

Resilience Matters: Examining the School to Prison Pipeline through the Lens of School-Based Problem Behaviors



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Abstract

The school-to-prison pipeline is an expansive issue that impacts the educational and criminal justice systems in the United States. Traditionally, research has linked the prevalence of the pipeline to factors based within school systems. These systemic factors include the use of zero tolerance policies, exclusionary disciplinary practices, and the presence of school resource officers. The present study aims to explore the impact of school-based problem behaviors as a catalyst to the school-to-prison pipeline. A sample of 112 mental health professionals (MPHs) who specialize in working with youth at-risk for justice system involvement were surveyed to assess their perceptions of three theoretical predictors of problem behaviors including parental efficacy, child impulsivity, and child resilience. Results indicate that respondents perceive that child resilience predicts problem behaviors above and beyond any other theoretical predictor. The implications of this finding as well as recommendations are discussed.

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Introduction

The school-to-prison pipeline refers to the process by which students are funneled from the school system into the juvenile or adult criminal justice system (Winn & Behizadeh, 2011). The pipeline has been an issue for over 20 years, plaguing the education and criminal justice systems in the United States. While juvenile delinquency itself has steadily declined across the country over the last decade, school-based juvenile delinquency has become more prevalent (Parker, Glenn, and Turner, 2014). In North Carolina, nearly half of juvenile complaints occur within the school system, with minority students overrepresented in school-based referrals. The literature related to the school-to-prison pipeline generally links its persistence to factors that are systemic in nature. Zero tolerance policies, inappropriate school disciplinary practices, school resource officer (SRO) presence, and subsequent academic disengagement have been found to perpetuate the school-to-prison pipeline (Henry, Knight, & Thornberry, 2011; Monahan, VanDerhei, Bechtold, & Cauffman, 2014). This research, however, has not occurred in a vacuum, as school districts and policy maker have taken steps to revise policies and review practices associated with the pipeline.

Despite concerted efforts to reform zero tolerance policies, create alternatives to exclusionary discipline, and better define the relationship between schools and SROs, African American students, among other minority students, continue to be disparately impacted by the school-to-prison pipeline (Heilbrun, et al., 2015). Trends related to school-based complaints in North Carolina have remained steady over the past several years. Young offenders, between the ages of 18–25 represent North Carolina’s most violent criminogenic population (Ernestus and Prelow, 2015). In addition, the academic achievement gap continues to widen as minority youth continue to be outperformed by their white counterparts, while suspended and dropping-out at disparate rates (Dancy, 2014).

The systemic focus on policies aimed toward reducing the number of juveniles funneled through the school-to-prison pipeline does not account for the non-systemic factors that may be perpetuating the problem. Factors that speak to the process by which rule-breaking behavior is developed at the individual level, as well as variables within the family structure, are underrepresented in the literature. This gap has limited the steps policymakers can take to address the school-based offending and the pipeline. Thought must be given to “why rules are broken” and the “rule-breaking process”, in addition to ensuring policies are equitable. Rule breaking, as studied in psychology literature, is absent from research on the school-to-prison pipeline. Traditionally, school-to-prison pipeline literature has focused on the fairness of policies and the decision-making tendencies of school personnel.

Addressing the problems that are associated with the school-to-prison pipeline from both systemic and non-systemic perspectives may give scholars a better understanding of the complexities of the pipeline, which could influence school-related policies.

Schools and juvenile justice practitioners have increasingly turned to mental health intervention programs to meet the needs of students exhibiting problem behaviors at school. Mental health and other community-based programming has expanded dramatically throughout the United States (Skiba, 2015). The steadily declined in juvenile delinquency over the last several years may be due in large part to more options for treatment through diversion programs. Problem behaviors that were once routed to the juvenile justice system are now handled by mental health professionals. Despite mental health service providers being the intermediaries between the justice system, the schools, and families, the literature related to the school-to-prison pipeline is devoid of their perceptions and insights. Youth mental health service providers not only work with court personnel to address punishment for juveniles, but they also work in conjunction with the schools and the families of the juveniles to assure compliance with court orders and streamline the delivery of services. This deficiency in the literature has created a notable gap in understanding a relatively unexplored aspect of the school-to-prison pipeline. The present study aims to address this gap in the literature by examining the perspectives of mental health professionals (MPHs) related to the school-to-prison pipeline.

Two research questions guided the exploration of the perceptions of mental health professionals in the present study. The first question (RQ1) assessed the MHP's perception of parenting efficacy, impulsivity, and resilience as predictors of child problem behaviors and delinquent behaviors. The second question (RQ2) assess the MHP's perception of the most important predictor of child problem behaviors and delinquent behaviors among parenting efficacy, impulsivity, and resilience. These research questions were developed with two primary goals in mind. First, the research questions were designed to capture the voice of MHPs related to predictors of problem behaviors that may manifest in schools, subsequently setting the stage for rule-breaking and the consequences therein. Capturing this perspective may shed light on elements of the school-to-prison pipeline that warrant further study. Second, the questions were meant to explore the value of MPHs perspectives related to the pipeline. Because their perspectives are not represented within the literature, notable findings in this study may warrant further exploration of MPHs' perspectives relative to other constructs in the study of criminal justice.

School-to-Prison Research

Historically, the sequence of events that describes the pipeline has linked school-based, systemic variables to its prevalence. Zero tolerance policies, school disciplinary practices, and exposure to SROs have all been linked to negative outcomes for students, including increased likelihood for delinquent and/or criminal behavior. Scholars and youth advocates typically refer to these constructs when discussing the pipeline, with their commentary focused on the role schools play in the perpetuation of negative outcomes for youth. Research on the use of zero tolerance policies paint a troubling picture related to their impact on students.

Zero tolerance policies are regulations implemented by school districts that administer rigid—and often severe—punishments for specified violations (Curran, 2016). These policies are effected without the benefit of case-by-case discretion and independent of mitigating factors, such as a student’s disciplinary history or contextual factors surrounding the incident. These regulations were originally created to prohibit the presence of weapons, including firearms, and drugs on school campuses. Zero tolerance policies were later expanded to include behaviors such as fighting, bullying, and noncompliance with school personnel. Researchers (Skiba, 2014; Curran, 2016) have criticized the implementation of zero tolerance policies, citing the unintended consequences of “net-widening” and school-facilitated academic disengagement. School districts that employ zero tolerance policies create more opportunities for students to violate the rules (net-widening) and sanctions, many of which have been linked to negative academic outcomes (Heilburn, et al., 2015).

Moreover, these policies have been associated with higher rates of school suspension, especially among African American students (Curran, 2016). Zero tolerance has also been found to be a predictor of school dropout, lower test scores in math and science, the criminalization of student behavior leading to school-based arrests (Skiba, 2014; Skiba, 2015; Parker, Glenn, & Turner, 2014). These findings illustrate the concern of scholars and social justice advocates related to the pipeline. Traditional research has also linked exclusionary discipline to the persistence of the school-to-prison pipeline.

Exclusionary school disciplinary actions, such as school suspension and expulsion, typically result from violations of school policy. Exclusionary discipline has been linked to a variety of negative academic and behavioral outcomes. School suspensions and expulsions have been found lead to an increased likelihood of subsequent illegal drug use and other antisocial behavior (Osher, et al., 2010; McCrystal and Higgins, 2007). This behavior exponentially increased the likelihood of contact with the criminal justice system. In addition, some scholars argue that

exclusionary discipline is an ineffective means of behavior modification. Students who are suspended for violating school policies have not had the proximate cause of their behavior addressed through the process of exclusion and are therefore just as likely to be suspended in the future (Osher, et al., 2010). Similarly, results in a longitudinal study on the predictors of school suspension and negative school outcomes suggest that the number of school suspensions a student receives in the fourth and fifth grade is the strongest predictor of future suspensions (Raffaele, Mendez, 2003). The study concluded that school exclusion as a disciplinary practice serves as a function of behavior reinforcement rather than behavior modification. As school policy and disciplinary actions have evolved, the process by which sanctions are adjudicated has also evolved to include the involvement of law enforcement (Irby, 2014; Skiba, 2000; Skiba, 2014).

The presence of SROs within schools has also been linked to the persistence of the school-to-prison pipeline. Police officers were originally assigned to work in schools to ensure public safety, specifically in response to an uptick in school shootings in the 1990s (Cramer, Gonzolez, and Lafont, 2014). While the police presence within schools was initially meant to be a means of protection for students and teachers, SROs have become increasingly involved in addressing the behavior of students. It has become routine in some school districts for School Resource Officers to intervene during violations of the student code of conduct. Researchers (Brown, 2006; Na and Gottfredson, 2015; Nicholson, Birchmiere, and Valentine, 2009) have linked increased SRO presence and contact with students to higher rates of student arrests and subsequent juvenile delinquency. Similarly, negative student interaction with police has been linked to academic disengagement and poor behavioral outcomes for students (Theriot, 2009). Taken together, zero tolerance policies, exclusionary discipline, and SRO presences in schools represent the conventional explanation that speaks to the prevalence of the pipeline. Youth problem behaviors, however, may tap into a much less explored element of the pipeline.

Youth Problem Behaviors and the Pipeline

The notion that rule violations in schools leads to prison is somewhat misleading. In reality, the vast majority of zero tolerance policy violations and interactions with SROs stem from relatively minor, problem behaviors (Cramer, 2014; Dancy, 2014). These behaviors rarely rise to a level that threatens public safety, but may violate school policies and border the line between disruptive and delinquent. Generally, the overwhelming majority of students suspended from school have violated conduct policies rather than criminal law (Theriot, 2009). These policies may

prohibit the use of profanity, or disrespecting school personnel. In addition, variations of bullying, skipping school, being “disruptive”, and the unauthorized use of electronic devices are some of the behaviors for which students may be suspended. Although most of these behaviors do not pose a risk to public safety, students who exhibit these behaviors at school experience a higher risk of justice system involvement.

As such, students typically encounter community-based interventions in lieu of restrictive out-of-home placements. The school-to-prison characterization of the pipeline can be more accurately described as a school-to-intervention program pipeline. The present study was designed to explore perpetuation of the school-to-prison pipeline from a perspective that assesses the development of school-based problem behaviors. Because MHPs work with students to address the triggers of problem behaviors, their perceptions of several non-systemic variables were captured to paint a picture of contributors to the rule-breaking process.

Methods

This study used a cross-sectional time dimension and quantitative research methods to explore the perspectives of mental health professionals related to the school-to-prison pipeline. Using a convenience sampling technique, the study assessed the perceptions of 112 professionals who provide mental health services to youth in the southeastern United States. Participants were recruited through the administrators of their corresponding behavioral health agencies. The administrators were contacted via email to secure permission to survey their staff providing mental health services to children. Upon approval from agency administrators, a link to the online survey was sent to potential participants via email.

In terms of the demographic characteristics of the participants, the majority of the respondents were African American, representing 57.5% ($n=62$) of the sample. White respondents accounted for 30.4% ($n=34$) of the sample, and the remaining 12.1% of respondents were identified as another race/ethnicity. The vast majority of the sample (83.3%, $n=90$) held graduate/professional degrees, and roughly half of the sample (52.8%, $n=57$) had 10 years of experience of fewer. Respondents in this sample were relatively young, with the vast majority (78.7%, $n=85$) being 34 years of age or younger.

The survey was constructed by combining sections of existing measures of variables explored within this study. Mental health professionals were asked to provide their perceptions of prevalence the constructs among the youth they serve. Perspectives regarding parenting efficacy, child impulsivity, child resilience, and

delinquent behaviors were explored. In addition, perceptions of a separate measure of child rule breaking behaviors was also included. The Alabama Parenting Questionnaire (APQ), developed by Frick et al. (1999), was used to assess the effectiveness of parenting practices that guide the socialization process of children. The APQ measures five dimensions of parenting including parental involvement, positive parenting, poor monitoring/supervision, inconsistent discipline, and corporal punishment. Eight items were pulled from four of the five subscales of the APQ. The following items were included in the construction of the survey: items 23 and 26 measuring parental involvement; item five (5), which measures positive parenting; item 24 measuring poor monitoring/supervision; and items eight (8), 22, 31, and 34 measuring inconsistent discipline.

The Barratt Impulsivity Scale (BIS11), developed by Patton et al. (1995), was used to assess the behavioral construct of impulsivity. The scale includes 30 items that measure impulsivity among three broad impulsivity constructs, each including two subscales. The first of the broad constructs measures attentional impulsivity, with subscales measuring attention and cognitive instability. The second broad construct measures motor impulsivity, with the subscales measuring motor responses and perseverance. The third broad construct measures non-planning, with subscales measuring self-control and cognitive complexity. Eight items were pulled from all three broad constructs, with representation from four of the six subscales. The following BIS11 items were included in the construction of the survey: item nine (9) from the attentional construct and the attention subscale. Items two (2) and three (3) from the motor construct and the motor subscale; items one (1), eight (8), and 14 from the non-planning construct and the self-control subscale; and items 15 and 27 from the non-planning construct and the cognitive complexity subscale.

Ungar et al. (2008) developed the Child and Youth Resilience Measure (CYRM-28) for the purposes of gauging variables associated with youth resilience. The measure was used to assess the mental health professionals' perception of youth resilience. This scale includes 26 items that measure resilience in children and youth using three broad constructs, each including three subscales. The first broad construct measures individual resilience, with subscales measuring individual personal skills, individual peer support, and individual social skills. The second construct measures caregiver resilience, with subscales measuring physical and psychological caregiving. The third construct measures context resilience with subscales measuring spiritual context, educational context, and cultural context. Eight items were pulled from all three broad constructs with representation from five of the eight subscales. The following CYRM-28 items were included in the construction of the survey: items eight (8) and 12 from the individual resilience

construct and the personal skills subscale. Items 14 from the individual construct and the social skills subscale, item 16 from the caregiving construct and the psychological caregiving subscale, items three (3) and 15 from the context resilience construct and the educational subscale, and items one (1) and 18 from the context resilience construct and the cultural context subscale.

The Deviant Behavior Variety Scale (DBVS) was developed by Sanches et al. (2016) to assess deviant behavior that potentially leads to delinquency. For the purposes of this study, this scale was used to measure mental health professionals' perception of delinquent behaviors. The scale includes 19 items that assess the youth deviant behaviors without the use of subscales. The construction of the survey instrument included the following eight items: one (1), two (2), five (5), seven (7), eight (8), 13, and 16.

Psychometric Evaluation

The survey instrument used in this study was constructed using components from four established instruments. The psychometric properties of these instruments were altered as a result of the use of only the eight items most relevant to the study. A psychometric evaluation of the researcher-developed survey was conducted to establish its validity. The validation procedures included an analysis to measure each scale's reliability and a factor analysis to measure scale validity.

Parental Socialization

The parenting variable was conceptualized as the degree to which parents exhibit effective parenting strategies with their children and operationalized using a four-point Likert scale (Strongly Disagree=1, Disagree=2, Agree=3, Strongly Agree=4). Eight survey items were taken from the original metric in the construction of the instrument, but five were eliminated during the scale construction process due to low reliability scores. The results of a reliability analysis produced a Cronbach's alpha of .643, indicating moderate internal consistency. This was slightly lower than the required .700, but the measure was close enough that it would not incur any reliability errors. Factor analysis results suggested strong validity, with the lowest eigenvalue of the scale at .707, exceeding the .400 threshold for validity. This scale ranged from 3 to 12, with higher scores reflective of higher degrees of parenting efficacy and lower scores reflective of lower efficacy.

Self-Control

The self-control variable was conceptualized as the degree to which the youth served by the mental health professionals exhibited behavior consistent with impulsivity and operationalized using a four-point Likert scale (Strongly Disagree=1,

Disagree=2, Agree=3, Strongly Agree=4). Eight survey items were taken from the original metric in the construction of the instrument, but four were eliminated during the scale construction process due to low reliability scores. The results of a reliability analysis produced a Cronbach's alpha of .601, indicating moderate internal consistency. This was slightly lower than the required .700, but the measure was close enough that it would not incur any reliability errors. Factor analysis suggested strong validity, with the lowest eigenvalue of the scale at .513, exceeding the .400 threshold for validity. This scale ranges from 4 to 16, with higher scores representing higher levels of impulsivity and lower levels of self-control, while lower scores represent lower levels of impulsivity and higher levels of self-control.

Resilience

The resilience variable was conceptualized as the degree to which the youth served by the mental health professionals exhibited behavior consistent with resiliency and operationalized using a four-point Likert scale (Strongly Disagree=1, Disagree=2, Agree=3, Strongly Agree=4). Eight variables were taken from the original metric in the construction of the instrument, none of which were eliminated during the scale construction process. The results of the reliability analysis produced a Cronbach's alpha of .837, indicating strong internal consistency. Factor analysis suggested strong validity, with the lowest eigenvalue of the scale at .630, exceeding the .400 threshold for validity. This scale ranges from 8 to 32, with higher scores representative of higher levels of resilience and lower scores representative of lower levels of resilience.

Problem Behaviors

The problem behaviors variable was conceptualized as the degree to which the youth served by the mental health professionals engaged in behavior consistent with deviance but not criminality and operationalized using a four-point Likert scale (Strongly Disagree=1, Disagree=2, Agree=3, Strongly Agree=4). Eight variables were taken from the original metric in the construction of the instrument, and one was eliminated during the scale construction process due to low reliability scores. The results of the reliability analysis produced a Cronbach's alpha of .594, indicating moderate internal consistency. This was lower than the required .700, but the measure was close enough that it would not incur any reliability errors. Factor analysis results indicated moderately strong validity, with the lowest eigenvalue of the scale at .585. This scale ranges from 5–20, with higher scores representing higher occurrences of problem behaviors in the youth and lower scores representing lower occurrences of problem behaviors.

Findings

Before running the regression analysis to test the predictive value of parenting efficacy, impulsivity, and resilience on child problem behaviors, Pearson's Correlation was run as a collinearity diagnostic. The results did not identify variables with collinearity issues, but did produce interesting findings. A statistically significant relationship appeared between youth problem behaviors and youth resilience as observed by the mental health professionals. Findings indicate a statistically significant, inverse relationship between problem behaviors and resilience ($r = -.236$, $p = .014$). This finding indicates that MHPs perceived higher occurrences of problem behaviors to be correlated with lower scores on resilience.

Additionally, a statistically significant relationship was observed between MHP's perception of youth problem behaviors and youth impulsivity. The findings indicate a weak, direct relationship between problem behaviors and impulsivity ($r = .202$, $p = .034$). This relationship suggests MPHs perceiving higher occurrences of problem behaviors are correlated with higher impulsivity levels and lower self-control levels.

A noteworthy relationship emerged between youth problem behaviors and parental efficacy. This relationship was not statistically significant, but the p-value appeared to be approaching statistical significance. The findings suggest a weak, inverse relationship between problem behaviors and parenting ($r = -.178$, $p = .065$). This relationship indicates that higher occurrences of problem behaviors are statistically correlated with less effective parenting strategies.

Table 1 Pearson's Correlation MPH Perceptions

	RES	PARENT	IMP	PROB
RES	1	.198	.086	-.236*
PARENT		1	-.194	-.178^
IMP			1	.202*
PROB				1

** $P < .01$ * $P \leq .05$ ^ $P = < .10$

PROB=Problem Behaviors PARENT=Parental Efficacy

RES=Resilience IMP=Impulsivity

Exploring the perceptions of MHPs related to parenting efficacy, impulsivity, and resilience as predictors of problem behaviors through an OLS regression model produced notable findings. Results indicated the regression model was statistically significant ($p = .004$, $F = 4.806$) and suggested a modest effect size ($R^2 = .122$). The

MHPs perception of resilience and impulsivity were both statistically significant predictors of youth problem behaviors. Similar to the correlational analysis results, an inverse relationship was found between MHP perception of resilience and problem behaviors ($b = -.225$, $p = .017$). A direct relationship was produced between MHP perception of impulsivity and problem behaviors ($b = .208$, $p = .026$). Parental socialization was not a statistically significant predictor of problem behaviors.

Stepwise regression is a variation of multiple regression that explores the impact of independent variables on a dependent variable by conducting several regression analyses, adding new independent variables to each progressive model. This technique allows researchers to determine which independent variables are predictive above and beyond other predictor variables (Stevens, 2007). Stepwise regression was used to explore the predictive impact of MHP perception of parenting efficacy, impulsivity, and resilience in relation to problem behaviors. Three regression models were run: the first only included parenting efficacy, the second added impulsivity, and the final included all three independent variables.

Table 2 MHP Perception of Problem Behaviors Regression Model

DV = Problem Behaviors			
Variable	<i>B</i>	T	β
Impulsivity	.231	2.26	.208*
Resilience	-.109	-2.42	-.225*
Parenting	-.164	-1.57	-.145
R ²	.122		
Std. Error Est.	1.940		
F		4.806**	

** $p < .01$ * $p \leq .05$

The first regression model, which only included MHP perception of parental efficacy as a predictor of problem behaviors was not statistically significant ($p = .065$, $F = 3.483$). The second model, including MHP perception of parental efficacy and child impulsivity was statistically significant ($p = .020$, $F = 4.081$) with the model explaining 7.2% of the variance within MHP's perception of problem behaviors ($R^2 = .072$). The final model run included parental efficacy, child impulsivity, and resilience. The model was statistically significant ($p = .004$, $F = 4.806$) and found that the addition of MHP perception of resilience explained an additional 5% of the variance in MHP perception of problem behaviors ($R^2 = .122$). The change statistics within the regression model suggest that the increase in explained variance was statistically significant ($p = .017$, $F \text{ Change} = 5.876$).

Table 3

DV = Problem Behaviors

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	T	β	<i>B</i>	T	β	<i>B</i>	T	β
Parenting	-.195	-1.86	.178	-.164	-1.83	-.173	-.164	-1.57	-.145
Impulsivity				.222	2.13	.201*	.231	2.26	.208*
Resilience							-.109	-2.42	-.225*
R ²		.032			.072			.112	
Std. Error Est.		2.018			1.985			1.940	
F change		3.483			4.562*			5.876*	

MHP Perception Stepwise Regression

**P< .01 *P≤ .05

Discussion

The overreliance on zero tolerance policies, exclusionary discipline, and SROs in schools has created a portal through which students may experience contact with the criminal justice system. The process by which a student enters this portal may be best understood by working backwards. Before a student experiences contact with the justice system, the student must violate a school policy. The policy violation is often a product of a student's misbehavior. In keeping with these premises, the prevention of school-based justice system contacts is driven by a community's ability to prevent and/or address students' problem behaviors. Because mental health professionals typically possess expertise in externalizing behavior, and have increasingly been called on to serve as an intermediary between the justice system and community stakeholders (e.g.: schools and families), their perspectives regarding problem behaviors that are likely to manifest in schools potentially yields valuable insight that may help to disrupt the school-to-prison pipeline.

In exploring MHP perception of parental efficacy, impulsivity, and resilience to predict problem behaviors, the researcher hoped to gain insight into factors that may contribute to the process by which youth violate rules at school. Traditional research on school discipline and the school-to-prison pipeline focuses almost exclusively on the role of the schools (Hutchinson, 2013; Skiba, 2014; George and Wiggins, 2013). However, in a similar manner as the criminal justice system, school systems are typically more reactive than proactive when addressing rule violations. Research (Irby, 2014; Christle, et al., 2005) supports the notion that majority of rule violations stem from problem behaviors rather than serious violations of the law.

Efforts to disrupt the school-to-prison pipeline have experienced marginal success as school-based complaints and school suspensions remain prevalent (Hutchinson, 2013). Rule violations at school and subsequent justice system involvement are primarily products of youth behaviors that are relatively normative, which is consistent with some of the existent literature (Parker, Glenn, Turner, 2014; Dancy, 2014). These problem behaviors are likely to be prevalent among most school-aged children, to some degree. The primary difference between youth in mental health treatment and youth not in treatment may be the number and quality of mechanisms of support that exist in the youth's home. This statement is supported by the statistically significant, inverse relationship between resilience and problem behaviors that was present in both the correlational analysis ($r = -.236, p = .014$) and the regression model ($b = -.225, p = .017$).

Moreover, research has shown punitive approaches to rule-breaking in schools, to include exclusionary discipline and the unnecessary involvement of school

resource officers in behavioral matters, to be antiquated and ineffective (Sullivan, et al., 2014; Shippen, et al., 2012; Na and Gottfredson, 2013). As such, the manner in which schools choose to address student behavior that results in rule violations is an issue of justice. Schools that choose to punish problem behaviors rather than addressing them are helping to facilitate the students' path toward the justice system. Findings from the present study offer some alternative approaches to consider when exploring the ways to disrupt the pipeline to the justice system.

One of the notable findings of the study was the prospect of child resilience being a stronger predictor of problem behaviors than any other variable in the study. MHPs perceived that child resilience predicted problem behaviors above and beyond child impulsivity and parental efficacy. This finding is important because it provides context to the process by which rules could be broken. While effective parenting and regulating impulsivity are notable factors related to the rule-breaking process, a child's resilience is a more important factor. This finding suggests that promoting resiliency may produce better behavioral outcomes than punishing problem behaviors that likely stem from noncompliance and impulsivity.

In the criminal justice and school systems, violations of the law or school rules are adjudicated through a form of punishment. While some school systems are making better use of restorative justice programs to address the behavior of students (Baroni, et al., 2016), these approaches require a violation of school rules to benefit the student. Restorative justice is a strong interventionist framework but is too reactive of a measure to serve preventative interests. Understanding that resilience, which research (Vanderbilt-Adriance and Shaw, 2008) has found to be a protective factor of delinquency and other positive behavioral outcomes, may be a stronger predictor than risk factors such as impulsivity and poor parenting is a finding that can help inform approaches to how school districts address rule breaking. Promoting resilience in lieu of punishing problem behavior may be a more effective means of addressing rule violations and fostering a harmonious climate in schools for students and educators. In addition, this concept could be useful in discussing a path forward related to criminal justice reform.

Reimagining Justice through Resilience

Despite being a popular topic of inquiry with several applications in the disciplines of psychology and social work, there is limited research done by criminologists on the utility of resilience frameworks to understand social phenomena in the study of criminal justice. Some research has been done on the resilience of offenders in relation to reentry (Thomas, et al., 2005), while other scholars have focused on the importance of resiliency as a variable in crime prevention. (Vanderbilt-Adriance and

Shaw, 2008; Newsome, et al., 2015). However, few studies have assessed the prospect of using the existing knowledge base related to resilience to guide criminal justice reform. The lack of interdisciplinary approaches aimed toward understanding issues in criminal justice has produced one-sided narratives on several important topics in the study of crime and justice, including the school-to-prison pipeline. The limited scope of the existing literature on the school-to-prison pipeline highlights a need for criminologists to develop innovative strategies to reimagine justice through interdisciplinary lenses.

The concept of resilience elicits several applications in the study and practice of criminal justice. From a delinquency and crime prevention perspective, low levels of resilience have been found to be a key predictor of negative outcomes for both youth and adults (Thomas, et al., 2005;). Although these findings have been instrumental in developing programs for offenders that consider the factors like exposure to trauma and adverse childhood experiences (ACEs), the depth of what is known about resilience and other risk/protective factors has not been explicitly integrated into the training of police officers, juvenile court counselors/probation officers, and other criminal justice actors. At best, training on the contextual factors that predict delinquency/criminality are available in professional development settings, which are generally voluntary. As a result, criminal justice decision makers are often ill-informed regarding the social context with which the law was violated, while expected to make decisions regarding how best to adjudicate the offense. A justice system that approaches crime control from a preventative perspective, relying less heavily on punitive measures that exacerbate the criminogenic needs of offenders, while focusing explicitly on combating risk factors and building resilience and other protective factors, is positioned to facilitate public safety more efficiently than our current justice system. Criminal justice scholars must leverage the quality research done in other disciplines to inform the recommendations made to stakeholders in the justice system regarding the latest innovations in the education and training of criminal justice professionals.

Recommendations

This study produced recommendations applicable to three groups of stakeholders. The first set of recommendations address teacher education programs in institutions of higher education. The second set of recommendations concern programming aimed to assist parents in socializing their children. The third set of recommendations focus on disciplinary practices within school systems.

Teacher Education Programs

Teacher education programs are generally the training ground for the next generation of primary and secondary educators. These programs prepare educators from a pedagogical perspective, often offering opportunities for on-the-job training to complement the theoretical underpinnings of their curricula. A quick review of the curricula at the ten largest state-supported institutions of higher education in southeastern United States highlight a gap in the training that prospective teachers receive regarding elements of the study of sociology, psychology, and criminal justice.

It is recommended that teachers in training receive coursework beyond general education curricula in the aforementioned disciplines. Courses in these disciplines may prepare teachers for the diversity they will encounter among the students and their families. An understanding of family dynamics, social constructs of deviance, and outcomes related to interaction with the criminal justice system may contextualize behaviors that are normative but deemed problem behaviors in classrooms. In addition, teachers may begin to develop a healthier understanding of negative outcomes related to exclusionary discipline, zero tolerance policies, and interactions with school resource officers (SROs). This may encourage teachers to use alternative methods of addressing disruptive behaviors within the classroom, without involving the school-to-prison pipeline. Every teacher education program reviewed offered opportunities for elective courses. Students should be encouraged to explore coursework related to the behavioral and social sciences to inform their teacher training, especially those that expose students to resilience frameworks.

Risk and Protective Factor Training for Parents

One of the notable findings of this study was the potential importance of resilience as a predictor of problem behaviors. Given the predictive power of this protective factor above and beyond risk factors, it is important that parents have support and resources available to assist with promoting protective factors while avoiding risk factors. Programs that address risk and protective factors of problem behaviors have already been developed, with the most widely implemented programming being evidence based and theoretically solid (Vanderbilt-Adriance and Shaw, 2008). It is recommended that evidence-based parenting programs that utilize a framework addressing risk and protective factors be made available to traditionally underserved communities. In addition, frameworks that include elements of resilience training are recommended for broad implementation in alignment with the findings of this study.

Student Resilience and Equitable Discipline

Should resilience prove to be as an important predictor of problem behaviors as found in this study, school systems should consider becoming proactive in their interactions with students by infusing activities and assignments that build resilience into their curricula. As schools play an important role in the socialization of children, promoting resilience through the learning process may be an effective preventative strategy for problem behaviors. Enhancing curricula to promote resilience may equip children with skills necessary to avoid rule-breaking behavior and consequently disrupt the school-to-prison pipeline. In addition, disciplinary decision makers should evaluate their protocols to ensure that resilience is a component of students' disciplinary experience.

Violations of the school code of conduct due to problem behaviors are typically addressed with school-based sanctions. These sanctions have been associated with negative academic and behavioral outcomes for children and the perpetuation of the school-to-prison pipeline. It is recommended that schools limit their use of punitive actions to behavior that significantly disrupts the learning process or harms students. Instead of school suspensions and other exclusionary discipline practices, school administrators should implement activities that build resilience and address the behavior from a strengths-based perspective. Psychologists have developed a range of curricula and activities aimed toward building resilience. It is recommended that school systems leverage these existing strategies to address problem behaviors within the classroom.

Directions of Future Study

The school-to-prison pipeline is an issue that warrants further exploration, especially from the non-systemic contributor perspective. While the present study produced interesting findings, future study of the issue should avoid the pitfalls of this present research. In replicating the present study, the primary element to consider is the psychometric properties of the scales. The researcher suspects that weak psychometrics affected the performance of conceptually important variables in the regression models. The scales with the strongest measurements of reliability and validity performed the best during statistical testing. Conversely, scales with the weakest psychometric properties had the poorest performance during statistical testing. Researchers replicating this study should consider using the entire metric used to measure each variable in the study. If using the entire metric is not feasible, using a higher number of indicators may produce stronger scales.

In addition, the use of an online survey greatly limited the number of respondents for this study. Researchers should consider replicating this study using paper surveys to ensure maximum participation. A larger sample size may have impacted the number of statistically significant relationships found during statistical testing as well as stronger psychometric measurements among the scales. If researchers expand the scales used to measure variables within the survey, online data collection would not be an ideal approach for this type of study.

Lastly, researchers replicating this study should consider the use of additional variables that measure protective factors in addition to the risk factors addressed in the present study. The researcher did not consider the practical role of each independent variable during the design of this study. As a result, this study assessed several more risk factors than protective factors. The results suggest special consideration should be given to protective factors in the prediction of problem behaviors. The scales used to measure additional variables should reflect strong psychometric properties to ensure solid performance during statistical testing.

New Methodologies

The present study utilized a quantitative approach to measure the impact of various non-systemic factors. This approach lacked the contextual perspective of respondents because there was no forum for them to expound upon their individual experiences. As a result, findings of the study lack the depth of knowledge possessed by the respondents. Future research should explore mixed method approaches for research design. A mixed method approach using focus groups or interviews to gain an understanding of rule breaking from the perspectives of mental health professionals would add context to the findings from the analysis of the quantitative data.

Additionally, exploring the perspectives of mental health professionals outside of the homogenous environment may prove helpful. This study should be conducted to account for the different types of support and resources available to the diverse population of the state. Comparing the perspectives of mental health professionals from rural areas to that of those from urban areas may produce interesting results. In addition, a broader study area may help to ensure that the feedback collected from respondents is representative of the entire population. This would help to strengthen the power of the findings of the study.

Limitations

Findings from the present study should be considered in conjunction with several study limitations. The psychometric properties of several of the scales are a major limitation to this study. Five of the six scales used in this study were constructed from existing measures. These measures were altered when the data collection instrument was being developed, only using the eight items most relevant from each scale in the study. In addition to the use of the altered scales, reliability and factor analyses eliminated items from all but one of the scales, further impacting viability. The psychometric properties of the scales in this study had a notable impact on their performance within the regression models. This raises questions regarding the overall internal validity of the scales used in the regression models.

Additionally, this study utilized a cross-sectional time dimension. Cross-sectional research is limited by the dynamics that exist during the time of data collection. Many of the variables speak to constructs that can change over time. For example, one's level of resilience or level of self-control can change based on how he/she developed during childhood. Because this study is only accounting for these constructs at the present time, ongoing changes cannot be accounted for, which may present an internal validity issue. Measurements related to these constructs may be skewed by the most recent life circumstances experienced by the children that the respondents serve.

The survey instrument used in this study was adapted from five existing scales. The adaptations not only affected the original psychometric properties of the scales, but they also their performance in the regression models. Each scale was originally created to be a measurement of its intended construct, but for the purposes of this study, was altered to measure the perception of the construct from the perspective of mental health professionals. For example, the resilience scale was designed to measure youth resiliency, but was used in this study to measure how mental health professionals perceived the resilience among the youth they serve. This adaptation, along with the small sample size may explain why many of the relationships between variables were not statistically significant and contradictory of the existing literature. The researcher suspects that test results involving the parental socialization scale and the rule breaking behaviors scale were especially impacted by these adaptations, as they yielded the weakest performance among the study variables.

In addition, the findings and conclusions of this study were driven by the chosen methodology. This study used a cross-sectional time dimension and a survey approach to capture the perceptions of mental health professionals regarding the

school-to-prison pipeline. The survey approach did not allow the respondents to provide context to their perceptions. A qualitative approach to this study, using interviews or focus groups to account for contextual factors related to youth mental health, may have provided a richer understanding of the non-systemic contributors to the pipeline.

Conclusion

The school-to-prison pipeline remains a significant issue in the United States. Existing research has established a strong framework upon which future studies of this social phenomenon can be studied. Findings from the present study suggest that the nexus of the sequence of events that create a pipeline from schools to prison is rooted in variables beyond the control of school systems. The degree to which schools can work with families to address problem behaviors via promotion of resilience and other protective factors rather than punishment of problem behaviors associated with risk factors may be critical in disrupting the school-to-prison pipeline. Stakeholders—from teachers in training, to parents and families, and school systems—can contribute to ending the phenomenon and ensuring that young people have an equitable path into adulthood.

References

- Brown, B. (2006). Understanding and assessing school resource officers: A conceptual and methodological comment. *Journal of Criminal Justice*, 34, 591–604
- Christle, C. A., Jolivette, K., & Nelson, C. M. (2005). Breaking the School to Prison Pipeline: Identifying School Risk and Protective Factors for Youth Delinquency. *Exceptionality*, 13(2), 69-88. doi:10.1207/s15327035ex1302_2
- Cramer, E., Gonzalez, L., & Pellegrini-Lafont, C. (2014). From Classmates to Inmates: An Integrated Approach to Break the School-to-Prison Pipeline. *Equity & Excellence in Education*, 47(4), 461-475.
- Curran, F. C. (2016). Estimating the Effect of State Zero Tolerance Laws on Exclusionary Discipline, Racial Discipline Gaps, and Student Behavior. *Educational Evaluation and Policy Analysis*, 38(4), 647-668. doi:10.3102/0162373716652728
- Dancy, T. (2014). (Un)Doing Hegemony in Education: Disrupting School-to-Prison Pipelines for Black Males. *Equity & Excellence in Education*, 47(4), 476-493.

- Ernestus, S. M., & Prelow, H. M. (2015). Patterns Of Risk And Resilience In African American And Latino Youth. *Journal of Community Psychology*, 43(8), 954-972. doi:10.1002/jcop.21725
- Fasching-Varner, K., Mitchell, R., Martin, L., & Bennett-Haron, K. (2014). Beyond School-to-Prison Pipeline and Toward an Educational and Penal Realism. *Equity & Excellence in Education*, 47(4), 410-429.
- Gregory, A., Hafen, C. A., Ruzek, E., Mikami, A. Y., Allen, J. P., & Pianta, R. C. (2016). Closing the Racial Discipline Gap in Classrooms by Changing Teacher Practice. *School Psychology Review*, 45(2), 171-191. doi:10.17105/spr45-2.171-191
- Heilbrun, A., Cornell, D., & Lovegrove, P. (2015). Principal Attitudes Regarding Zero Tolerance And Racial Disparities In School Suspensions. *Psychology in the Schools*, 52(5), 489-499. doi:10.1002/pits.21838
- Henry, K., Knight, K., & Thornberry, T. (2012). School Disengagement as a Predictor of Dropout, Delinquency, and Problem Substance Use During Adolescence and Early Adulthood. *Journal of Youth and Adolescence*, 41, 156-166.
- Hutchinson, A. (2013). *Report of the national school shield task force*. Retrieved from http://www.nraschool-shield.com/NSS_Final.pdf
- Irby, D. (2014). Trouble at School: Understanding School Discipline Systems as Nets of Social Control. *Equity & Excellence in Education*, 47(4), 513-530.
- McCrystal, P., Percy, A., and Higgins, K. (2007). Substance Use Behaviors of Young People With a Moderate Learning Disability: A Longitudinal Analysis. *The American Journal of Drug and Alcohol Abuse*, 33(1): 155-161.
- Mohanan, K., VanDerhei, S., Bechtold, J., & Kaufmann, E. (2014). From the School Yard to the Squad Car: School Discipline, Truancy, and Arrest. *Youth Adolescents*, 43(1), 1110-1122.
- Na, C., & Gottfredson, D. C. (2013). Police Officers in Schools: Effects on School Crime and the Processing of Offending Behaviors. *Justice Quarterly*, 30(4), 619-650. doi:10.1080/07418825.2011.615754
- Newsome, J., Vaske, J. C., Gehring, K. S., & Boisvert, D. L. (2015). Sex Differences in Sources of Resilience and Vulnerability to Risk for Delinquency. *Journal of Youth and Adolescence*, 45(4), 730-745. doi:10.1007/s10964-015-0381-2
- Nicholson-Crotty, S., Birchmeier, Z., & Valentine, D. (2009). Exploring The Impact of School Discipline On Racial Disproportion In The Juvenile Justice System. *Social Science Quarterly*, 90(4), 1003-1018.

- Osher, D., Bear, G.G., Sprague, J.R., & Doyle, W. (2010). How Can We Improve School Discipline? *Educational Researcher*, 39, 48-58.
- Parker, M.M., Glenn, J.W., Turner, A. (2014). Criminalizing childhood: the social development of juvenile crime in a rural north carolina school. *Social Development Issues*, 36(2), 35- 52.
- Raffeale-Mendez, R. (2003). Who Gets Suspended from School and Why: A Demographic Analysis of Schools and Disciplinary Infractions in a Large School District. *Education and Treatment of Children*, 26(1), 30-51.
- Shippen, M., Patterson, D., Green, K., & Smitherman, T. (2012). Community and School Practices to Reduce Delinquent Behavior: Intervening on the School-to-Prison Pipeline. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 35(4), 296-308.
- Skiba, R., & Peterson, R. (2015). School discipline at a crossroads: From zero tolerance to early response. *Exceptional Children*, 32, 200-216.
- Skiba, R., Arredondo, M., & Williams, N. (2014). More Than a Metaphor: The Contribution of Exclusionary Discipline to a School-to-Prison Pipeline. *Equity & Excellence in Education*, 47(4), 546-564.
- St. George, D., & Wiggins, O. (2013, February 7). Schools taking serious look at putting armed police in schools after massacre. *Washington Post*. Retrieved from http://www.washingtonpost.com/local/education/schoolstaking-serious-look-at-putting-armed-police-in-schools-after-massacre/2013/02/07/f2fcc9ec-6e11-11e2-ac36-3d8d9dcaa2e2_story.html?hpid¼z2
- Stevens, J. P. (2007). *Intermediate statistics: A modern approach* ;(Third ed.). New York, NY: Lawrence Erlbaum Associates.
- Sullivan, A. L., Norman, E. R., & Klingbeil, D. A. (2014). Exclusionary Discipline of Students With Disabilities. *Remedial and Special Education*, 35(4), 199-210. doi:10.1177/0741932513519825
- Theriot, M. (2009). School resource officers and the criminalization of student behavior. *Journal of Criminal Justice*, 37, 280-287.
- Thomas, M., Chenot, D., & Reifel, B. (2005). A Resilience-Based Model of Reunification and Reentry: Implications for Out-of-Home Care Services. *Families in Society: The Journal of Contemporary Social Services*, 86(2), 235-243. doi:10.1606/1044-3894.2458

- Vanderbilt-Adriance, E., & Shaw, D. S. (2008). Protective Factors and the Development of Resilience in the Context of Neighborhood Disadvantage. *Journal of Abnormal Child Psychology, 36*(6), 887-901. doi:10.1007/s10802-008-9220-1
- Winn, M., & Behizadeh, N. (2011). The Right To Be Literate: Literacy, Education, And The School-to-Prison Pipeline. *Review of Research in Education, 25*, 147-173.
- Wolf, K. (2014). Arrest Decision Making by School Resource Officers. *Youth Violence & Juvenile Justice, 12*(2), 137-151.
- Zimmerman, M. A. (2013). Resiliency Theory. *Health Education & Behavior, 40*(4), 381-383. doi:10.1177/1090198113493782

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