of the assessment (this definition was consistent with prior research on juvenile recidivism, see FDJJ, 2010a and 2010b; McMackin, Tansi, & LaFratta, 2004; Myner, Santman, Cappelletty, & Perlmutter, 1998). Additionally, we examined alternate youth outcome measures including subsequent felony adjudication or conviction, arrest and felony arrest, and placements into commitment, adult probation or prison within one year of program completion.

Placement in either community-based day treatment or residential commitment programming was the primary independent variable of interest (1=AMIkids Day Treatment, 0=Residential Placement). Consistent with prior research the study examined the impact of gender (1=male, 0=female), race (1=Black, 0=White), ethnicity (1=Hispanic, 0=White) and age indicators on disposition and youth outcomes (FDJJ, 2010a and 2010b). Controlling for prior record, the study also includes number of prior charges and adjudications and seriousness indicators in the statistical modeling. Seriousness index scores for prior referrals were also included as a measure of prior offense history. This measures offense gravity for both prior referral and arrest. A weighted system assigns point values to specific offense types, as crime seriousness increases, so does the seriousness score (FDJJ, 2010a and 2010b).

Analytic Procedures

Youth completing experiential day treatment programs were compared to a matched sample of youth completing low, moderate and high restrictiveness level residential programs. Restrictiveness levels refer to the physical and staff security

levels of the facility, as opposed to youths' risk to re-offend (FDJJ, 2010a). Youth were matched however by individual risk level, as measured by the validated Positive Achievement Change Tool (PACT) used by FDJJ to assess criminogenic risks and needs.

To ensure an equitable comparison between youth completing day treatment services and residential programming, propensity score matching (PSM) was used to statistically control for inherent differences between the groups. In a typical application, PSM compensates for possible biases imposed under non-experimental conditions (e.g., lack of randomization) by modeling the selection process related to placement, then comparing outcomes for subjects with a similar likelihood of probation dispositions, but different actual rates of supervision placement. The study relied upon Rosenbaum and Rubin's (1983) method PSM measures. The propensity score was calculated as the probability of a youth completing day treatment services versus residential programming using the probabilities produced by a logistic regression model. Youth with the same propensity score were matched and divided into two groups, those who did and did not receive the community-based experiential interventions.

Table 1.
Independent Variable List for Inclusion in the Matching Process

Variables	B	SE B
Youth is Male	-0.049	0.000
Youth is Black*	-0.007	0.557
Youth is Hispanic	0.046	0.000
Age at Release	-0.126	0.000
Age at First Arrest	0.100	0.000
Prior Referral Seriousness Index	-0.210	0.000
Total Prior Charges	-0.253	0.000
Total Prior Felonies	-0.169	0.000
Total Prior Misdemeanors	-0.173	0.000
Prior Adjudicated Seriousness Index	-0.217	0.000
Total Prior Adjudicated Charges	-0.226	0.000
Total Prior Adjudicated Felonies	-0.167	0.000
Total Prior Adjudicated Misdemeanors	-0.160	0.000

**Although not significant, was included because of its documented relationship with recidivism.*

The logistic regression model was based on the significant differences between youth completing AMIkids day treatment services (N=1,083) and all non-AMIkids youth completing residential programs (N=6,158) in the same fiscal year. Differences in the samples were examined using bivariate analyses. Table 1 lists the factors found to be significantly different between the two samples or considered important factors to control for between populations based on their relationship to the

outcome. The independent variables were then included in the logistic regression model to calculate the propensity scores.

The independent variables selected are those known in prior research to have been significantly related to recidivism outcomes and not impacted by the treatment of interest. Although other social-risk variables such as current alcohol and drug use, or aggression may also have significantly differed between the two groups, they were not considered for inclusion given their potential correlation with the treatment received (Stuart, 2010). While some variables may be significantly collinear, with propensity score estimation (PSE) there is less concern with the parameter estimates of the model than with the resulting balance of the covariates (Augurzy & Schmidt, 2001). Further, Stuart (2010) notes that the inclusion of variables that are unassociated with treatment assignment are of little influence in the

propensity score model. Rather, the potential for an increase in bias is more likely to occur as the result of the exclusion of important confounders. Given research (FDJJ & Justice Research Center, 2006) in Florida on the increased likelihood of minority youth being arrested, adjudicated, and committed as compared to non-minority youth, race/ethnicity, though statistically insignificant between the samples ($p > .05$), was included in the model.

Using these independent variables, individual probabilities for placement in day treatment versus a residential commitment were calculated using logistic regression. The probabilities were used as the estimate of the propensity score. Using 'nearest neighbor' techniques, the scores were then used to match youth completing day treatment to similar youth completing residential services during the study time period.

Table 2.
Logistic Regression Results

Independent Variables	B	S.E.	Wald	df	Sig	R	Exp(B)
Youth is Male	-0.17	0.09	3.09	1.00	0.08	-0.01	0.85
Youth is Black	0.55	0.11	22.96	1.00	0.00	0.06	1.73
Youth is Hispanic	0.35	0.08	19.81	1.00	0.00	0.05	1.42
Age at Release	-0.22	0.03	49.08	1.00	0.00	-0.09	0.80
Age at First Arrest	0.06	0.02	6.33	1.00	0.01	0.03	1.06
Prior Referral Seriousness Index	-0.02	0.01	2.36	1.00	0.12	-0.01	0.98
Total Prior Charges	-0.23	0.02	199.22	1.00	0.00	-0.18	0.79
Total Prior Felonies	0.29	0.08	13.21	1.00	0.00	0.04	1.34
Total Prior Misdemeanors	0.28	0.04	56.18	1.00	0.00	0.09	1.32
Prior Adjudicated Seriousness Index	-0.14	0.03	27.56	1.00	0.00	-0.06	0.87
Total Prior Adjudicated Charges	0.23	0.03	47.72	1.00	0.00	0.09	1.26
Total Prior Adjudicated Felonies	0.28	0.14	3.91	1.00	0.05	0.02	1.33
Total Prior Adjudicated Misdemeanors	-0.01	0.06	0.02	1.00	0.89	0.00	0.99
Constant	2.88	0.48	36.33	1.00	0.00		

Supplemental analyses included descriptive statistics and independent samples t-tests. The descriptive statistics illustrated baseline measures on the outcome variables of interest -subsequent arrest, felony arrest, adult conviction/juvenile adjudication, felony adjudication or conviction, or subsequent commitment, adult probation or prison. Independent samples t-tests were used to test for significant differences in the outcomes between the day treatment and matched residential samples.

Results

The initial and post-PSM sample compositions are presented in Table 3. There were some notable differences between the experiential learning and residential samples prior to matching. Compared to day treatment, the residential youth had higher proportions of males, older youth at the time of completion, youth whose delinquency began at a younger age, and youth with more extensive and serious offense histories.

Following the PSM adjustments, the final sample compositions were more balanced than in the initial comparisons (Table 3). Only one of the PSM inclusion variables remained significantly different, average age at release. This was due primarily to the small variance that existed in the variable in the matched samples ($S^1=1.14$, $S^2=1.38$, respectively). The differences were minimal, however, with an average age of 16.6 years for day treatment youth and 16.4 years for the residential comparison. In addition to these differences, average length of stay, which was not controlled for through PSM, was also found to be significantly different. However, since average length of stay is a condition of the program services it was determined that the differences in the samples should, in fact, remain. Overall, 22% of the total day treatment sample matched to low-risk residential youth, 64% matched to moderate-risk, and 14% matched to juveniles completing high-risk residential programs.

Table 3.
Comparisons for Day Treatment and Residential Samples

Day Treatment to Residential	Original Sample		PSM Sample	
	Day Treatment Sample	Matched Residential Sample	Day Treatment Sample	Matched Residential Sample
Total Completions	1,083	6,158	1,083	1,083
Males	862 (80%)	5,210 (85%)	862 (80%)	875 (81%)
Blacks	553 (51%)	3,204 (52%)	553 (51%)	571 (53%)
Hispanics	155 (14%)	3,632 (10%)	155 (14%)	167 (15%)
Average Age at Admission*	16.2	16.4	16.2	15.8
Average Age at Release	16.6	17.1	16.6	16.4
Average Age at First Offense	13.9	13.3	13.9	13.8
Average Prior Referral Seriousness Index	23.8	45.5	23.8	24.8
Average Prior Adjudication Seriousness Index	10.9	22.1	10.9	10.8
Average Number of Prior Charges	9.3	19.4	9.3	9.8
- Felonies	2.7	5.3	2.7	2.8
- Misdemeanors	3.5	5.5	3.5	3.6
Average Number of Prior Adjudications	4.2	8.1	4.2	4.3
- Felonies	1.1	2.5	1.1	1.1
- Misdemeanors	1.7	2.7	1.7	1.7
Average Length of Stay (LOS)	167.8	250.1	167.8	22.2

Table 4 shows the overall outcome comparisons and significant test results. The experiential day treatment sample achieved significantly better outcomes than residential programming, despite serving youth with similar pre-conditions following the PSM procedure. The percent difference observed between the groups was 5% for both subsequent rates of arrest and juvenile adjudication/adult conviction. The rate differences expected (95% confidence intervals) ranged anywhere from one to nine percent, favoring day treatment completions. The rate differences expected with regard to subsequent felony arrests and convictions was substantially higher, ranging from between 8% to 16% for a subsequent felony arrest, and 6% to

13% for a subsequent felony re-adjudication or adult conviction. Further, youth completing day treatment services were significantly less likely to be committed, placed on adult probation, or sentenced to prison following release. In sum, after controlling for sample differences and covariate predictors of recidivism, the community-based, day treatment cohort was significantly less likely to be adjudicated or convicted for an offense within 12 months of completing services (38% day treatment recidivism rate versus 43% residential recidivism rate), and substantially less likely than their residential counterparts to be arrested or convicted for a felony offense.

Table 4.
Outcome Comparisons on Youth Completions FY 2007-08

	Total Completions	Recidivism		Re-Arrest		Felony Re-Arrest		Felony Reconviction		Subsequent Commitment, Adult Probation or Prison	
		Rate	T (Sig)	Rate	T (Sig)	Rate	T (Sig)	Rate	T (Sig)	Rate	T (Sig)
AMIkids Day Treatment	1,083	38%		54%		30%		18%		23%	
Matched Residential Sample	1,083	43%		59%		42%		2%		29%	
Expected Rate Difference (95% Confidence Intervals)		1.0% - 9.3%		0.7% - 9.1%		8.2% - 16.2%		5.5% - 12.6%		1.9% - 9.3%	

Table 5 presents the effect sizes for the day treatment and comparison groups. Standardized mean difference effect sizes were calculated relative to an underlying base recidivism rate of 50 percent. Given equal numbers of youth in each group, it was not necessary to weight the effect sizes. Positive mean ef-

fects would indicate that the day treatment group had lower recidivism and subsequent placement rates than the residential group. Negative individual effects would reflect rates greater than the baseline of 50 percent,

Table 5.
Mean Effect Size Estimates for Day Treatment and Residential Samples

Program	Re-Adjudication/ Conviction Rate	Re-Arrest Rate	Felony Re-Arrest Rate	Felony Re-Adjudication/ Conviction Rate	Recommitment, Adult Probation, or Prison Incarceration
Day Treatment	0.24	-0.08	0.41	0.77	0.60
Residential	0.14	-0.18	0.16	0.55	0.47
Effect Size	0.10	0.10	0.25	0.22	0.13

Comparing the residential matched sample to day treatment reveals positive effects ranging from 0.10 to 0.25 across the five outcome measures presented in Table 5 and Figure 1. Relatively strong effect sizes were found for subsequent felony arrest and conviction rates at 0.25 and 0.22, respectively.

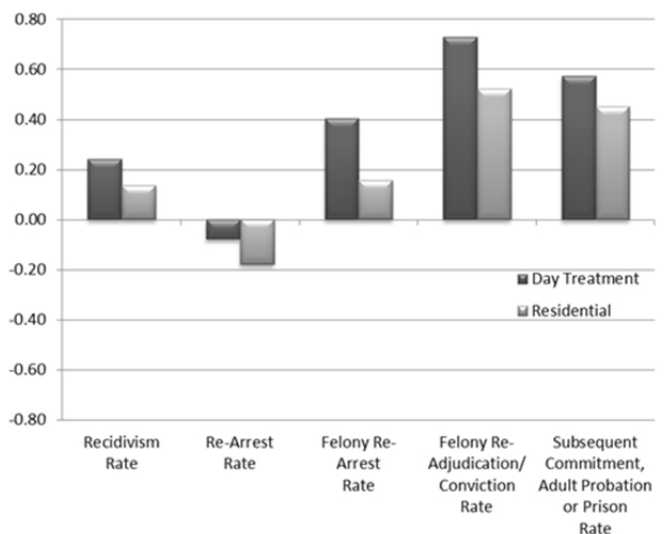


Figure 1. Program Effect Size Estimates for Day Treatment and Residential Services

Cost Benefit Analysis

The relative expense of AMIkids day treatment and residential services was established using the FDJJ's standard method for calculating program costs. Cost figures were obtained from the FDJJ 2008 Comprehensive Accountability Report (CAR), which were based on actual expenditures for services. The FDJJ derived costs from provider invoices and included both state and federal expenditures. The total costs were then divided by all youth completing services. Costs per completion were weighted by the representation of day treatment youth within each restrictiveness level of the matched residential sample. According to the FDJJ figures, on average it cost \$8,498 per completion for low-risk, \$38,886 for moderate-risk, and \$65,969.90 for high-risk residential services. In comparison, it cost an average of \$12,632 per completion from an AMIkids day treatment program. Based on the weighting procedure for the comparison sample, the average cost per completion for each youth in the matched residential group was \$35,872. The difference in expense between the day treatment and residential programming was \$23,240 dollars for each youth completing services. Figure 2 illustrates the projected expenditures for graduating 100, 250, 500, 750, and 1000 youth from day treatment or residential programs. The cost comparison demon-

strates that the state saves over two million dollars for every 100 youth who complete AMIkids day treatment services versus similar youth in residential programming. Potential cost savings for completing 1000 youth in day treatment, as an alternative to commitment, is \$23,240,110 million dollars per year.

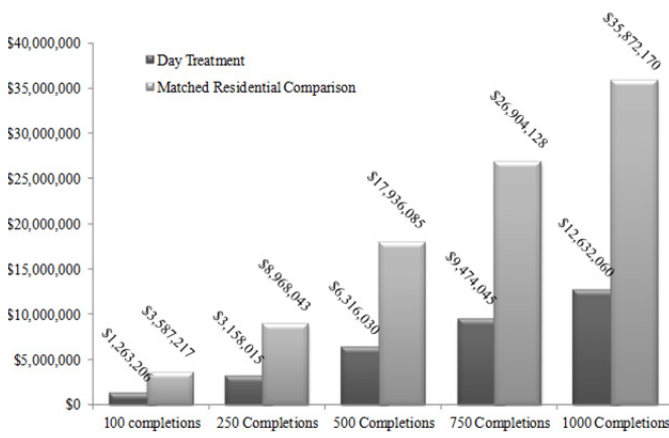


Figure 2. Cost Comparisons for Day Treatment and Residential Completions FY 2007-08

Discussion

Recent meta-analytic and evaluation research on juvenile justice programming has documented the negative effects of institutional treatment for youthful offenders, particularly low to moderate risk youth who do not require the intensity and duration of residential interventions and may actually be at increased risk for relapse if committed. The effectiveness of community-based, experiential day treatment services; however, has not been fully explored to determine whether they can reduce recidivism among juvenile offenders. The current study examined the recidivism and cost effectiveness of a national delinquency day treatment provider, AMIkids Inc., and found that in comparison to a matched sample of youth completing residential programming, the community-based, day treatment group was significantly less likely to be re-adjudicated or re-convicted for an offense within 12 months of release.

Of particular note, while overall re-arrest rates for the day treatment youth were slightly better than the residential group, subsequent felony arrest and adjudication/conviction was substantially lower for the day treatment cohort. It would appear that skill building programs, specifically one that employs experiential learning opportunities within the community, are able to achieve comparable if not substantially better outcomes than serving similar risk youth in residential commitment programs in Florida. Mean effect sizes ranged between 0.10 and 0.25 across the five outcome measures, using the residential matched sample as a comparison to the day treatment group. Coupled with cost comparisons demonstrating a savings of

over \$2 million dollars for every 100 youth completing AMIkids day treatment, the findings suggest that these community-based interventions represent a viable option for effectively reducing delinquency at significant costs savings to state juvenile justice systems.

The current study represents an initial examination of one experiential program model and is limited to evaluating only the day treatment component of services offered by the provider. Future research should explore specific programming strategies, as well as service dosage and duration measures, to identify practices that are associated with reductions in juvenile recidivism. Additionally, to further evaluate the efficacy of day treatment services research should examine the relative effectiveness of these interventions compared to other, non-residential programs available in Florida. Staff in AMIkids day treatment programs follow a manualized system of care referred to as the Personal Growth Model. While data were not available for the current study, future analysis should assess whether model fidelity is associated with improved outcomes, and if so, whether reductions in subsequent offending and at-risk behaviors vary for certain types of youth (e.g., males, females, younger, higher risk youth, for example).

The Association for Experiential Education (2011) reported positive effects of adventure therapy programming compared to incarceration, when certain elements are coupled with therapeutic services. Relying on prior research (Gass, 1993; Gillis & Gass, 2010), the Association outlined seven factors associated with successful programs including treatment that: employs action-oriented experiences; uses unfamiliar client environments; produces change through the positive use of stress; relies on client assessment to inform care; delivers services in small, supportive groups; uses solution-oriented practices; and allows the therapist to actively engage in and frame services (Association, 2011). In the current study, the day treatment model we evaluated integrated experiential learning, vocational instruction, education and challenge experiences in seamanship, water safety, fishing, low ropes, high ropes, backpacking, gardening, culinary arts, and/or wilderness adventures (e.g., rafting, scuba diving, and rappelling). For many clients, these involve unfamiliar environments and experiences. AMIkids reports that experiential activities take place in small groups, which foster a more relaxed atmosphere with staff and facilitate cognitive behavioral change. The extent to which these specific strategies address offenders' individual risks and needs, and reduce subsequent offending still must be empirically tested.

The findings reported here preliminarily support the conclusion that experiential, day treatment models can achieve similar if not better recidivism outcomes compared to traditional residential confinement for juvenile offenders. Given the well-documented potential negative effects of incarceration, as well as the costs of confinement, states searching for cost effective alternatives for delinquent youth should give strong consideration to the expansion of community-based, non-residential day treatment services.

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Aggregate Correlates of Status Offender Case Outcomes Across Counties

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This article examines the petitioning and adjudication outcomes of juveniles taken into custody for drinking, truancy and ungovernable behavior offenses across 67 Alabama counties. Outcomes of these cases reflect social and political arrangements, as well as involve the least culpable of all offenders, status offenders. Aggregate family poverty, prosecutorial caseload, presence of social workers and police presence are key variables in juvenile court decisions across counties.

Keywords: juveniles, Alabama, counties, punishment, low risk

Many organizations such as the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and American Bar Association (ABA) have spoken out against excessive punishment of status offenders. Harsh punishment for status offenders is the problem under consideration in this article. Such processing may have negative consequences for juveniles as well as communities (Jennings, Gibson and Lanza-Kaduce, 2009; Osgood, 1983; Spergel, Reamer and Lynch, 1981; Rubin, 1979). In this article, we examine aggregate factors expected to affect contextual variation in the outcomes of status cases.

Feld (1991) advanced the idea of understanding the importance of jurisdictional context on juvenile court processing. There are socio-economic factors such as aggregate poverty, inequality, single parent households and racial composition specific to any area that may affect aggregate delinquency within areas (Jarjoura, Triplett and Brinker, 2002). These same aggregate variables have been used to predict court outcomes for juveniles (Hay, Fortson, Hollist, Alzheimer and Schaible, 2007; Feld, 1991).

The structural and economic resources available to the courts within certain areas prove themselves valuable predictors of whether cases are formally processed (Feld, 1991). One variable that has not yet been considered in the literature, however, is the effect of the presence of social service resources on juvenile court outcomes. In this article, we test whether the amount of funding allocated to juvenile social services across counties is an indicator of the ability of courts to divert certain low risk juveniles. Such resources include a large local tax base and ability of the court to utilize social workers. In this article, we explore whether access to such resources contribute more to court decisions than is generally thought.

Some research also indicates that political sentiments, demographic and economic factors affect court processing (Bowers and Waltman, 1993). We recognize that localized ideologies (such as conservatism) may also define areas and operate as a catalyst for how certain jurisdictions are predisposed to

negotiate with offenders. In this article, we add an indicator of juvenile social services to examine status case processing, while holding constant some of the more traditional aggregate variables used to explain outcomes in court processing.

Literature Review

Previous work explores factors affecting prosecutorial and judicial decision-making in juvenile courts. Feld's (1991) seminal work points out several individual and aggregate-level characteristics that potentially affect petitioning and adjudication decisions. According to Feld, there is a need for contextual sentencing analyses in juvenile justice because sentencing disparities are linked with areas: "Studies which analyze and interpret aggregated data without accounting for contextual and structural characteristics may systematically mislead and obscure, rather than clarify defining individual characteristics..." (Feld, 1991, p. 160).

Understanding geographic variation is important, especially in the processing of status cases, because as Ulmer and Johnson (2004, p. 137) note: "The possibility of such a justice system presents a dilemma: on the one hand, fundamental civil rights issues, on the other, notions of democracy. If the sentence one receives and the grounds for that sentence depend on location, then the notions of equal justice that underlie most Western legal systems may be undermined." Most studies of contextual variation in sentencing have focused on adults due to limited data availability for juveniles.

Literature Review: Contextualized Sentencing Studies

Contextualized sentencing refers to external factors that influence sentencing (Muncie 2008; Feld, 1991). Early research examining political contextual effects focused on sentencing for criminal cases in a single political jurisdiction or state (Peterson and Hagan 1984; Kuklinski and Stanga, 1979). Feld (1991) adapted this idea to the juvenile justice system, adding the idea that factors such as cultural homogeneity and ruralness across counties affected processing formality. Many studies since indicate that local decisions may also be affected

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by aggregate and jurisdictional level politics at small levels of analysis, such as counties and cities (Helms and Jacobs, 2002; Huang et al., 1996; Kuklinski and Stanga, 1979).

Savelsberg (1994) argued that the influence of public opinion on punishment in a populist direct democracy such as the U.S. reinforce an expectation that local political values will be a key punishment determinant. Contextual sentencing research from Huang et al. (1996) supported a hypothesis linking political conservatism to enhanced punishment decisions across a wide range of felony cases in the state of Georgia. Other studies have contributed support for political environment effects on legal decision making as well (Cook 1977; Waltman and Bowers 1993; Erickson, Wright, and McIver, 1987).

Contextual Sentencing and Political Ideology

The centerpiece of contextual sentencing analyses has usually been law and order politics, which is usually measured by aggregate conservative voting preferences (Carmichael and Burgos, 2012). Law and order politics, which emphasize an aggressive crime control agenda are usually thought to preside in Republican jurisdictions (Helms and Costanza, 2010, Jacobs and Helms, 2001). Because strict crime control politics is often associated with punishment, both criminal and juvenile sentencing will be more severe in those areas. Democratic versus Republican politics within certain jurisdictions often provide the focus of such research and jurisdictional political preference has been shown to impact adult sentencing (Barnes, Sloss and Thaman, 2009; Bowers and Waltman, 1993).

Prosecutorial Caseload and Juvenile Social Services

Another influence on court outcomes is the courtroom work environment. Some have highlighted the importance of overloaded courtroom dockets on prosecutorial and judicial decision-making (Vogel, 1996). Independent of politics, it seems possible that the amount of adult crime (or more serious juvenile crime) in an area indirectly dictates the outcome of less serious juvenile cases. The importance of the courtroom workgroup (prosecutors, judges and defense attorneys) in making pretrial decisions (Haynes and Ruback, 2010) cannot be overstated.

Overloaded adult court dockets (stacked with more serious cases of crime) find less serious delinquents and status offenders beneficiaries of less harsh sentencing because prosecutorial caseload has reached unsustainable levels (Feeley, 1979). In most cases, prosecutors and juvenile judges have wide ranging discretion in making dispositions toward juvenile offenders. The juvenile justice system has the largest variation of dispositions in the United States (Janeksela and Miller, 1985). Alternative punishments doled out by the juvenile court system have ranged from everything from community service to physically binding children to their parents (Bonnie, 1995). In fact, much of the relevant literature here focuses on the large degree of discretion in the juvenile justice system among police (Novak, James, Smith and Engel, 2002; Southern Illinois University

Center for the Study of Crime, 1978), intake workers (Mulvey and Iselin, 2008; Shook and Sarri, 2007; Bell and Lang, 1985), prosecutors (Sanborn, 1996; Feely, 1979) and judges (Schrag, 1991).

Limitations of Previous Literature

Although there is no literature that makes it explicit, one would assume that certain areas are better equipped to mete out alternative punishment or divert cases away from formal processing. Some areas, for example, may receive substantial endowments from federal authorities to channel funds into preventative programs or educational programs. Some areas may have more social workers and associated social services present to facilitate such cases. Many contextual analyses have illuminated our understanding for why some cases are formally processed, but do not examine the court's ability to provide alternatives to formal process. Specifically we are concerned with how those counties' level of social support for at-risk juveniles might affect court processing in context. We look at outcomes of status offenses; something that has rarely been done in contextual analyses.

Theory and hypotheses

The research presented here assesses whether certain contextual variables help to predict punishment patterns for status offense cases that were adjudicated across 67 Alabama counties and reached final disposition in 2001. Drawing from the aforementioned literature, several hypotheses are created for status offense outcomes. The theory we offer is that juvenile processing is influenced by a convergence of factors that involve both county-level politics and resources, both of which vary by area. Among variables that we utilize are: the rates of police per thousand juveniles in an area, the size of prosecutorial caseload, the number of social workers and the amount of federal funding received by a county for drug-free programming. Many of these variables have been utilized at some points to explain court decision making, but rarely, if ever applied to status crimes.

This research examines aggregate level factors found to be of import in previous research of crime, and applies those factors to examining jurisdictional and contextual punishment for the least serious of juvenile offenders. Contextual indicators of punishment, such as police presence, prosecutorial caseload and social services provisions are also expected to show impact on juvenile petitioning and sentencing decisions.

First, we expect that *overall prosecutorial caseload plays an important role in the petitioning and disposition of status offense cases*. This hypothesis suggests a link between court resources and the outcomes of cases. Some research indicates that the prosecutorial caseload effects what is known as case-processing time, or the total number of days it takes for a case to reach one or more stages in the system, is the a commonly used measure of the pace of case progress (Steelman, Goerdt, & McMillan, 2000). Boyd, Huss and Myers (2008)

discuss the impact of lengthy case processing on the compromised quality of processing. To preserve case integrity, prosecutors in areas with overloaded dockets may ignore the more innocuous cases such as juvenile crime.

We hypothesize that in areas with a large prosecutorial caseload, status offense sentencing becomes a matter of common sense, wherein both petitioning and sentencing are less likely to be carried out. In areas where there are a lot of arrests for adult crimes and/or index crimes, the importance and relevance of status offense cases will simply render such cases not important enough to bring to trial. We also hypothesize that a *high percentage of delinquency cases will result in less petitioning and dispositions for status offenders*.

Second, we expect family deprivation, linked to aggregate poverty, to play an important role in the prediction of status offense processing. Poverty has been found to affect sentencing decisions at the individual level (Wooldredge, 2007). Our primary hypothesis is that a higher percentage of households in poverty within a county will predict an increase in status offense punishment. Where areas are experiencing a great deal of poverty, families may simply not have the resources to appeal to the sensibilities of intake officers. Inversely, residents of areas with affluence can prove effectual in hiring attorneys that may have more influence on juvenile judicial decision-making. In addition, affluent families of troubled juveniles can also ostensibly afford to pay for private social services, for example, private drug rehabilitation facilities. As such, we expect the *aggregate level of poverty in an area to be positively associated with petitioning and disposition of status cases, along with length of stay*.

A fourth hypothesis is that *aggregate-level conservatism will be associated with most severe status offense dispositions*. There is a host of literature that focuses on the tendency of courtroom actors in law and order jurisdictions to support severe sentences (Helms and Costanza, 2009; Carmichael, 2012). In Alabama, the county prosecutor (or, district attorney) is directly elected by voters. The district attorney is responsible for appointing juvenile prosecutors, or may even act as the sole juvenile prosecutor in rural or small jurisdictions. We expect that these prosecutors will be responsive to their electorate.

We suggest that the average *age of status offense defendants within a given jurisdiction will affect the amount of cases that are brought to adjudication and likewise, sentenced*. There is much literature that shows juvenile courts are quicker to punish older juveniles than younger juveniles (Espinoza & Ek, 2011). This also appeals to a commonsense notion that older juvenile offenders are more dangerous than younger juvenile offenders. Therefore, we expect that in areas where the average age of juvenile defendants is higher, the level of punishment for status offenses will rise as well.

From Feld's (1991) work, we suspect that rural areas are less prone to formally process juvenile cases. There is some literature that indicates that the level of informal social control is higher in rural settings (Stanley, Henry, et al. 2011), however, we bear in mind that some research indicates urban jurisdictions are *less* likely to target status offenses at the policing

level (Decker, 1979). These factors may counterbalance each other.

A final hypothesis presented here revolves around the ability of the local government to handle cases informally through networks of social work services. We note that resource capacity should be under consideration at many levels. Government resources such as federal funding, number of people in social work professions and number of people in policing professions within counties should hypothetically provide alternative routes in regard to adjudication dispositions. For example, in an area with many social workers, there may not be a need to sentence a status offender to detention. Such a case may be diverted. That said, federal funding and manpower in policing could also be taken as alternative ways to measure a government's organizational capacity within its own jurisdiction. We hypothesize that *more governmental resources within an area will predict reduced status offense disposition*.

Data and Methods

To test hypotheses, this data set was aggregated from five sources and applied to a macro level study of Alabama's 67 counties. First, data on juveniles taken into custody and final disposition for Alabama juvenile status crimes were acquired from the Alabama Department of Youth Services (D.Y.S.). In 2001, there were a total of 20,674 juveniles taken into custody in the state of Alabama. Of those, only 1,285 were formally processed for a status offense. During 2001, Alabama ranked only slightly below the national average with 315 out of every 1000 juveniles incarcerated. Between 2003 until 2008, Alabama ranked above the national average for juvenile offenders in custody (Snyder and Sickmund, 1995).

Unfortunately, due to confidentiality issues, we were not allowed detailed demographic or criminogenic backgrounds on these individuals so Hierarchical Linear Modeling (HLM) was not possible. The status offenders were aggregated by jurisdiction and county-level data was pooled with matching data from the 2000 census. From the 2000 census the following variables were obtained: population between the ages of 10 to 17, total population, socioeconomic status, percent of unmarried teenage single mothers, percent of households on welfare, median household income and percentage of people in the area who listed their profession as social services.

In addition, data specific to adults were taken from the 2001 Uniform Crime Reports (U.C.R.) to assess general criminal activity. This variable is important in assessing overall prosecutorial caseload. It is notable that juvenile prosecutors, in most counties, do not strictly prosecute juveniles. In many counties, they are general employees of the prosecutor's office and are also needed to prosecute adult criminal activity. As one would suspect, the number of cases on dockets increases with the number of arrests that are made, these UCR statistics provide a proxy for prosecutorial caseload.

A fourth source of data was the 2001 Law Enforcement Management Administrative Statistics (L.E.M.A.S.). This survey provided an indicator of police presence at the county

level. A fifth source of data was each county's voting registries for the 2000 presidential election results, as provided by the Alabama Secretary of State Elections Division. Data on voting preferences are a standard measure of conservatism in some previous research (Huang, Finn et al. 1996; Bowers and Waltman, 1993; McCann, 2008).

Method. OLS regression models were used to analyze the county level model of contextual effects on status offense outcomes for two categories: petitioning (which refers to the decision by the court to press the juvenile into adjudication) and out-of-home placement (custody).

Operationalizing variables. The dependent variable was developed from disaggregated Alabama juvenile statistics on status offenses. For each of the 67 Alabama counties, we focused on three status offense types: truancy, liquor violations and ungovernable behavior. To better understand the impact of these different status offense types, we explain correlates of; percent petitioned within counties and percent out-of-home placement within counties.

Prosecutorial caseload is measured by the rate of UCR index crime arrests per 1000, plus the rate of arrests per 1000 of persons between ages 10-17. *Juvenile prosecutorial caseload* is measured by observing the percent of all delinquency (minus the status cases) cases petitioned within counties. Both variables factored together in factor analyses and were added together as a proxy for overall caseload. *Police presence* within counties is measured by the number of enforcement agencies per 1000 people aged 10-17 within counties. The number of police agencies reflects the complexity of the criminal justice system within a given county.

Political conservatism within areas has also proved to be important in many studies of contextual sentencing. We constructed a conservatism index from two variables that factored together: the Republican-to-Democrat ratio within a county plus the ratio of high social economic status citizens to low social economic status citizens. It was expected that conservatism would be positively associated with harsh sentencing decisions.

Factoring together, and combining, two variables taken from the 2000 census allowed the creation of a *family deprivation index*. These variables: percent of unmarried teen mothers within a county plus the percent of individuals in poverty within a county were expected to be more than a satisfactory indicator of family deprivation.

Two variables that factored together well: percent of labor force in social service professions within a county (taken from the 2000 census) as well as rate of federal drug free funding per

1000 juveniles (taken from the 2001 Law Enforcement Management Administrative Statistics) were taken together to indicate each county's level of juvenile social service support for its residents. We combined these measures into one single index indicating social support to reduce multicollinearity.

We also call this the *juvenile social support index* because it represents two facets of organizational capacity: preventative and treatment. It reflects the ability of each county to avoid formally processing status offenses. Federal money that has gone toward delinquency prevention probably represents a concentrated effort on the part of each county to address delinquency from a treatment perspective. The presence of social workers in a county provides the court system with more diversion options. In accord with the hypotheses, we expect that the higher the level of such resources within any given county, the less likely it will be that juveniles must face formal sanctions for status offenses.

Limitations of the Data. There are two key concerns that relate to the generalization of any analyses to come. First, it has been argued that Alabama is a patently conservative state. To this we concede that results may be limited to one region of the country. However, we point out Alabama is not alone, as many Southern states have traditionally been earmarked as bedrock areas for conservative politics and traditionalism (Regnerus and Sikkink, 1999). By keeping political ideology relatively constant, we can observe the influence of other variables.

Second, the data that were available to us did not allow us to test traditional hypotheses about individual-level characteristics and prosecutorial and judicial decision-making. For example, we do not know the race or juvenile history of status offenders detained in any given county. That said, there is need for further research of individual level hypotheses. However, we note the literature on prosecutorial and judicial decision-making for status offenders has hardly been developed and that this article can make a substantial contribution by considering aggregate level factors.

Results

In Table 1, two models are presented that represent the effects of our instrumental variables. The table shows the effects of these variables on percent of status offense cases petitioned (model A), percent of status offense cases adjudicated delinquent (model B). We also controlled for average age of juvenile status defendants within counties and whether counties were considered rural or urban by the census.

Table 1.
OLS - Percent of Status Cases Petitioned and Cases Adjudicated Delinquent

	Model A: Percent of Status Cases per 1000 Petitioned	Model B: Percent of Status Cases per 1000 Adjudicated Delinquent
	Beta	Beta
Adult Prosecutorial Caseload	-0.296***	-0.370***
Aggregate Family Deprivation Index	0.254*	0.473***
Social Support Index	-0.277**	-0.058
Conservatism Index	0.212	0.223
Rate of enforcement agencies per 1000 juveniles	0.274**	-0.038
Average age of Defendants	0.152*	-0.253**
Percent of all Delinquency (non-status) cases petitioned	0.338***	-0.232
Ratio of Urban to Rural residents	0.154	-0.025
R2	.52	.27
Adjusted R2	.45	.16
F	7.84***	2.68***

(*** $p < .01$, ** $p < .05$, * $p < .10$)

Our strongest model is model A, which explains 52% of the variance in petitioning. As expected, prosecutorial caseload

has a negative and significant influence (-0.296) on the decision to petition cases. The model also indicates that the social support index is a negative and significant predictor (-.266) of petitioning cases. Family deprivation (.234), rate of enforcement agencies per 1000 juveniles (.274), juvenile prosecutorial caseload (.338) and average age of defendants (.152) are all significant and positive predictors of the decision to petition.

In the general sentencing model (Model B), we see that only 27% of the variance in sentencing is explained by modeled variables. Family deprivation shows a strong and positive correlation (.473) with delinquent adjudications in status offense cases. Again, this seems to confirm much of what is known about the lack of integrity between the criminal justice system and the poor. Another notable finding is that overall prosecutorial caseload bears a significant and negative relationship (-.370) with guilty verdicts. The more adult cases that county courts have to prosecute, the less severe they will be toward status offenders.

An unexpected finding in the model is that the average age of juvenile defendants within counties proves to be significantly and negatively associated with guilty dispositions. This seems to contradict much of the literature of that suggests that older offenders are more likely to receive a delinquent adjudication, however it is important to note that the average age represents the average age of all juvenile defendants within any given county. Therefore, a higher average age for defendants in delinquency adjudications may translate into leniency for status offenders of all ages.

Table 2 presents delinquent adjudications disaggregated by offense type for three status crimes. The following models account for delinquent adjudications for truancy, ungovernable behavior and liquor violations.

Table 2.
OLS Models for Rates Adjudicated Delinquent by Disaggregated Offense Type

	Model A: Percent of Status Cases per 1000 Petitioned	Model B: Percent of Status Cases per 1000 Adjudicated Delinquent	Model C: Rate of Liquor Violation Adjudicated Delinquent per 1000
	Beta	Beta	Beta
Overall Prosecutorial Caseload	-0.293***	-0.329***	-0.275***
Family Deprivation Index	0.384*	0.510***	0.102
Social Support Index	-0.036**	-0.046	-0.070
Conservatism Index	0.179	0.203	0.345**
Number of enforcement agencies per 1000 juveniles	-0.101	0.046	-0.016
Average age of Defendants	0.307***	-0.227*	0.006
Percent of all Delinquency cases petitioned	0.329***	-0.066	-0.439
Ratio of Urban to Rural residents	-0.057	0.033	-0.026
R2	.23	.27	.37
Adjusted R2	.13	.17	.28
F	2.25**	2.74***	4.31***

(*** $p < .01$, ** $p < .05$, * $p < .10$)

In the disaggregated model for truancy (model A), overall prosecutorial caseload, again proves a negative and significant (-.293) predictor of delinquent verdicts. Also, the average age of defendants within the county and percent of all delinquency cases petitioned proved to be negative and significant predictors of sentencing. It would seem that when counties have more to deal with, status offenses become less serious. Unfortunately, the model indicates this may not be true for the poor. The family deprivation index presents itself as the only positive and significant predictor of adjudicated delinquent. This model explains twenty percent of the variance in delinquent adjudications for truancy.

Similar results appear in the disaggregated model for ungovernable behavior in model B. Again, it appears that more deprived families within a county means significantly (.502) more delinquent adjudications for ungovernable behavior. This makes sense, as these families usually cannot afford professional counseling and treatment. The model also shows that the average age of defendants as well as prosecutorial caseload are both significant and negative predictors of guilty verdicts. This model explains 27% of the variance in guilty verdicts for ungovernable behavior status offenses.

Finally, in model C., the liquor sentencing rates model, we find overall prosecutorial caseload once again significantly predicts reduced guilty verdicts. One interesting finding is that conservatism in counties seems to lead to significantly more (.345) liquor sentencing. Inversely, we find that the overall prosecutorial caseload and percent of delinquency cases petitioned is significantly and negatively linked to guilty verdicts in liquor sentencing. In this model, 37% of the variance in sentencing minors for liquor offenses is explained.

Liquor policy is one policy area in which there is pronounced variation across Alabama counties. In fact, there are still a few counties in Alabama that are completely "dry", including Bibb County and Jackson County. However, collinearity with the "rural variable eliminates the influence of the "dry county" variable.

Discussion

From the above models, certain variables emerge that are worthy of further assessment. Among those are poverty, social support, police services, prosecutorial caseload and to a lesser degree, political conservatism. Status offenders who resided in areas with advanced levels of aggregate poverty are petitioned and detained most often. This is the first and most disheartening point of discussion. In this study, more deprived families in an area predicted a higher risk of status petitioning and also predicted more delinquent adjudications. This confirms what is already known about the way that the juvenile justice system has historically processed people in poverty.

It is recognized that people in poverty have fewer economic, political and cultural resources available to avoid formal sanctioning. This research confirms once again, that the trend toward severe punishment of the poor is clearly not limited to the adult level. American courts have many designations (i.e.:

Children in Need of Supervision, Minors in Need of Supervision, etc.) that can be applied to children in poverty. These designations are designed in part to reduce culpability. Simply put, a child in poverty is recognized by the government as "at-risk" for deviant behaviors. Ideally, children should be assisted by courts, and not subject to incarceration unless absolutely necessary.

Another finding worth noting is that more police agencies within counties means significantly more petitioning of status offenders. Conversely, more social support services, namely in the form of social workers and federal funding, predict less status offense petitioning across counties. This is a relationship that needs little dissecting. The presence of more police agencies (ie: sheriffs, constables, metropolitan police, etc.) probably indicates there is a greater chance of arrest for all offenders. In addition, more police agencies also probably means that law enforcement has more spare personnel to assign to petitioning cases.

Given the import of political contextual effects in much sentencing research (Bowers and Waltman, 1993) is worth noting that political conservatism may not play as strong a role in determining status case court outcomes. Aggregate political conservatism, as we measure it, plays a role as a positive predictor of liquor violation adjudications and nothing more. We expected that status crimes such as truancy and ungovernable behavior would also be affected more by political conservatism, but that did not prove to be the case. For some reason, only sentencing for alcohol offenses seems to be associated with net conservatism. Perhaps in particularly right-leaning jurisdictions, tradition and religion may influence prosecutorial decisions about liquor violations.

Finally, we find as expected that as juvenile prosecutorial caseload for *delinquency* increases, there are less severe consequences for status offenders. This is consistent with the overall impact of prosecutorial caseload discussed in the findings. As the number of cases that prosecutors must deal with increases, decisions to petition *status* cases are significantly reduced. Many counties are unwilling or unable to support diversion programs for status offenders (Bowers, 2002).

Conclusions and Recommendations

In a state where some counties have very little to offer in terms of programming, formal juvenile correctional systems may present itself as the only treatment option. In other words, a sympathetic judge or juvenile prosecutor may view juvenile detention as a more humane avenue for treatment because it is the only avenue for treatment in some areas. The alternative to the state juvenile justice system with its attendant risks, in many cases is to do nothing, which may be an unfair alternative for juveniles with behavioral problems or substance abuse issues.

Reforms that states and communities can utilize to divert status offenders away from their juvenile justice systems usually require federal or state assistance if they are to be substantial in their impact. However, since federal funding to many

rural counties is weak, we suggest looking for alternative avenues to implement best practices. One type of reform that has been successfully implemented in Florida, New York and Washington that we feel is likely to succeed in rural areas (in relatively poor states) involves community-based responses. According to reports (Vera Institute of Justice, 2013) such programs have proven successful in diverting status offenders. Such responses often rely on nonprofit organizations helping families in crisis. When youth engage in status offenses, police officers escort them to "respite centers" where they are safe and ostensibly away from negative influences. A caseworker then helps the youth and their family in obtaining necessary counseling and services.

Such alternative programs, because they are often sponsored by faith-based organizations as part of their charitable mission, would help to ease prosecutorial caseload. Such programs, of course, might be dependent on churches for survival. However, in rural areas, it is possible that religious organizations remain the strongest and best funded establishments. However, such reform while an improvement over the current system is far from perfect. Many of these areas still lack social workers, psychologists and trained counselors. Furthermore, many religious organizations may be unable or unwilling to fund case managers and other social services for dogmatic reasons. Such programs provide a viable template to divert children away from the juvenile court in areas where government unable to provide services.

Future research may want to examine if counties with few alternative programs or social welfare programs are using violation of probation to reclassify status offenders to delinquents in order to ensure their admission to the state juvenile justice system. Even well-meaning judges may see that there are more behavioral or psychological programs at the state level. However, once ensnared in the state juvenile justice system the consequences can be disastrous for the youth at risk.

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Mississippi Juveniles Adjudicated as Adults and Held in Adult Jails: The Perspective of the County Sheriff

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Information gathered from nineteen interviews of a non-probability sample of sheriffs and jail administrators is used to explore five broad questions surrounding their perceptions of juveniles adjudicated as adults who are housed in their county jails. The interviews took place in Mississippi, a state that does not have any statutory protections for confinement of juveniles charged or sentenced as adults. Results suggest that the varied responses echo the lack of agreement across the country with regard to pretrial detention of juveniles in adult facilities. A review of the relevant literature, implications, and suggestions for further research is provided.

Keywords: juveniles, adult, jail, sheriff, county, felony

This study explores the perceptions of sheriffs in Mississippi regarding pretrial detention of certified juveniles in adult jails. While there has been a significant body of literature on post adjudication sentencing of transferred juveniles, little work has been done on the issue of pretrial detention with regard to this population. By way of background, in Mississippi, automatic waiver of juveniles to adult court occurs based on the following criteria: any act that could be punished by death or life in prison under state or federal law; any act attempted or committed with a deadly concealed weapon, or a shotgun or rifle, any act that would be a felony if committed by an adult; or any act committed by a child on or after their seventeenth birthday that would be a felony if committed by an adult (Miss. Code Ann § 43-21-105(d)). In Mississippi, the juvenile court system has exclusive and original jurisdiction over juveniles in all legal matters, with the exception of those crimes described above. The minimum age for certification for juveniles is 13, and there are no blended sentencing options whereby a juvenile receives a stayed adult sentence, only to be executed if the juvenile does not successfully complete his juvenile sentence. Furthermore, Mississippi practices statutory exclusion, also known as legislative exclusion, meaning that cases that meet certain criteria originate in criminal rather than juvenile court. Finally, once a juvenile is in the adult system in Mississippi, the juvenile will always be in the adult system.

In Mississippi, when a juvenile commits a felony, the juvenile will be placed in a county jail while awaiting a hearing. The juvenile cannot be sent to another facility because there is no specific facility in the state that only houses juveniles awaiting trial for felony level crimes. This leaves juveniles in overcrowded adult county jail with an adult prison population. Research has shown this can have a negative impact on the juvenile (Myers, 2003; Woodlark et. al., 2005). The State of Mississippi offers few guidelines to county sheriffs, jail administrators, and little training for jail personnel as to how to deal with juveniles in adult jails.

Sheriffs are ultimately responsible for the operation of their county jails, the "first stop" for these juveniles. Therefore, they (and/or their chief deputy/ jail administrator, hereafter referred to as "sheriff") should be able to provide some insight into the issues surrounding juveniles in adult jails. While the law may require that a juvenile adjudicated as an adult be placed in adult jails, how the law is carried out varies from state to state, and within each state, varies from county to county. This variance comes from a variety of factors, including objective issues like space availability, to more subjective issues, like the personal beliefs, ideas, or background of the sheriff.

It is all but impossible to acquire an exact number of juveniles housed in Mississippi county jails on any given day due to minimal reporting systems, and identification of juveniles as adults within the county jails. In essence, these juvenile offenders are all but invisible. This invisibility comes from the fact that Mississippi jails are closed systems, and there is no mandatory reporting of juvenile offenders to any state body. In addition, while each state has case progression standards for appearances, preliminary hearings, and trials, each county may still have a different pace of how quickly cases can be adjudicated.

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cated. It is possible for a juvenile to be charged with a felony crime, and wait one year for his or her case to go to trial. It is also possible for the juvenile to be found not guilty, which will then immediately return him/her to a juvenile status, but only after having already been exposed to adult confinement, potentially learning from adult prisoners and/or being victimized by them physically and sexually (Redding, 1999; Woods, 2012).

The main aim of the present study is to look at the intersection of juveniles in the adult jail setting. Specifically, this exploratory study seeks to answer five broad questions surrounding juveniles adjudicated as adults and housed in county jails prior to disposition. These questions are: (1) What kind of special accommodations or protections are provided to juveniles? (2) Does the jail provide any specific educational or rehabilitation programs specifically for juveniles? (3) What were the sheriff's personal opinions regarding an alternative placement to adjudicated juveniles, if given the opportunity to change the current system? (4) What challenges in housing juveniles was experienced? Finally, (5) was there a correlation between demographic characteristics of the sheriffs and their perceptions of whether adjudicated juveniles should be housed in adult jails? Prior to answering these questions, a brief review of the literature pertaining to juveniles in adult confinement is important.

Literature Review

The history of juvenile justice begins with the notion of *parens patriae*, whereby the government could take a child away from his/her parents if the state determined the child's welfare to be at risk. At the point at which the child was taken from the parents, the "guardian" of the child became the court (Spohn & Hemmens, 2009). The formation of a separate juvenile system was more concerned with protecting children - originally from their parents and ultimately from their own destructive behavior - and rehabilitating them rather than punishing them. This history stems from a lack of direction from the U.S. Constitution.

As originally written, the U.S. Constitution is virtually absent any guidance regarding juvenile justice matters. The founding fathers supported the traditional paternalistic culture of the era in which the family head, usually the father, was the final authority in all matters concerning juvenile offspring (Siegel, Welsh, & Senna, 2003). The landmark case of the Supreme Court in *In re Gault* established the procedural safeguards that should be extended to juveniles in the courts; however this issue of confinement for juveniles was not in the ruling. The first state to establish that juveniles should be treated differently was Illinois in 1899 (Delaney, 2006). By the 1930's, most states had a different system of justice for juveniles. However, this differential treatment is not without its caveats. Juveniles, depending on the crimes they commit and/or other aggravating circumstances, can be considered adults and treated as adults in the eyes of the court and the correctional system. The number of juveniles treated as adults by the legal system has steadily increased since 1992 (Stimson &

Grossman, 2009; Woodlard, Odgers, Lanza-Kaduce, & Daglis, 2005).

Sickmund (2003) provides a review of the pathway to adult court, which primarily falls under three basic categories: judicial waiver, concurrent jurisdiction, and statutory exclusion. Judicial waiver (also known as certification, remand, or bind over) is when a judge uses his/her authority and transfers a juvenile to adult court. Concurrent jurisdiction (also known as prosecutorial waiver, prosecutor discretion, or direct file) is when the prosecutor is given discretion to try the case in either adult or juvenile court, since both have original jurisdiction. Statutory exclusion (also known as legislative exclusion) is when a juvenile, because of the crime and/or prior history, is automatically transferred to adult court. However, states have set a minimum age for this to happen, with Georgia, Illinois, Mississippi, New York, and Oklahoma all setting statutory exclusion minimum age requirements to be as young as 13. In addition to the three categories discussed, a majority of states have what is known as a "once an adult, always an adult" provision which states that if a juvenile has been convicted as an adult, then they are an adult in the eyes of the court for any other subsequent offense. This provision also opens the possibility of acquittal, if a juvenile is charged with a felony and has been housed in an adult setting but then later has charges dropped or the case is not won by the prosecutor. The adjudicated juvenile regains all rights and protections afforded to someone under the age of adulthood, even though the juvenile may have just spent the last one to two or more years in an adult jail setting. The other possible pathway for juveniles is known as reverse certification, whereby a juvenile subject to an automatic waiver requests a hearing in which they can argue to be tried in juvenile court.

There is no clear consensus among the states about what age juveniles should be treated like adults, nor is there consensus on where they should be confined. Individually, states have developed standards and guidelines for determining which juvenile offenders will be adjudicated as juveniles and which will be transferred to the adult system. Often this requires an awareness of juvenile crime trends, empirical studies of outcomes for certified and non-certified juveniles, decisions about how to respond to juvenile crime in general, and logistical considerations for what to do with certified juveniles. Each state and county court and correctional system has to decide where to house these juvenile offenders who have been transferred to the adult system through legislative exclusions (the most likely reason), prosecutorial or judicial decisions. While the Juvenile Justice Delinquency and Prevention Act does require a separation of sight and sound of juveniles in adult jails, this is not required for those juveniles who have been charged and waived to adult jurisdiction. The act is more concerned with keeping juvenile status offenders from being incarcerated (Levitt, 2010). According to the Office of Juvenile Justice and Delinquency prevention, "a juvenile who has been transferred, waived, or direct filed is otherwise under the jurisdiction of a criminal court does not have to be separated from adult criminal offenders pursuant to the separation requirements of the

JJDP Act" (OJJDP, 2007, p. 31 as cited in Levitt, 2010). Thus, certified juveniles will more than likely be housed with adults prior to conviction.

The biggest concern among those advocating reform is the risk of victimization of juveniles by adults awaiting trial (Levitt, 2010; Redding, 1999). However, others contend that juveniles waived to adult court have generally committed criminal acts serious enough that they forfeit their status as children, and should not be given any special considerations. Some note that waived juveniles, who are typically from high crime areas, may have already lived with convicted adult felons most of their lives (Richeson & Klofas, 1990).

States have expanded legislation allowing for the prosecution and sentencing of juveniles in adult courts (Torbet, Gable, Hurst IV, Montgomery, Szymanski, & Thomas, 1996). All states allow juveniles to be tried as adults under certain circumstances. In the 1990's, mechanisms were greatly expanded by almost every state to allow juveniles to be tried as adults (Sickmund, 2003). These mechanisms include adding more crimes to the list of those excluded for jurisdiction in juvenile court and adding mandatory minimum time for incarceration. These changes came about for a variety of reasons, with one of the primary reasons being the belief that the juvenile justice system was not equipped to handle violent juvenile offenders (Woolard et al., 2005). Public opinion polls have shown that the public has consistently been in favor of transferring juveniles to adult court for serious felonies (Myers, 2003). There is a trend to try and keep juveniles in juvenile court. Between 2011-2013, 12 states (Arizona, Colorado, Connecticut, Delaware, Illinois, Nevada, Utah, Virginia, Washington, Ohio, Maryland and Nevada) revised their transfer laws to make it more likely that the juvenile will stay in juvenile court (Campaign for Youth Justice, 2013). It is clear that states have changed their laws, but it is not clear if these laws actually serve the purposes for which transfers are given: accountability, retribution, and enhanced public safety (Myers, 2003).

As already noted, when a juvenile finds themselves in adult court this also means they could find themselves in adult confinement at pre-trial. Pre-trial is a process where the defense lawyers prepare their case before trial. There is no time limit on when this pre-trial must be completed. Goeman, Evans, Geller, and Harrington (2007) describe legal parameters pertaining to pre-trial detention of juveniles awaiting trial and adjudicated as an adult. In 2007, thirty-nine states permitted juveniles charged as an adult to be held in adult detention, of which ten states, including Mississippi, mandate it for certain types of offenses. Of the thirty-nine states that permitted it, twenty states required extra protection (such as separation of sight and sound). Between 2011 and 2013 there has been a trend to try and keep juveniles out of the adult facility. Eleven states (Colorado, Idaho, Indiana, Maine, Nevada, Hawaii, Virginia, Pennsylvania, Texas, Oregon and Ohio) have passed laws limiting states' authority to house youth in adult jails and prisons (Campaign for Youth Justice, 2013). Campaign for Youth Justice (2007) discusses the laws in relation to pre-trial within each state. Colorado, Delaware, Illinois, Massachusetts,

Oregon, and South Carolina had age restrictions defining the minimum age allowable for detaining juveniles in adult jails for pre-trial. The minimum age for pretrial detention in adult jails was 16 in Delaware and Oregon, 15 in Illinois, 14 in Colorado and Massachusetts, and 13 in South Carolina, with the possibility of detention in adult jails at age 11 or 12, if so ordered by family court. The remaining states permit pre-trial detention in adult jails without minimum age restrictions.

While a juvenile may be considered an adult in the eyes of the court and may have committed very adult crimes, the question as to whether they are psychologically still a child is relevant. Between 2011-2013, eight states (California, Colorado, Georgia, Indiana, Texas, Missouri, Ohio, and Washington) took into consideration the developmental differences of juveniles and adjusted their mandatory minimum sentencing practices (Campaign for Youth Justice, 2013).

Classification tools often used to place offenders in a jail/prison setting are based on a risk assessment developed for adult offenders using actuarial data, which may not translate to a juvenile population that have development differences that are already well documented in both the psychological and medical literature (Woodlark et al., 2005). According to Furby and Beyth-Marom (1992), laboratory studies of non-delinquent adolescents show that 14 and 15 year olds have roughly the same reasoning skills as adults. Others, however, note that such laboratory studies do not replicate stressful real world situations such as those in which a delinquent juvenile may find himself, and further note that adolescents do not make good decisions (Kambam & Thompson, 2009).

It is clear that the issue of housing juveniles in adult jails is controversial. Some have argued that housing juveniles with adults is conducive to more violent behavior, provides opportunities for socialization into more crime, and produces higher recidivism (Wood, 2012). Part of the problem is that adult jails have a lower-staff to inmate ratio, and cannot offer the services (emotional, developmental, social, etc.) that can reduce recidivism (Wood, 2012). Others argue that juvenile offenders' threat to public safety outweighs any potential risks to the juveniles themselves.

Juveniles transferred to adult court have committed serious violent crimes and are perceived as a threat to public safety. The disturbing notion that a child could commit a heinous act can perhaps explain the research findings that juveniles transferred to adult court are sentenced more harshly than young adults who have committed similar crimes (Kurlychek & Johnson, 2004). Steiner (2009) found that there were no differences between certified juveniles and young adults regarding the court's decision of whether or not to offer bail, but indicate that certified juveniles were less likely than adults to be able to afford bail, and were consequently incarcerated pretrial more than their adult counterparts. It is important to note that these juveniles were incarcerated pretrial, which may be a function of the extralegal status of their economic situation rather than the legal factor of their perceived dangerousness, and has been shown to be a predictor of being sentenced to prison once convicted (Steiner, 2009).

Some states have made special confinement accommodations for juveniles who have been sentenced as adults. One notable example is Pennsylvania where the state opened the nation's first state prison specifically for juveniles who had been transferred to adult court, sentenced, and convicted to confinement. The facility, the Pine Grove State Correctional Institution, opened its doors in 2001, after spending \$71 million in start-up costs. In 2006 the average cost per year, per inmate was \$46,370 (Commonwealth of Pennsylvania, Audit Report for Pine Grove, 2007). In contrast, in fiscal year 2012 Mississippi spent an average of \$41.50 per day/per prisoner in operated facilities (State of Mississippi, Mississippi Department of Corrections' FY 2012 Cost Per Inmate Day, 2012). This equates to \$15,148 per year.

According to Mississippi statutes, the state is not required to provide special accommodations, such as formal education, age specific social interaction, or recreation programs to juveniles adjudicated as adults. While some might argue that this adds an additional layer of punishment, others recall the fact that once adjudicated as an adult, the juvenile is no longer considered a child and should not require the same accommodations as would be afforded to children in the system (Richeson & Klofas, 1990). Pine Grove is accredited by the American Association of Corrections Commission of Accreditation for Corrections. According to the Pennsylvania Department of Corrections' webpage (2010), the facility holds primarily fifteen to twenty year old adjudicated adults and "meets their special needs of education, adolescent development and recreational activity, while providing a safe environment for those offenders."

These needs are echoed in the literature where it has generally been shown that jails offer minimal services to their inmates, including services dealing with medical, mental health, education, and rehabilitation programs. Specific programming targeted at offenders under the age of eighteen are not as likely to be offered by an adult jail (Woodlard et al., 2005), and jail staff in primarily adult facilities are not trained in issues relevant to juveniles (Richeson & Klofas, 1990). The literature suggests that juvenile segregated jail facilities are rarely available. For juveniles awaiting trial, and adjudicated as adults, the empirical evidence has shown that these juveniles in adult jails: 1) have higher victimization rates by inmates and staff, 2) do not receive adequate treatment services for physical or mental health, 3) have higher suicide rates, 4) are exposed to jail/prison staff who are unable to appropriately deal with an immature and disadvantaged offender, 5) are disproportionately minorities, 6) have greater difficulty getting their record expunged, which impacts future education and employment, 7) have the possibility of denial of military services, 8) are more likely to recidivate, 9) are supervised by correctional staff who have not been given specific training or provide a differential response that is age appropriate (Continuing the Struggle for Justice, 2006; Myers, 2003; Woolard et al., 2005).

While new or specific facilities are one potential remedy to these problems, the other potential remedy is a change in legislation. It has been suggested that the same logic applied to the

landmark U.S. Supreme Court case *Roper V. Simmons* (2005), which determined the execution of juveniles to be unconstitutional, should be extended for adult punishment (Ash, 2006). In May 2010, the United States Supreme Court further reinforced the idea that juveniles are and should be treated differently than adults. Specifically in the case of *Graham v Florida* (2010), the court stated that "a juvenile offender [should not] be sentenced to life in prison without parole for a non-homicide crime". In 2012 in *Miller V. Alabama* it was further defined that life without the possibility of parole is a violation of the Eighth Amendment when applied to juveniles.

The number of juveniles certified as adults and housed in jails while awaiting trial can only be estimated. However, there are a few studies that have tried to fill this void that exists in the tracking of juveniles through the justice system. Recent data indicate that of the 6,837 individuals under 18 housed in local jails in the United States in 2007, 5,652 or 83% were awaiting trial as adults either due to prosecutorial transfer to adult court or because they live in a state where 16 and/or 17 year olds are considered adults in the criminal justice system (Sabol & Minton, 2008; Sickmund, 2004). Data from 2011 showed the annual one-day count at mid-year for juveniles held in jails was 5,900. Of this 4,600 were held as adults (Minton, 2012).

Mississippi has a total of 82 counties and 94 jail facilities. There are 21 (19 public and 2 private) juvenile residential facilities (United States Department of Justice, Office of Juvenile Justice and Delinquency Prevention). These facilities can house anyone under the age of 21. This number does not include facilities exclusively for mental health or substance abuse. Juvenile residential facilities in Mississippi, as in other states, exist to treat some medical, psychiatric or social need the juvenile may have. Juvenile residential facilities in Mississippi, also as in other states, do not house persons who have been charged with a felony crime, due to safety concerns for other juveniles. In Mississippi, the law states that juveniles who have been transferred to adult court may be detained in an adult jails, with no specific protections outlined for these juveniles (Miss. Code Ann. § 43-21-301(6) and Miss. Code Ann. § 43-21-315(2)). It should be noted that the authors did not review data from adults or juveniles housed in private facilities due to the large variance in reporting mechanisms and the limited scope of this study.

Methods

The purpose of this exploratory study is to determine the sheriffs' perceptions and experiences regarding juveniles awaiting trial and adjudicated as adults being held in adult county jails. The methodology consisted of a non-probability convenience sample of 19 sheriffs from Mississippi who agreed to participate in a qualitative face-to-face interview utilizing a semi-structured interview guide. In order to determine the sheriffs' perceptions and experiences, five related questions were asked and analyzed¹: 1) What kind of special accommodations or protections are provided to juveniles? 2) Does the

jail provide any specific educational or rehabilitation programs specifically for juveniles? 3) What were the sheriffs' personal opinions regarding an alternative placement to adjudicated juveniles, if given the opportunity to change the current system? 4) What challenges in housing juveniles was experienced? 5) Was there a correlation between demographic characteristics of the sheriff and their perceptions of whether adjudicated juveniles should be housed in adult jails?

Sample

A non-probability convenience sample of 22 counties was chosen from the southern half of Mississippi to participate in the research. A total of 19 county sheriffs in South Mississippi agreed to participate. Two sheriffs declined to participate in the study, and one county no longer had a functioning jail following the 2005 Hurricane Katrina disaster. Of the 19 sheriffs that consented to participate, 7 requested that the researchers interview their jail administrator or deputy instead. The authors conducted face to face interviews at the jail or sheriff's office in each of the participating counties. A semi-structured interview guide was developed by the researchers in order to collect the data. The guide was accompanied by an informed consent letter that was given to each of the research participants at the time of the interview.

The demographics of the sample include the following: twelve were sheriffs and the remaining seven were jail administrators, or chief deputies. Seventeen were males and two were females; three respondents were African American and sixteen were white. The age range of the respondents was between thirty six and sixty two. The years of experience in their current position ranged from six months to nineteen years. Total years of criminal justice experience ranged from seven to thirty eight years. Eleven sheriffs currently were raising their own children who were under the age of eighteen. Six sheriffs had only a high school education, while the other thirteen had completed at least some college.

Upon arrival at each interview, the researchers explained the purpose of the study. The researchers reviewed the informed consent letter and explained that participation in the study was voluntary and that the identity of the respondents and the corresponding answers would remain confidential. The interview subjects were told they were free to not answer any question(s) and could stop participating in the interview at any time. All participants signed the consent form, and were given an extra copy for their records. The researchers obtained verbal consent to audio record each of the interviews. Each interview lasted approximately thirty to forty-five minutes. The researchers did not interview or have any contact with the incarcerated juveniles. This study was approved by the Human Subjects Review Committee of the University of Southern Mississippi.

¹While data could have been analyzed using a qualitative software package, the reasonable size of the sample led the authors to code and analyze the data by hand.

Limitations of the Study

The major limitation of this exploratory study was that it was a non-probability convenience sample, consisting of only 19 of the 82 counties in Mississippi, and therefore the results of this study are not generalizable beyond those counties who voluntarily participated. While the qualitative responses of 19 sheriffs are completely appropriate for qualitative research, it is difficult to make claims of statistical significance in quantitative analysis. The tables presented in the following section are merely included so that the reader can have some idea of sheriffs' opinions based on their demographic characteristics. Furthermore, the researchers would have preferred to conduct interviews that were longer and more in-depth, but had to be respectful of the limited amount of time and availability of the sheriffs who consented to participate. Finally, the researchers were limited in the literature review regarding Mississippi; specifically, few statistics and information are readily available regarding Mississippi corrections population or institutions. A mix-methods approach would have been preferred in this study, but access to information was problematic and limited.

Findings

Information obtained from the sheriffs regarding children adjudicated as adults in the jails were as follows. On the date of the scheduled interview, ten of the nineteen sheriffs stated they did have at least one juvenile in the jail. From these ten jails, there were a total of 59 juveniles housed on the day of the interview. Of the 59 juveniles housed, all were male; one of the juveniles was 13 years old, one was 14, and the remaining were between the ages of 15 to 18. Answers to our five questions follow.

Question 1: What kind of special accommodations or protections are provided to juveniles?

Overall, sheriffs consistently stated that adjudicated juveniles are treated the same as adult prisoners because in the eyes of the court, they are considered adults. However, in practice this was not necessarily the case for all the jails. Responses from the sheriffs ranged from complete separation of sight and sound from offenders older than eighteen, to separation from only violent offenders, to segregation from the general population, to housing juveniles with more seasoned "father like" offenders, to housing with only other adjudicated juveniles, to placement in the general population.

One sheriff stated:

"We do booking, and strip searches of the individual, just like we do all inmates. This protects us and them."

Another stated:

"I have no control [on how to manage these youths]. I have to enforce state laws."

Some sheriffs confirmed that they do manage the intake and placement of adjudicated juveniles differently from that of the adult population. For example:

"If a juvenile is 13, 14 or 15, we will put them in lockdown (defined in this specific county as a two person cell, as opposed to general population which is an open dorm style ward). However, if a juvenile is in for a [felony] sex charge, we will isolate them to protect them from other inmates. We do this based on our past experiences."

Several sheriffs also expressed concern about the juvenile's physical and mental wellbeing in the jail. As one put it:

"We have to spend more time with these younger ones. We need to get to know them - they usually have a whole lot of issues they are dealing with. We need to know what these might be."

Yet another sheriff commented:

"We can't talk with juveniles the same way. We can't reason with them the same way [as adults]. We have to make adjustments, so the juvenile can understand what they did and hopefully learn how to deal with their issues."

It appears that the size of the jail is correlated with placement options. For example, in one particular jail that had less than 50 beds, the sheriff housed the offender in a segregation cell generally designed for problem offenders or offenders in crisis. In other jails that had more than 50 beds, the sheriff had more placement options, and as such was able to provide a variety of arrangements if he/she so desired.

The researchers followed up with a question specific to parental visitation. Most of the sheriffs stated that the visitation policy was no different for these juveniles, partly because they did not want to create the illusion to other inmates that these adjudicated juveniles were being given special privileges. However, several sheriffs did say that if a parent was overly concerned about their child or heard about an incident that occurred in the jail, they have allowed an extra visit.

Sheriffs consistently stated that they wanted to maintain fairness in the rules to protect the adjudicated juveniles. However, one sheriff commented:

"We don't want to punish the parents for their child's behavior. We will allow a parent visit [during non-scheduled visitation times] if requested."

In contrast, another county sheriff had the following comment:

"Parents of these juveniles will visit during normal visitation times; this will be a non-contact visit."

In another county, the sheriff replied:

"We need to keep the perception of preferential treatment of these juveniles to a minimum. I will only allow visitation of parents during the scheduled visitation times. However, if something significant happens to the juvenile in jail, or a significant family issue arises, we will make exceptions. We are human and know these kids will one day be back with family."

Another related area had to do with training. The researchers asked if jail personnel had received any special training for working with adjudicated juveniles or juvenile offenders in jail. All the sheriffs said that there was no additional training beyond Mississippi's state mandated jail personnel training. Many sheriffs did express a desire for additional training opportunities for their jail personnel regarding juveniles in adult jails along with other training needs. The other training needs most commonly noted were appropriate response to

basic mental health issues and basic foreign language skills, especially Spanish.

Question 2: Does the jail provide any specific educational or rehabilitation programs specifically for juveniles?

When asked this question, almost all the sheriffs said "no". However, as was the case with placement, there appeared to be a correlation with size of facility and rehabilitation and educational opportunities offered to the offenders in general, and specifically to the juveniles. The larger the jail size, the more opportunities were available. It is important to note these additional educational and rehabilitation opportunities, when available, were still limited and primarily included religious programming, limited GED education, alcohol and other drug programs, and some vocational programs. All sheriffs mentioned a lack of resources to provide adequate and appropriate rehabilitative programming for all of their offenders. It was a universal theme that the sheriffs supported education and rehabilitation programs, but the state reimbursement does not allow for these additional services to be funded. An exception was that in one particular jail, a judge in that county had ordered for a teacher to provide appropriate grade-level tutoring to a specific adjudicated offender, and as a result of the court order a teacher came to the facility to provide these services. This was the only stated case of a child adjudicated as an adult and awaiting trial receiving a formal education while incarcerated.

Question 3: What were the sheriff's personal opinions regarding an alternative placement for adjudicated juveniles, if given the opportunity to change the current system?

The response to this question varied significantly. All sheriffs felt that there needed to be consequences to the crime committed by juveniles, but how these consequences were carried out varied. Some sheriffs felt the system was appropriate. They consistently quoted the well known saying, "Do the crime, do the time". Other sheriffs felt there should be an alternative facility just for adjudicated juveniles. Some believed that juveniles should be placed in a juvenile detention center until they turned 18, at which time, they should then be transferred to an adult facility. It should be noted that several sheriffs, when discussing the issue of juveniles in adult jails, expressed concern about that juveniles housed with adults pretrial may later be found not guilty or have all charges dismissed for lack of evidence or other legal maneuvering. The sheriffs were concerned that if the courts find the juvenile not guilty, the juvenile will have spent time in adult facility which could have multiple negative future consequences.

The responses from the sheriffs reflected the variations found within the literature on the subject of juvenile incarceration. One sheriff stated:

"This is the best place for kids who have committed a violent crimes. The kids must be punished for the crime they committed."

Reinforcing this comment of punishment, one sheriff stated:

"If they have done the crime, they deserve to do the time."

On the other end of the crime punishment versus crime rehabilitation perspective, one sheriff stated:

"Depending on the severity of the crime, younger offenders have limited consciousness related to crime. We have to address the seriousness of the crime. Some kids need to be handled in a different setting than jail. It is hard to rehabilitate kids once they have learned from older, hardened criminals."

The theme of incarceration options continued with this sheriff's comment:

"We just need a separate facility [for juveniles] and more training to deal with juveniles."

The idea of a separate facility was further echoed by this comment:

"We need a facility in the state for juveniles who have committed serious legal offenses to keep them away from the adult court system. We need to head off these kids before they get into the adult system."

Question 4: What challenges in housing juveniles was experienced?

All sheriffs believed the primary concern of housing juvenile offenders was to make sure they were safe. The sheriffs had the same concern for safety for their adult inmate population, but felt it more keenly as it related to these incarcerated juveniles. In one case the sheriff simply stated "these cases are special". Another sheriff stated that his biggest challenge in housing adjudicated juveniles was "preventing them from committing suicide." Yet another sheriff highlighted this issue in saying:

"My challenge is keeping them safe. The big ol' boys I worry less about, they can take care of themselves. It is the small boys we need to watch out for."

The issue of safety of juveniles was a consistent response from the sheriffs. A few sheriffs commented on the importance of keeping juveniles connected with schools:

"Keeping juveniles connected with schools. We want to keep these kids at, or bring them up to, grade level. These kids will eventually get out of jail."

A number of sheriffs echoed the idea that in the jails, adult offenders teach the younger offenders how to be better criminals. A sheriff commented that the biggest challenge, was "simply putting these juveniles in the general population with repeat offenders."

Questions 5: Was there a correlation between demographic variables of the sheriff and their perception of whether adjudicated juveniles should be in an adult facility?

The demographics variables of the sheriff that were looked at included age, being a parent of a child under the age of 18, years in current position, and level of education.

Table 1.

Age and perception of housing adjudicated juveniles in adult jail (If you had an alternative to the current placing of juveniles in adult jails would you opt for this as an alternative?).

Opinion	36-50 years old	51 and older
Yes	6 (67%)	9 (90%)
No	3 (33%)	1 (10%)
Total	9 (100%)	10 (100%)

As indicated in Table 1, older sheriffs were more likely than younger sheriffs to opt for alternative placement for juveniles.

Table 2.

Years in present position and perception of housing adjudicated juveniles in adult jail (If you had an alternative to the current placing of juveniles in adult jails would you opt for this as an alternative? (years in current position only, not total law enforcement years)).*

Opinion	0 - 5 years old	6 - 20 years
Yes	9 (82%)	6 (75%)
No	2 (18%)	2 (25%)
Total	11 (100%)	8 (100%)

As indicated in Table 2, years in position does not appear to make a significant difference in the perception of opting for an alternative placement. Those with only a few years of experience were only slightly more likely to answer yes to this question than those with more experience.

Table 3.

Sheriffs with children under the age of 18.

Opinion	Yes	No
Yes	11 (58%)	0 (0%)
No	0 (0%)	8 (42%)
Total	11 (100%)	8 (42%)

As seen in Table 3, all sheriffs currently raising their own children under the age of 18 were in favor of finding alternative placement options, whereas all sheriffs without children under 18 answered no to this question. It is clear that those with children are more sensitive to the risks for juveniles housed with adults.

Table 4.

Sheriff's educational level and perception of housing adjudicated juveniles in adult jails. Sheriffs were asked: If you had an alternative to the current placing of juveniles in adult jails would you opt for this as an alternative?

Opinion	High School	Some College/College
Yes	6 (100%)	9 (69%)
No	0 (0%)	4 (31%)
Total	6 (100%)	13 (100%)

As indicated in Table 4, education does appear to have an influence on whether the sheriff will want an alternative placement for housing adjudicated juveniles. College educated sheriffs are less likely to agree with having alternative placement

(69%) than their counterparts with only a high school education (100%).

Discussion

The issue surrounding juveniles adjudicated as adults and housed in adult jails is not unique to Mississippi. Every state must determine where the most appropriate place is to house juveniles and what the procedures are for appropriately responding to this population of offenders who are not physically or psychologically an adult. This is not a new issue and as juveniles continue to commit serious crimes they will likely be waived to the adult criminal court. It is important that best practices and policies be developed.

The current research sheds some light on what some of the real and practical difficulties are for those states that chose to place these offenders in adult facilities. The empirical literature regarding the placement of juveniles is clear; there are significant negative long-term concerns with housing adjudicated juveniles in adult jails. The sheriffs in the present study added to these concerns by illuminating the issues surrounding safety of these juveniles in an adult setting, lack of education and rehabilitation services, and lack of timely access to the court system. It is clear that states are responding to the impact this may have on the juveniles and have recently enacted new legislation that prohibits this practice (Campaign for Youth Justice, 2013).

The experience in Southern Mississippi mirrors national trends in the variation in services offered. Some offenders, simply due to space availability or geographic location, will receive more rehabilitation and educational services, as well as greater protection (i.e. separation of sight and sound) than others. The variation of services and responses to adjudicated juveniles is very apparent in South Mississippi. There is no one set standard that all sheriffs or jails in Mississippi follow.

Following the ideas of many sheriffs, a separate facility for juveniles who are adjudicated as adults by Mississippi statutes could serve the state and the juveniles well. A creation of a facility in Mississippi such as the Pennsylvania Pine Grove Correctional Facility would seem to provide a solution to the problems county sheriffs face housing juvenile offenders. Such a facility in Mississippi would relieve many of the concerns expressed by the sheriffs of the county jails. Staff would be specially trained to address the problems and uniqueness of housing juvenile offenders who have committed felony level crimes that warrant placement in an adult setting. Prior to such an implementation, lessons learned, and an in-depth analysis of Pine Grove's experiences would be warranted to help streamline the process, perhaps cut costs, and provide the best alternative for juvenile offenders.

Conclusion

The researchers of this study recommend additional exploration into juvenile confinement in adult jails, both in Mississippi and nationally. In Mississippi, a look at the northern counties

of the state as well as a cross state comparison should be conducted to see if similar patterns exist. Nationally, a replication and expansion of this study in other states that also do not have minimum age limits could provide some interesting parallels and help inform best practices and procedures. Interviewing the sheriff is only the first step in helping inform best policies and procedures. More rich data can be garnered by interviewing the juveniles themselves, as well as the judge, and other legal professionals that help shape the disposition of the juvenile.

Further research into the number of juveniles who are charged with a crime that requires automatic transfer to adult courts and are later found innocent of the charges is warranted and would provide data on the extent of this invisible problem that could also help shape best practices. There are no data in Mississippi on the number of times this occurs or what happens to these juveniles once they are released from the county jails. A review of jail facilities and services they provide specifically to juveniles across the country is needed as a basis of comparison and can be informative for future directions. A content analysis of the written policies related to housing juveniles at each facility should also be considered. Clearly, there is a need for more empirical research in this area of juveniles in adult facilities in order to ensure the best outcomes possible for juvenile offenders. The criminal justice response to juveniles is a delicate balancing act that can be life altering for the juvenile.

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Discipline and the Pipeline to the 'Pen': A Proposal for Change

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Consciously or subconsciously, educators are funneling our children from schools to prisons. Moreover, they're uploading African American and Hispanic children into the system at a number that is measurably out of proportion to their White counterparts. Ticketing students for minor behavior infractions and labeling them as "alternative" often causes them to act out alternatively. Becker (1963) believes that those who create rules and labels for others that do not follow those rules are actually responsible for creating deviance. Ultimately, when students are hastily ticketed and charged when they act out, it's much easier for them to drop out of school and drop in to a penal institution.

Keywords: Pipeline, Penitentiary Labeling, Juvenile Justice System

Don't throw the baby out with the bath water! Oftentimes, this phrase is offered to someone when it is believed they are about to rid themselves of something that might be of good use. Thus, the symbolism of the dirty bath water could be replaced with a person. Additionally, the symbolism of "throwing out" the bathwater could be replaced with the theory of labeling (Becker, 1963). The use of this cliché as an introductory sentence is quite simple. When educators markedly target chil-

dren of certain racial and/or ethnic groups and label them as deviant because of their own racial bias; perceived misconception; a child's momentary behavioral problem; or their own lack of cultural knowledge; they are in essence "throwing out" entire groups and generations of children-"with the bathwater." This phenomenon has led me to coin another phrase, *Don't throw the child out with the label.*

U.S. Racial Discrimination	Dates	Children Funneled Into Incarceration	Dates
Slavery	1600-1863	Chattel Slavery	1600-1865
Reconstruction/Black Codes	1865-1876	Convict Leasing/"Apprenticeship"	1865-1900
Jim Crow Laws	1876-1965	Juvenile Justice System	1899-
Civil Rights Legislation	1964-	"Get Tough" Policies	1964-
War on Drugs	1982-	Youth Certified as Adults	1865-
Mass Incarceration	1983-	Youth Jailed With Adults	1865-
Prisons-for-Profit	1984-	School "Zero-Tolerance" Policies	1994-
Tougher Sentencing Legislation	1986-	Children Ticketed in Schools and introduced to the System	1994-
Modern Day Slavery	2014-	Youth Imprisoned for Profit	2014-

According to the *Encyclopædia Britannica*, during the era of the Black Codes, apprentice laws—from 1865 to 1900—provided for the "hiring out" of Black orphans and other young dependents to Whites, who often turned out to be their former slave owners. It is of no coincidence that the Juvenile Justice System was created in 1899. Its stated cause included not punishing

youthful offenders like adults but, rather, rehabilitating them. According to the U.S. Bureau of Justice Statistics (BJS) there were about nine hundred and six thousand African Americans in jail and prison in 2009 (841,000 Black males and 64,800 Black females out of a total of 2,096,300 males and 201,200 females). The 2010 census estimated that Blacks comprised 13.6% of the U.S. population. Hispanics (of all races) were 20.6% of the total jail and prison population in 2009 and comprised 16.3% of the U.S. population. According to Bruce Western, African American males have a higher chance of going to prison if they drop out of high school (an over 50% chance of being incarcerated in their lifetime), as compared to an 11%

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chance for White male high school dropouts. Economic disparities, communities left behind, educational inequalities, and unequal treatment in the criminal justice system, have contributed to this gap in incarceration rates by race (*Punishment and Inequality in America*, 2007). Western says those who spend time in prison make much lower wages upon release and are more underemployed than men without criminal records. The devastation of mass incarceration has left one out of every ten Black children without a father in their presence. The phenomena of mass incarceration perpetuates the damaging cycle of broken families, poverty, and crime. The quicksand explosion of imprisonment is forming a heavy road to tow for future Americans (Western, 2007).

A few years after the signing of the Emancipation Proclamation (1863) a new breed of fear and intimidation could be seen in the eyes of many White Americans, as there were millions of out-of-bondage African Americans that hadn't lost their memory of the atrocities of slavery. These newly freed Americans were also hungry, homeless, and in need of employment. Additionally, the American economy was suffering, and "free labor" was no longer free. As an answer to this new state of being in America, many states initiated Black Codes that graduated misdemeanors to felonies, in order to criminalize and incarcerate the newly freed population. This new instillation of rules actually extended slavery. Immediately, jail and prison cells begin to fill with freedmen, who had done things as trivial as looked haughty. States implemented a convict leasing program, because the wealthy former slave owners still needed affordable (free) help to continue the production of their companies. States were earning as much as \$14,000.00 a month (up to \$4 million today) to "lease" human beings for labor.

The convict leasing program was essentially a death penalty, as it left many former slaves/convict laborers in worse condition than when they were under the realms of indentured servitude. At least the slave owners cared enough to keep their investments alive. Corporate owners could care less, because many of them knew the labor bosses were willing to perform crime sweeps in counties across the country to capture more convict laborers. Many of the African Americans that were swept up in the crime sweeps were teenagers, who ultimately ended up paying off their fines and debts to society with their lives, as the working conditions in the mines and abuse on the plantations was more than they could handle. As early as 1890, Disproportionate Minority Confinement (DMC) reared its ugly head. African American males comprised only 12% of the population at that time, but 30% of them were in prison. This mass incarceration caused a media frenzy that fueled the propaganda that people of color were not trustworthy and for the most part, criminal. Sharecropping, peonage, and chain gangs prevailed for years and many justices were paid to convict innocent African Americans into the convict leasing program. Eventually, the NAACP called for change. President Roosevelt enacted laws and swift justice, and labor bosses/slave owners were tried and convicted. However, the fight to end the pipeline to the penitentiary is not over. Interestingly enough, the 13th Amendment to the Constitution declares that "Neither slavery

nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction." In essence, since 1865, it has been legal to force someone into slavery, if they commit a crime. The prisons-for-profit private sector (Corrections Corporation of America/CCA) is a billion-dollar industry. According to Vicky Pelaez (2014), seven percent of our incarcerated citizens are in private prisons and states fork over about 100 million dollars/per year to the CCA. This for-profit group also has a hand in assisting legislators with proposed bills. The American Legislative Exchange Council (ALEC) is a "think-tank" of sorts that works to "advance limited government, free markets, and federalism at the state level through a nonpartisan public-private partnership of America's state legislators, members of the private sector and the general public" (ALEC website, 2014). Reportedly, members of the CCA have been heavily involved with this organization. At least 37 states have legalized the contracting of prison labor by private corporations (Global Research, 2014).

This might come as a shock to some, but the pipeline to the penitentiary started after slavery and has continued via the zero-tolerance school policies guided by the "get tough" administrators throughout the various school systems. Unlike the Juvenile Justice system, the zero-tolerance school policies do not seek to rehabilitate, although their primary clients are juveniles. Just as the Black Codes gave a "green light" to deem almost anything criminal, many school zero-tolerance policies are creating the same prism by causing students to drop out of school and/or become criminals before finishing school. Racial profiling, indecent searches of students, excessive policing at schools, and high-stakes testing that slates students for failure must be addressed and altered.

Labeling and Learning

Michelle Alexander (2010) says "Rather than rely on race, we use our criminal justice system to label people of color 'criminals'" (p. 1). Labels follow children well into adulthood and may cause children and adults to act out the characteristics of the label they have been given (Tannenbaum, 1938). For example, a child labeled "truant" at age 13 may be denied entry into a prestigious college at age 18. Additionally, a student in a behavioral treatment program may later be denied entry into the United States military. Eventually, the child or adult acts out the behavioral label they have been given in the mode of a "self-fulfilling prophecy" (Merton, 1968). In 1968, Lenore Jacobson and Robert Rosenthal put Merton's theory to the test at a poor, urban school. They examined the theory of the self-fulfilling prophecy in "The Oak School Experiment." Teachers were told that some of the students in their classes had scored in a high percentile on an IQ test. At the end of the year, the results of their experiment demonstrated expectancy effects. In other words, students who had been given a "special" label did exceedingly well throughout the year. They also tested well at the end of the school year. Consequently, teacher expectations can have a substantial effect on a students' scholastic perfor-

mance. The best thing to do, according to Frank Tannenbaum, is to not label anyone and focus on positive character traits. Do not "dramatize the evil," (e.g., segregate the child, tag the child, or identify the child as something other than normal), as it will only summon the child to behave with the very trait that it has been given (Tannenbaum, 1938).

Negative activity should not lead to a negative label. A momentary discretion should not lead to permanent peril. Howard S. Becker introduced the Labeling Theory in 1963. He believed the label itself contributed to the person's deviant acts. However, the process and outcome of labeling is not foolproof. Some children are never labeled, regardless of their behavior and/or learning ability. Some will be labeled, primarily because of who they are, who their parents are, and/or how much their parents earn in yearly wages. Race and income does matter. As Giddings (2011) reports, an African American child is more likely to be ticketed, charged, and sanctioned for an infraction in school. An African American child is also more likely to be expelled from school and placed in an alternative education program (Giddings, 2011). It is an inappropriate response to deviance that lends a causal relationship to the disproportionality and overidentification of African American children. Losen and Orfield (2002) believe there are several variables that are attributable to overidentification and disproportionality. They include race, gender, poverty, unconscious racial bias, resource inequalities, reliance on IQ tests and other evaluative tools, and power struggles between school officials and minority parents. They believe many states use the labeling system like a welfare system, as they channel monies from the federal government by identifying certain students with disabilities.

Labeling an African American student after witnessing a certain behavior, while ignoring the same behavior from a White student shows that it is not the actual behavior that is causing the child to be labeled; it is the person's reaction to that particular child. Labeling carries a heavy burden in a child's social participation and self-image. Many educators are in essence setting the student up for failure or a life of hardships. As students carry these labels year-after-year, from this school to that school, it forces a trickle-down effect which causes others to look for these "special" or deviant traits.

In other words, the student will become undesirable (e.g., the "Broken Windows" theory, by Wilson and Kelling, 1982). When the student is rejected and/or treated differently, he or she begins to internalize this treatment and exhibits it as if it were so. Others will see the label first, and the person second. Edwin M. Lemert coined this circumstance as Secondary Deviance (1951). Society has a hard time of letting go. Forgiveness is rare. Many do not care if one has "served the time for the crime." Their motto is, "If you do it once, you'll do it again." Believe it or not, some do not believe a child can be rehabilitated, especially if s/he committed a violent crime. This attitude plays a major role in the lives of many offenders participating in secondary deviation. The first crime may have caused a certain societal reaction, which led to a second offence; as the offender now wants to assume the societal role s/he has been given.

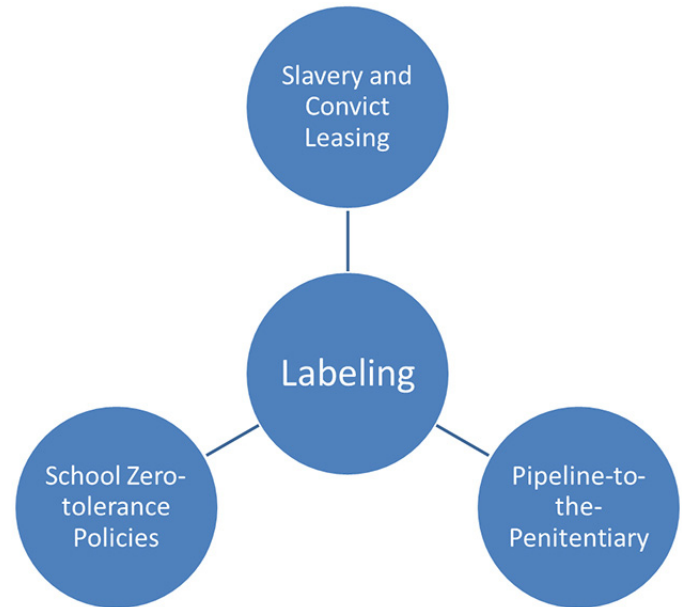


Figure 1.

Pipeline to the Penitentiary

For more than four centuries, African Americans have been asked to separate their entire existence from mainstream society. People of color were to be seen (performing a given task) and not heard. They were to do as they were told, and accept what they were told as truth. That view is rooted in slavery and has sprouted into several million people under community supervision today (Alexander, 2010). Several administrators of various schools and school districts around the country appear to be forwarding and promoting this idea with their overly-sanctioned zero-tolerance policies. And quite amazingly, many parents willing leave their children in the care of these "forward-thinking" educators for several hours per day.

In *The School-To-Prison Pipeline* (2010), Kim, Losen, and Hewitt compared and contrasted today's American law with the continuously evolving laws of the public school systems. They note that in this dubious "zero tolerance" era, school systems are "ticketing" many children into the juvenile justice system...and eventually into the criminal justice system. They argue that criminalizing typical school misconduct, "threatens" an entire generation of children. The authors also tackle the misuse and overuse of school suspensions, expulsions, alternative schools, and racial and educational discrimination. According to Senator John Whitmire, who represents Texas Senate District 15 and serves as Chairman of the Senate Criminal Justice Committee, most of the tickets are written for disruption of class or transportation, disorderly conduct, curfew violations, and truancy. He estimates that over a five-year period, Class C tickets were issued to 1,200 elementary school students in the Dallas Independent School District. In the 83rd legislative session, Senator Whitmire passed Senate Bill 1114

(SB 1114) to address ticketing in public schools. The bill established a complaint process for all offenses occurring on school grounds. From 2014 and beyond, a student may not be arrested after their 17th birthday for a violation of the education code. Children under 12 will no longer receive citations or complaints for offenses occurring on school grounds.

Reportedly, the Houston Independent School District distributed over 5,000 misdemeanor tickets to students in the 2008-2009 academic school year. According to the Public Policy Research Institute at Texas A&M University (2005), "The single greatest predictor of future incarceration in the juvenile justice system is a history of disciplinary referrals at school." What child would want to return to a place that threatens to lock them up, and/or cost their parents/guardians hundreds of dollars (e.g., a child was ticketed for spraying perfume on her body in a classroom)? (McGreal, 2012) Sadly, the school dropout rate will continue to increase amidst such policing and arrests in public schools. Eventually, theorists will coin a term that parallels the school drop-out rate with the prison "drop-in" rate.

In a similar effort, Texas Appleseed, a public interest law center, studied the impact of school discipline policies; ticketing, arrest and use of force in public schools; and court involvement in student discipline and found that African American and special education students are more likely than their peers to be discretionarily disciplined at school (2010). Additionally, in their December 2010 Executive Summary, they reported that African American students were significantly over-represented in discretionary referrals to In-School Suspension (ISS), Out-of-School Suspension (OSS), the Disciplinary Alternative Education Program (DAEP), and in discretionary expulsions to Juvenile Justice Alternative Education Programs (JJAEPs). After a push for justice by the mother of a student

ticketed at a middle school in Bryan, TX, Texas Appleseed along with the NAACP chapter in that area filed a federal complaint against the Bryan Independent School District (BISD). Shortly after the Office for Civil Rights within the U.S. Department of Education began investigating the school district (in late 2013), BISD changed its disciplinary policy.

Jeanette Moll of the Texas Public Policy Foundation described the "problem" of zero tolerance policies in an article entitled, "Expelling Zero-Tolerance: Reforming Texas School Discipline for Good." Moll (2012) explained the thoughts behind the passage of Texas Education Code § 37.001. In 1995, Texas enacted a school disciplinary code, for several infractions (e.g., classroom disruption, transportation disruption, sexual harassment, tardiness, truancy, disorderly conduct, graffiti, fighting, cursing, skipping class, drug use, alcohol use, possession of weapons, etc.) and granted local school districts the ability to establish additional individualized standards for school discipline (e.g., zero tolerance policies). The policies were swiftly enacted as a response to the "get tough" stance on juvenile delinquents. The policies were intended to crack down on the use and possession of guns and deadly weapons on school campuses. However, the policies allowed school districts to expand, as needed and without state approval, the ability to penalize student conduct as harshly as they deemed appropriate. Supporters of zero tolerance policies believe the policies are needed to keep schools free of violence. They believe the zero tolerance policies will exert a blanket mode of general deterrence across school campuses. They also believe it is necessary to remove the "problem," instead of dealing with the problem. There is a legitimate relationship between harsh school disciplinary policies and the school dropout rate as illustrated in Table 2. (Skiba, 2000).

Zero Tolerance	Effects on Children	Label Given to Children	Discipline Alternative
Suspension	Escape/Dropout	Yes	Bullying Prevention
Expulsion	Counter Aggression	Yes	Conflict Resolution
Fines	Anger	Yes	Peer Mediation
Tickets/Citations	Resentment	Yes	Better Classroom Behavior Management
Arrests	Posttraumatic Stress Disorder	Yes	Early Identification and Intervention
Alternative Education	Recidivism	Yes	Peace Officer Training
Racial Disparity in Punishment	Adult Life of Crime	Yes	Judicial Review Boards
Disproportionality in SES	Chronic Unemployment	Yes	Restorative Justice
Inconsistency in School Administration	Loss of social bonds/ No social bonds	Yes	Diversity Training for All Educators

A Proposal for Change (Methodology)

Goals:

- ♦ Implement Judicial Review Boards at Independent School Districts (ISDs) across Texas
- ♦ Evaluate Judicial Review Boards in comparison to "Zero-Tolerance" Policy Outcomes
- ♦ Disengage the "School to Prison Pipeline/Discipline-to-the-Penitentiary Pipeline" by implementing Judicial Review Boards on public school campuses
- ♦ Lessen Disproportionate Minority Confinement (DMC) in the justice systems
- ♦ Better the communities surrounding the schools and eventually better the population and available workforce
- ♦ Provide more stable and nurturing households for children
- ♦ Implement a better disciplinary system for educators
- ♦ Heighten moral aptitude
- ♦ Get everyone to focus more on the primary goal: Education
- ♦ Save young lives...

Committees are quite prevalent in the Texas independent school districts. According to Texas Education Code § 37.001, there are several instances where a review board must be enacted when making decisions on the educational life of a student. The Placement Review Committee (PRC; a three-member committee) is formed when a teacher refuses to allow a student to return to his or her class. This committee must be created to review a child's pending placement in an alternative education program. The schools must also structure a PRC for the placement and review of students with disabilities. Additionally, schools must establish a PRC upon a student's return from a three-day suspension. Considering those facts, there should also be a Judicial Review Board or Committee in the public school system that handles minor infractions and campus violations. Ticketing a child and charging them with a Class C Misdemeanor for typical schoolyard behavior has to stop. The complaint process stipulated by Senator Whitmire's SB 1114, requires schools to impose progressive sanctions on the child before filing a criminal complaint. The progressive sanctions include a warning letter, a behavior contract, counseling services, and community services.

This is a proposal for a new disciplinary Judicial Review Board. The proposal will be presented to independent school districts across Texas. The public school judicial review board will be similar to the Judicial Review Board on college campuses around the United States. The public school judicial review board members will consist of parents, community volunteers, teachers, and administrators. The school staff will be appointed to the review board by the administrators of the independent school districts or the school principal. The parents will be appointed by the Parent Teacher Association (PTA). Community volunteers and alternate members will be appointed by the school principal in conjunction with PTA members.

The Judicial Review Board members will have clear and concise rules and provisions to follow in deciding on infractions and sanctions. Students and parents will be made aware

of the alternative disciplinary Board within the public school and given detailed information about the operation of the Board. The Board members will not be paid an additional stipend for their service on the judicial review board (unless the independent school district can afford to implement the extra pay). Police officers will not be allowed to write citations to students. Instead, each case will be referred to the Board. The members will meet every week to decide upon the cases. The Board will only hear serious cases (e.g., Bullying, Fighting, Truancy Violations, etc.). Minor violations (e.g., throwing paper in a classroom, talking while the teacher is talking, running in the hallway, yelling in the library, etc.) will be handled by the classroom teacher and/or assistant principal.

This new alternative disciplinary Board has the capability of changing the entire education system. There will be no "zero tolerance" policies. Disciplines will be graduated (e.g., on a tier hierarchy, based on proven results). Board members will help develop a planned continuum of effective disciplinary alternatives for students with behavioral actions that threaten the safety of the school. Board members will seek to improve collaboration efforts and communication between school officials, parents, law enforcement officials, juvenile justice officials, and county mental health professionals. This collaboration should help develop an assortment of discipline alternatives for referred youth. In fact, SB 1114 allows school district officials to assist the court in supervising its court orders in juvenile cases (e.g., providing intervention services with the consent of the youth's parents or guardians).

The Board will also assist policy makers in developing legislative initiatives for schools and school districts that will provide an array of disciplinary alternatives in place of school suspension and school expulsion (American Psychological Association, 2008). Young children will not be ticketed for typical childhood behavior (something SB 1114 has enacted for youth younger than 12 years of age, as of January 2014). This Board will help divert students from the criminal and juvenile justice systems and possibly a life of crime.

Within this new alternative disciplinary program, there are additional plans to introduce more Positive Behavioral Interventions (PBI). PBI is based on a problem-solving model that aims to prevent inappropriate behavior through teaching and reinforcing appropriate behaviors (OSEP Technical Assistance Center on Positive Behavioral Interventions & Supports, 2007). Given that the Board will have parents as members as well, the parent-to-parent influence should help decrease bullying on public school campuses. Senator Whitmire believes we should be moving toward peer mediation. Senator Whitmire recently introduced legislation that would have diverted truancy cases away from the courts and reduced fines for first time offenders, but Mr. Rick Perry (the outgoing Texas Governor) vetoed the bill.

Some of the factors that might assist the Board in implementing a successful alternative disciplinary program include, deciding on the actual intent of the action of the child and integrating that into the disciplinary decisions; mandating school-wide support of the positive behavioral interventions;

training the judicial review board members in quarterly developmental courses and workshops; utilizing and integrating community resources as much as possible; and continuously evaluating the implementation of the new alternative disciplinary program and its members.

In evaluating the proposed project, statistical analyses will be conducted to test numerous hypotheses (e.g., correlations between race and discipline referrals, outcome success in accordance with rules and standards, etc.). This will be a primary data research study, where the data will be gathered from all participants throughout the project.

Conclusion

We must be careful not to allow the zero-tolerance school policies to lead our young men and women of color back into the convict leasing program. The American Civil Liberties Union describes the "school-to-prison pipeline" as a set of policies and practices that move school children out of classrooms and into justice systems. They believe many are prioritizing incarceration over education. Michelle Alexander (2010) says, "Sociologists have frequently observed that governments use punishment primarily as a tool of social control" (p. 4). According to historian Mary Ellen Curtin (2000), before the Civil War, the prison population was 99% White. After the official end of slavery, the demographics in the prison cells shifted to a predominantly African-American population. African Americans were being charged with crimes that had not previously been felonies; thus, prisons not only became for-profit institutions, but also sources of cheap labor for the burgeoning industries of the New South during Reconstruction and beyond.

In *Slavery by Another Name*, Douglas Blackmon (2009) says this is how the U.S. got into the habit of finding it normal to see such a huge population of African-American men incarcerated all the time. He also says it's the missing link in understanding the persistence of the economic and educational gaps between African-Americans and Whites in modern society today. According to Blackmon (2009), slavery didn't go away 150 years ago. In essence, African-Americans have not had the opportunity to recover from all the terrible damage of slavery. He says the atrocities that were committed against African-Americans didn't just injure Black people. The miscarriage of justice injured the whole country, as it deprived us of the talent, energy, ambition, and abilities of a huge population of people.

When students are ticketed and garnished with a criminal record, oftentimes they become continuously delinquent, because many feel they have "nothing to lose." The students are thrown into volatile situations where their parents are stressed and forced to pay fines that they often cannot afford. The stress of the parents is often passed on to the children and ultimately revealed in their behavior at school. Second and third infractions cause many students to become engrossed within the juvenile justice system and alternative education programs. Title 2, Public Education, Subtitle G, Safe Schools, Chapter 37, Discipline; Law and Order, Subchapter A., Alternative Settings

For Behavior Management (Texas Education Code § 37.001) was amended in 2005, 2007, 2009, and 2011 and requires each independent school district in Texas to have a local policy that prohibits the following infractions: dating violence; making a hit list; harassment; bullying; hazing; disruption of transportation; using drugs; selling drugs; exhibiting firearms; emitting noise of an intensity that prevents or hinders classroom instruction; disruption of classes; obstructing or restraining the passage of persons in an exit, entrance, or hallway of a building without the authorization of the administration of the school; disruptive activities; etc. Most of the infractions are classified as Class C Misdemeanors. Meanwhile, the list of labels for the student grows with each infraction and delinquent adjudication. While serving as a guest panelist at the 2014 Royce West Forum and Lecture Series, Texas Senator John Whitmire explained that oftentimes making something mandatory or criminal (law), causes more harm than good. This excruciating cycle causes many students to drop out of school and subsequently become adult criminals. With this new proposal for change, I hope to change that prophecy of doom.

The implementation of the judicial review board on public school campuses should contribute to a better workforce for our future and a heightened moral aptitude in our school systems. The aim of the Board is to get rid of the one-size-fits-all solution to discipline and educational referrals. Disruptive and criminal behavior should be lessened, as students gain a greater sense of responsibility. Social bonding should also be strengthened (Social Control Theory, Travis Hirschi, 1969).

If successful, I hope to help implement this alternative disciplinary system in schools throughout the nation and the world, via the United Nations. This system should also create a better collaborative effort between and among school officials and parents. The community should also benefit greatly from this new system. Alexander (2010) suggests we take a practical approach towards community self-help in an effort to exact an about-face in school drop-outs, crime, and incarceration. Above all, a greater sense of care should be shared by all.

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