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TEACHERS' PERSPECTIVES ON THEIR ROLE IN FOSTERING SUPPORTIVE  
RELATIONSHIPS WITH THEIR STUDENTS

by

Jamee Carroll, B.S.

A Thesis submitted to the Faculty of the Graduate School,  
Marquette University,  
in Partial Fulfillment of the Requirements for  
the Degree of Master of Science

Milwaukee, Wisconsin  
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ABSTRACT  
TEACHERS' PERSPECTIVES ON THEIR ROLE IN FOSTERING SUPPORTIVE  
RELATIONSHIPS WITH THEIR STUDENTS

Jamee Carroll, B.S.

Marquette University, 2018

Adolescence is a critical developmental period when the risk for developing several mental health disorders and problem behaviors increases. Promoting *resilience*, which describes healthy functioning in the presence of adversity, can be beneficial to this population (Masten, 2014). Supportive relationships with caring, competent adults contribute to the promotion of resilience in adolescents. Research demonstrates that teachers can serve in this role (Yeung & Leadbeater, 2010). While there is evidence in the literature regarding the benefits of supportive teacher-student relationships for positive youth outcomes and school climate, there is little empirical research on the factors that serve to cultivate these relationships.

The current study examined teachers' perspectives on their role in fostering supportive relationships with their students. Specifically, researchers examined associations among teachers' beliefs about addressing student mental health needs, operating from a growth mindset, and committing to implementing programs that support student well-being and the school climate more generally, and how teachers' beliefs were associated with students' outcomes. It also examined whether longer implementation of a resilience-based program was associated with more positive student outcomes. Results suggested a range of effect sizes among the variables, namely a significant positive correlation among teachers' (n = 621) and students' (n = 4793) perspectives on school climate. Additionally, schools with longer duration of the resilience-based program were associated poorer outcomes. Potential explanations and implications are discussed.

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## Introduction

Adolescence is a critical developmental period when the risk for developing several mental health disorders and problem behaviors increases. Promoting *resilience*, which describes healthy functioning in the presence of adversity, can be beneficial to this population (Masten, 2014). Supportive relationships with caring, competent adults contribute to the promotion of resilience in adolescents. Previous research has focused on adolescent resilience in the context of families, specifically parental figures, and how they offer a significant supportive relationship for adolescents during this crucial developmental period. However, adolescents spend the majority of their waking hours in school, and thus schools represent a potentially powerful context for promoting resilience as well. In school, teachers have the most direct and prolonged contact with students, which provides them with key opportunities to foster these essential supportive relationships. While there is evidence in the literature regarding the benefits of supportive teacher-student relationships for positive youth outcomes and school climate, there is little empirical research on the factors that serve to cultivate these relationships. The current study examined teachers' perspectives on their role in fostering supportive relationships with their students. The beliefs and attitudes that teachers have about their students and their role in promoting students' development are likely to guide their behavior toward them. The current study examined associations among teachers' beliefs about addressing student mental health needs, operating from a growth mindset, and committing to implementing programs that support student well-being and the school climate more generally. It was proposed that in the presence of these beliefs and attitudes, teachers can better contribute to creating a positive school climate, which in turn would

be associated with fewer instances of bullying and suicidal ideation among students. The findings suggest that teachers' beliefs are associated with student outcomes, though not necessarily in the directions hypothesized. However, the findings provide insight into the difficulty of translating beliefs into practices, and may help guide future studies.

### **Resilience in Adolescence**

Adolescence is a time of increased risk for the development of psychopathology (Masten, 2014). Since 2014, the national rate of mental health disorders in adolescents has risen steadily, with as many as one in five adolescents reporting having any mental health issue (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). Many adolescents are also exposed to adverse childhood experiences (ACEs), which have been linked to poor health outcomes in childhood and adulthood (Poulton et al., 2002). According to the 2011-2012 National Survey of Children's Health (NSCH, 2012), 48% of children and adolescents experienced one or more ACEs in their lifetime. Moore and Ramirez (2016) found that adolescents who experience more ACEs are more likely to experience psychological problems.

However, not all adolescents exposed to adversity experience poor outcomes (Masten, 2014). Resilience is defined as healthy functioning following exposure to adversity (Masten, 2014) and is a function of the stressors experienced and the internal and external resources available to the individual at a given time (Zautra, Hall, & Murray, 2010). The conceptualization of resilience as a state implies malleability and the potential for change and suggests that it can be fostered through prevention and intervention efforts (Henderson, Milstein, & Werner, 2002; Yehuda & Flory, 2007; Krovetz, 2008). Since adolescence can often be regarded as a "turnaround point" in a child's life, resilience



promotion is particularly important in this developmental period. Schools can be helpful in promoting resilience in adolescents because the majority of their time is spent there (Masten, 2014; Wekerle, Waechter, Leung, & Leonard, 2007).

### **Factors that Promote Resilience**

A constellation of internal and external factors may contribute to the development of resilience in children and adolescents (Benard, 1995; Masten, 2014). Internal assets are individual traits or characteristics that facilitate positive adaptation in the context of risk or adversity (Dray et al., 2014) and include strong problem solving and coping skills, autonomy and a sense of identity, a sense of purpose, responsibility, a sense of mastery, empathy, and social and emotional competence (Dray et al., 2014; Krovetz, 2008; Masten, 2014; Masten et al., 2004). External resources refer to the protective factors located outside of the individual that aid in overcoming adversity (Fergus & Zimmerman, 2005). Fostering these protective factors serves to increase adolescents' capacity for resilience and better prepare them to combat adversity and risk factors.

Research has focused primarily on examining the myriad of internal assets that can promote resilience in adolescents (Masten et al., 2004), and consequently much less is known regarding the external resources linked to health and well-being. The external factor most consistently related to resilience is supportive relationships. The presence of positive social relationships increases the potential for more favorable outcomes among adolescents, such as higher reported levels of life satisfaction and wellness, better academic achievement, and decreased risk of psychopathology (Shrivastava & Desousa, 2016; Stewart & Suldo, 2011). Adolescents are shown to benefit from relationships with competent and caring adults, and research has consistently identified parents and

caregivers as the primary source of that supportive relationship (Zimmerman et al., 2013). Parental support and relationship quality, which refers to caregivers' ability to appropriately and consistently discipline, engage with, communicate, and monitor the child, have both been widely cited as markers for resilience and adaptiveness (Masten et al., 2004; Wyman, Sandler, Wolchik, & Nelson, 2000). Parental support may also moderate the relationship between poverty and engaging in acts of violence; adolescents experiencing poverty engage in less violent behaviors when greater parental support is present (Fergus & Zimmerman, 2005). However, as adolescents seek more autonomy from parents, relationships with adults outside of the family, such as teachers, become more salient (Yeung & Leadbeater, 2010).

**Schools.** Much less research has focused on resilience in schools than in families, but findings indicate that school personnel, such as teachers, can also provide the supportive relationships conducive to promoting resilience and well-being in adolescents (Yeung & Leadbeater, 2010). Research has shown that teacher-student relationships are related to a variety of student health outcomes. For example, Rudasill, Reio, Stipanovic, and Taylor (2010) found that close teacher-student relationships were associated with a decrease in engagement in risky behaviors such as smoking and alcohol use. Murray (2009) reported that positive teacher-student relationships and student perceptions of closeness and trust were related to higher grades in math and language arts classes in a predominantly minority, low-income urban school. Supportive relationships in the school context may also mitigate the effects of certain forms of victimization. Yeung and Leadbeater (2010) assessed the moderating role of emotional support from a caring adult in the relationship between peer victimization and poor emotional and behavioral

outcomes. Teacher support was shown to be a moderator for the association between relational peer victimization and maladaptive outcomes; when teachers offered emotional support to students who had suffered relational victimization, students were less likely to experience the negative outcomes typically associated with being victimized by bullying (Yeung & Leadbeater, 2010).

***School climate.*** In the context of fostering resilience in adolescence, researchers may look to school as the locus of change (Benard & Slade, 2009). Schools are often charged with the task of not only teaching children and adolescents but also aiding in their development of social and emotional competence (Masten, 2014). Ensuring a positive school climate helps foster those internal skills, which are associated with resilience (Durlak, Domitrovich, Weissberg, & Gullota, 2015). School climate is multifaceted and encompasses a broad array of factors contributing to the quality of school life for staff and students (National School Climate Council, 2007), including the norms, values, interpersonal relationships, and practices that the community of administrators, teachers, and students foster (Aldridge et al., 2015; National School Climate Council, 2007). Schools most capable of fostering resilience facilitate an environment that provides students with factors, such as positive teacher-student and peer relationships, that can help them recover from adversity (Aldridge et al., 2015; Benard & Slade, 2009; Henderson et al., 2002; Krovetz, 2008).

Studies show that both students and teachers view the teacher-student relationship as important for students' well-being. For example, participants in a 40-year longitudinal study cited their favorite school teachers, those who provided more than academic guidance, as most influential in their life successes when family proved unable to offer

the necessary emotional support (Werner & Smith, 1988). Suldo and colleagues (2009) offered insight into the qualities that students view as most salient for teachers. They asked sixth, seventh, and eighth grade students “How can you tell teachers care about you?”, and the top themes were related to empathy and teachers’ interest in student wellness. For instance, one student provided the example of having a teacher inquire about negative changes in their students’ moods. Modeling empathy and compassion also led to students’ increased feelings of social and emotional support in school (Suldo et al., 2009). Oswald, Johnson, and Howard (2003) evaluated teachers’ perceptions of factors that contribute to student resilience and found that teachers believe that being accessible and supportive are significant factors in promoting resilience in their students.

Supportive relationships with teachers thus appear to be a potentially important source of resilience for adolescence; however, there has been little research examining factors that promote such relationships. Understanding why strong teacher-student relationships develop may help to make them more widespread. Teachers’ beliefs about their role may be one critical factor. Oswald and colleagues’ (2003) work suggests that teachers’ beliefs about being accessible and supportive lead them to be more engaged with their students. Brooks and Goldstein (2008) argued that teachers who believe that empathy aids resilience promotion helps them better connect to students and form more lasting relationships with them. These studies raise the question of what other teacher beliefs and attitudes may be conducive for promoting a positive school climate and resilience in students. The goal of the proposed research was to investigate whether teachers’ beliefs are related to (a) student perceptions of teacher-student relationships and school climate and (b) students’ experiences with bullying and suicidality.

## Current Study

### Teacher Beliefs and Attitudes

This study examined three types of beliefs that may be important for shaping teacher- student relationships: teachers' attitudes regarding their schools' role in students' mental health, operating from a growth mindset, and their commitment to preventive programming and interventions were addressed.

**Mental health in schools.** Teacher attitudes concerning the mental health of students may contribute to the positive school climate necessary for the emotional, social, and academic success of students (LaRusso, Romer, & Selman, 2008). A previous research study highlighted a potential link between teachers' perceptions of student access to mental health professionals and their reports of school climate (Bruns, Walrath, Glass-Siegal, & Weist, 2004). Teachers in schools with an expanded school mental health approach rated aspects of school climate more positively than those from matched control schools. Further, teachers in schools with an expanded mental health approach were also less likely to issue special education referrals for students with emotional and behavioral difficulties (Bruns et al., 2004). While there is a shortage of literature that directly studies the associations between the teacher recognition of mental health needs among high school students and student outcomes, a study on teacher perceptions of their role in addressing the mental health needs of their early childhood and elementary school students showed that teachers felt unprepared for that task (Reinke, Stormont, Herman, Puri, & Goel, 2011). Despite an overwhelming percentage of teachers agreeing that schools should play an active role in the mental health of students, only 34% felt they

were equipped with the training necessary to do so (Reinke et al., 2011). Reinke and colleagues (2011) cited the need to respond to student externalizing behaviors as teachers' primary concerns, with more than 90% of respondents listing defiance and aggression as the most concerning student behaviors. However, less is known regarding teachers' concerns and willingness to address mental health needs among high school students when internalizing behaviors such as depression and anxiety are more prevalent (Dray et al., 2014). Addressing mental health needs with students begins with cultivating healthy and supportive teacher-student relationships more broadly. When teachers help create respectful environments where students feel valued and like their needs are met, poor mental health outcomes occur less frequently (LaRusso et al., 2008). Minimal research explores teachers' perceptions of the school's and their potential role as mental health advocates for students' needs.

**Growth mindsets.** A growth mindset refers to the beliefs regarding human abilities being able to improve with effort (Dweck, 2008). It is beneficial for students to operate from this framework as it may allow them to believe that they can learn more, even with difficult subject matter. Previous research has shown that teachers have begun to teach a growth mindset approach as it applies to their students' learning (Masters, 2013). However, teachers may also benefit from a growth mindset (Dweck, 2008). In regards to building relationships with students, Muller (2001) posits that teachers are more likely to foster relationships with students that are more dedicated to school and less likely to nurture relationships with those students who are disengaged and may benefit the most from these supportive relationships. Teachers' beliefs that they can foster relationships with their most difficult students may be linked to more positive student

outcomes, but less research has focused on examining teachers' own growth mindset beliefs (Dweck, 2008).

**Commitment to preventive programing and interventions.** In a review on helpful mindsets in effective teaching and resilience promotion, Brooks and Goldstein (2008) asserted that teachers who viewed social and emotional learning as a component of the curriculum, as opposed to additional content, were considered capable of fostering resilience in their students. Higher levels of teachers' levels of commitment to implementing various types of preventive programs and interventions have been shown to significantly improve youth outcomes (Lillehoj, Griffin, & Spoth, 2004; Rigby, 2002). Lillehoj and colleagues (2004) posited that teachers implementing a preventive substance abuse program were more likely to adhere to the protocol and thus deliver the program more comprehensively when they were committed to the program. Researchers found that students were less likely to engage in alcohol and tobacco use, had more knowledge regarding substance use, and had more realistic ideas of peer substance use when teachers were committed to the prevention program (Lillehoj et al., 2004). In a related area of study, when identifying bullying interventions deemed most successful among elementary school-aged children, Rigby (2002) found that staff commitment to implementing the interventions accounted for more differences in results than did the slight variations between programs. Following fidelity checks and monitoring, staff that engaged with and competently delivered the bullying interventions inspired more positive results among students (Rigby, 2002). Similarly, staff involvement in implementing a bullying prevention program has been found to be a significant predictor of reduced instances of bullying among students (Eslea & Smith, 1998). The findings demonstrate

the positive effects of staff commitment to program implementation; when those responsible for delivery of the program believe in and are committed to producing the intended effects, there is higher potential for success (Rigby, 2002). The present study focused on staff commitment to implementing restorative practices, which have been introduced in varying degrees in district high schools.

### **Restorative Practices**

The use of restorative practice in schools stems from the concept of restorative justice, which originally developed in the criminal justice system as an alternative to punitive methods following criminal activity (Coates, Umbreit, & Vos, 2003). In a restorative justice approach to crime, victims and perpetrators come together to determine how the harm done can be addressed and corrected (Coates et al., 2003). Restorative practices in schools involve integrating the fostering of healthy and meaningful relationships with normal school practices and repairing those relationships when conflict or harm arises. This approach represents an alternative to punitive methods of discipline (McCluskey et al., 2008). Restorative practices in schools employ proactive circles, restorative questions, and shame management (Costello, Wachtel, & Wachtel, 2010). The increased focus on building, repairing, and nurturing relationships among peers, as well as between teachers and students, has the potential to positively affect the school climate and promote the development of key internal assets such as sense of responsibility, problem solving skills, and social and emotional competency (Macready, 2009).

Restorative practices, which can contribute to fostering a positive school climate, have been shown to be helpful in aiding efforts to decrease instances of bullying in schools by promoting empathy and responsibility (McCluskey et al., 2008). Similarly, a



positive school climate has been shown to be negatively associated with bullying (Wang, Berry, & Swearer, 2013). Bullying in adolescence may take the form of physical abuse, cyberbullying, relational bullying, and verbal attacks (Bradshaw, Waasdorp, & Johnson, 2015). Bullying is a potential risk factor for various mental health disorders common in adolescence such as depression and anxiety (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000). With bullying being a leading contributor to the growing rates of suicidal ideation and attempts, decreasing rates of bullying in schools may impact student mental health (Bauman, Toomey, & Walker, 2013). A warm and caring environment maintained by both staff and students promotes school connectedness, is a cornerstone of bullying prevention programs, and is key in fostering a positive school climate (Fonagy et al., 2009). Initiatives that support efforts to decrease bullying also indirectly improve mental health outcomes for students.

Restorative practices also share principles of popular suicide prevention programs that are implemented in high schools. For example, the school-based suicide intervention Sources of Strength (Wyman et al., 2010) uses peer relationships as a cornerstone of the intervention by training student leaders to be more actively involved in the mental health of their peers. The Sources of Strength intervention, similar to restorative practices, also encourages positive student-teacher relationships. Students who received the Sources of Strength peer training were more likely to refer their peers to adults in the school as the intervention increased perceptions of adult support regarding mental health issues (Wyman et al., 2010). Although there are similarities between restorative practices in schools and school-based suicide prevention programs, there has been little research

studying the impact that implementing restorative practice in schools may have on suicidal ideation in adolescents.

Despite knowledge of factors that promote resilience in high schools, there is little research that focuses on adolescence and high school as a key opportunity for intervention. The impact of a positive environment for students are potentially far-reaching, and teachers are actively involved in shaping student experiences. Therefore, the proposed study aimed to investigate the association between teacher beliefs and attitudes regarding school climate; supporting student mental health needs, growth mindsets, and commitment to preventive programming such as restorative practices; and student perceptions of school climate. It was also important to examine the associations among the previously-listed teacher beliefs and attitudes and the prevalence of bullying and suicidal ideation among students.

### **Hypotheses**

To address these aims, the project investigated several questions:

**Question #1:** Are staff responses on subscales measuring commitment to implementing restorative practices in school, attitudes regarding student mental health, growth mindsets, and teacher perceptions of school climate associated with student perceptions of school climate, specifically teacher-student relationships? *Hypothesis #1:* Higher staff scores on subscales assessing commitment to restorative practice implementation, student mental health, faculty growth mindset, and school climate will be associated with higher scores on a measure of student perceptions of school climate, specifically teacher-student relationships.

**Question #2:** Are staff responses on subscales measuring commitment to implementing restorative practices in school, attitudes regarding student mental health, growth mindsets, and teacher perceptions of school climate associated with student reports of bullying and student suicidality? *Hypothesis #2:* Higher staff scores on subscales assessing commitment to restorative practice implementation, student mental health, faculty growth mindset, and school climate will be associated with lower scores on student reports of subscales assessing bullying and suicidal ideation in students.

**Question #3:** Is the duration of implementation of restorative practices in high schools associated with lower levels bullying and suicidal ideation among students? *Hypothesis #3:* When comparing across three levels of implementation (i.e., schools with no implementation of restorative practices, schools with one year or less of implementation, and schools with more than one year of implementation), the schools with a longer duration of implementation will have fewer student reports of bullying and suicidal ideation.

## **Method**

### **Participants**

The participants in the current study were 621 teachers from 12 high schools in an urban school district. Staff data was collected as a component of regular district assessment, further explained below. There was an average of 64% response rate among the 12 schools. Information on teacher and staff demographic characteristics were not requested to preserve anonymity. Participants did not provide identifying information, other than school name, with their questionnaire responses.

Although students did not directly participate in the current project, high school students' perspectives on school climate and student risk behaviors are assessed annually by the school district. These data were requested from the district for the 2017-2018 academic school year. (<http://www.udisp.com/schools>). Data from 4,793 students was included in the present analyses. The largest group of student participants (44.6%) were Black or African American, which is representative of the school district's student demographics. See Table 1 for student demographic characteristic information obtained from the Essentials of School Culture and Climate Survey data, described in detail below.

**Table 1.**  
*Student Demographic Variables*

Sex, <i>n</i> (%)	
Female	2521 (53%)
Male	2272 (47%)
Race <i>n</i> (%)	
Black or African American	2139 (44.6%)
Latino/Hispanic	1486 (31.0%)
White	690 (14.4%)
Asian	362 (7.6%)
Multiracial	74 (1.6%)
American Indian or Alaskan Native	40 (.8%)
Native Hawaiian or Other Pacific Islander	2 (.04%)
Grade, <i>n</i> (%)	
9 <sup>th</sup>	1629 (34.0%)
10 <sup>th</sup>	1258 (26.2%)
11 <sup>th</sup>	1065 (22.2%)
12 <sup>th</sup>	841 (17.5%)

*Note.* *n* = 4793

## Procedure

Approval from both Marquette University's Institutional Review Board and the school district's Research and Evaluation Office was received prior to initiating the current project.

Staff were asked to participate in the present study by responding to a questionnaire that was administered after high school teachers and staff members completed a mandatory district training session for implementing the restorative practices initiative. While the training was mandated by the school district, staff had the option to forgo responding to the study questionnaire. The questionnaire took approximately 10 minutes to complete.

Students' reports of school climate (Essentials of School Culture and Climate Survey, 2017) and youth adjustment (i.e., Youth Risk Behavior Survey; Centers for Disease Control and Prevention [CDC], 2009) were received from the school district for students enrolled in the schools that participated in the present study. The district provided student data aggregated at the school level. The following paragraphs describe the items selected for the present study from each of the relevant subscales and measures.

### **Measures**

The 22 items were selected for the present study questionnaire in collaboration with school district personnel overseeing restorative practice implementation. The items were chosen from relevant subscales of three questionnaires: the Developing Staff Commitment for Social and Emotional Learning subscale from the Collaborative for Academic, Social, and Emotional Learning (CASEL) Staff Survey of Implementation; the Mental Health subscale from the Department of Education School Climate Survey; and the Faculty Growth Mindset, School Leadership, and School Climate subscales from the Panorama Teacher Survey.

**Developing staff commitment.** (American Institutes for Research [AIR], 2014). The 58-item Social Emotional Learning staff survey was developed by the American

Institutes for Research (AIR) to evaluate district and school implementation of social and emotional learning curriculum. The four items selected for use in the present study from the Teacher Attitudes “Commitment to Social Emotional Learning” subscale assess staff beliefs regarding commitment to implementing social and emotional learning in their schools. The items were modified to refer to commitment to implementing restorative practice in schools as opposed to social and emotional learning (ex. *How would you rate your level of commitment to promoting restorative practices?*). Respondents answer how much they agree with each statement on a four- point Likert scale (1=Strongly disagree, 2=Disagree, 3=Agree, 4=Strongly Agree; AIR, 2014). Higher scores on this subscale represent higher levels of staff commitment. The Teacher Attitudes scale has a Rasch reliability of .60 and Cronbach’s alpha of .95 (AIR, 2014).

**Mental health.** The United States Department of Education developed the School Climate Survey (National Center for Education Statistics ED School Climate Surveys [EDSCLS] National Benchmark Study, 2016) for students and instructing and non-instructing school staff. Items for instructing school staff will be used in the present study. The 82-item survey evaluates staff perceptions of school climate on three scales (Engagement, Safety, Environment) and twelve subscales. The questionnaires have good internal consistency with Cronbach’s alpha of .92, .92, and .95 for each scale, respectively. The present study questionnaire included five items from the Mental Health subscale from the Environment scale (ex. *This school places a priority on addressing students’ mental health needs.*). Items in this domain assess staff beliefs regarding their school’s approach to student mental health. Lower scores represent strong agreement with statements regarding the school’s ability to address student mental health needs.

Items will be reverse scored in the analyses in order to remain consistent with the other measures. The item responses are arranged on a 4-point Likert scale ranging from *Strongly Agree* to *Strongly Disagree* (EDSCLS National Benchmark Study, 2016). The Mental Health subscale has a Cronbach's alpha of .91 (EDSCLS National Benchmark Study, 2016).

**School climate.** Four questions from School Climate subscale of the Panorama Instructing Staff Survey (Gehlbach, 2015) assessed staff perceptions of school climate; higher scores are indicative of more positive school climates (ex. *How respectful are the relationships between staff and students?*). Responses are on a 5-point Likert scale ranging from *Not at all* to *Extreme*. No information about the subscale validity and reliability is available.

**Faculty growth mindset.** Four questions from the Faculty Growth Mindset subscale of the Panorama Instructing Staff Survey (Gehlbach, 2015) will assess staff perceptions on the likelihood of teaching and teacher-student relationships improving over time (ex. *How possible is it for teachers to change how well they relate to their most difficult students?*). Responses are on a 5-point Likert scale ranging from *Cannot increase/improve/change at all* to *Can increase/improve/change a tremendous amount*. No information about the subscale validity and reliability is available.

**Essentials of School Culture and Climate.** The Essentials of School Culture and Climate questionnaire was adapted from the *5Essentials Survey* created by the University of Chicago Consortium on School Research (CCSR; Essentials of School Culture and Climate Survey MPS, 2017). Both surveys are designed to assess a school's ability to achieve five essential characteristics researchers identified as target areas to improve in

urban schools: student and staff perceptions of the school's effective leadership, involvement of families, supportive environment, collaborative teachers, and ambitious instruction (Sebring, Allensworth, Bryk, Easton, & Luppescu, 2006). The staff climate survey includes 69 items; the high school student survey includes 44 items.

Analyses of student data were conducted using the mean score from the 26-item Supportive Environment subscale (ex. *I feel safe and comfortable with my teachers at school*), with higher scores indicative of a more positive perception of school climate. The subscale also includes items assessing how safe students feel at school and how much they think their school and teacher prepare them for college. Response options are on a 4-point Likert scale and vary depending on item content: *Not Safe to Very Safe* or *Strongly Disagree to Strongly Agree*.

**Youth Risk Behavior Survey.** The Youth Risk Behavior Survey (YRBS) was developed by the CDC in 1991; it has since been updated and is used to assess the health risk behaviors of children and adolescents through dissemination in schools (CDC, 2009). The 89-item survey assesses behaviors that pose a threat to student physical, mental, and sexual safety. The data from the YRBS is collected annually by the participating school district. The questions ask about student behavior in the past 12 months (ex. *During the past 12 months, have you ever been bullied on school property?*). Analyses were conducted using scores derived from both the bullying and suicide ideation subscales which include two items regarding experiences of bullying and four items regarding suicidal thoughts and/or attempts. Questions ask respondents to indicate whether they have experienced either with 1 point for *Yes*, and 0 points for *No*. Higher scores indicate more risk.



District guidelines dictate that in order for individual school results to be reported, there must be at least a 50% participation rate. Consequently, data on the ESCCS and YRBS was received from 12 and 8 schools, respectively. Because these were obtained at the school level, the sample size for analyses including these measures corresponds to the number of schools reporting these data. Because the power to detect statistically significant effects is limited at this sample size, effect sizes also are reported and interpreted based on Cohen (1988) guidelines.

## **Results**

### **Teacher Beliefs and School Climate —Question 1**

To address the first research question, Pearson's correlations were conducted to determine whether teachers' scores on the Staff Commitment, Student Mental Health, Faculty Growth Mindset, and School Climate subscales were associated with student perceptions of school climate (ESCCS mean score; see Table 2). There was a medium-sized effect for teachers' commitment to restorative practices (Staff Commitment) and students' perceptions of school climate (ESCCS), ( $r = .32, p = .310$ ). There was a large association between teachers' beliefs regarding student mental health needs (Mental Health) and ESCCS, and the correlation approached significance, ( $r = .56, p = .059$ ). There was a small association between faculty's growth mindset (Growth Mindset) and ESCCS, ( $r = -.07, p = .831$ ). One statistically significant positive correlation emerged between the School Climate subscale and the ESCCS mean score, ( $r = .75, p = .005$ ).

## Teacher Beliefs and Bullying, Suicidality—Question 2

To address the second research question, Pearson's correlations were conducted to determine whether the four staff subscale scores were associated with student scores on the two YRBS bullying items (see Table 2). There were medium-sized effects for Staff Commitment and both bullying at school, ( $r = .36, p = .384$ ), and cyberbullying, ( $r = .46, p = .384$ ). There were small effects for Mental Health and both bullying at school, ( $r = .05, p = .905$ ), and cyberbullying, ( $r = .05, p = .905$ ). There were medium-sized effects for Growth Mindset and both bullying at school, ( $r = .29, p = .486$ ), and cyberbullying, ( $r = .41, p = .315$ ). There were small associations with School Climate and both bullying in school, ( $r = .12, p = .785$ ) and cyberbullying, ( $r = .20, p = .630$ ).

Pearson's correlations were also conducted to determine whether the four staff subscales were associated with student reports of suicidal ideation on the YRBS. There were small associations between Staff Commitment and both student feelings of sadness and hopelessness, ( $r = .10, p = .808$ ) and suicide plan, ( $r = .12, p = .778$ ) and large associations with suicidal ideation, ( $r = .52, p = .187$ ) and suicide attempts, ( $r = .68, p = .062$ ). There were also small associations with Mental Health and both student feelings of sadness and hopelessness, ( $r = .15, p = .730$ ), suicide plan, ( $r = -.15, p = .724$ ), and suicide attempts, ( $r = .20, p = .630$ ). There were medium-sized effects for Mental Health and suicidal ideation, ( $r = .40, p = .332$ ). Growth mindset also had small associations with sadness and hopelessness, ( $r = .09, p = .830$ ) and suicide plan, ( $r = .14, p = .748$ ) and a medium-sized association with suicide ideation, ( $r = .48, p = .231$ ). There was a significant positive correlation for Growth Mindset and student suicide attempts, ( $r = 0.73, p = .042$ ). School Climate had small associations with students' feelings of sadness

and hopelessness, ( $r = .20, p = .628$ ), suicide plan, ( $r = -.12, p = .772$ ), and suicide attempts, ( $r = .18, p = .679$ ). A medium-sized effect was also observed for School Climate and suicidal ideation, ( $r = .41, p = .317$ ).

**Table 2.**  
*Student Demographic Variables*

	Staff Commitment	Mental Health	Growth Mindset	School Climate(Teacher)
Student Perceptions of School Climate	.32	.56	-.07	.75**
Bullying at School	.36	.05	.29	.12
Cyber Bullying	.46	.05	.41	.20
Sad and Hopeless	.10	.15	.09	.20
Suicidal Ideation	.52	.40	.48	.41
Suicide Plan	.12	-.15	.14	-.12
Suicide Attempts	.68	.20	.73*	.18

*Note.*  $n = 8$ .

Staff Commitment = Staff Commitment to Restorative Practices

Subscale mean Growth Mindset = Faculty Growth Mindset

Subscale mean; School Climate (Teacher) = Teacher Perceptions of School Climate Subscale mean.

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

### **Duration of Restorative Practices Implementation—Question 3**

To address the final research question, independent samples t-tests were conducted with schools categorized into two groups by duration of implementation as the independent variable and bullying and suicidal ideation item scores as the dependent variables. Schools were separated into two rather than three groups because only one school had a duration of more than two years. The eight schools with YRBS data were grouped by duration of implementation of RP with schools implementing RP for a year or less (Schools  $\leq 1$ ),  $n = 3$ , and schools implementing RP for longer than a year (Schools  $> 1$ ),  $n = 5$  (see Table 3). There were significant differences between the two groups on bullying,  $t(6) = -2.80, p = .03, d = 2.21$ , and cyber bullying,  $t(6) = -3.68, p = .010, d$

=3.16. There were also significant differences between the two groups on suicidal ideation  $t(6) = -2.82, p = .030, d = 2.21$ ; suicide plan  $t(6) = -3.23, p = .018, d = 2.21$ ; and suicide attempts  $t(6) = -3.45, p = .014, d = 2.75$ . More risk behaviors were observed in the group with longer duration of RP implementation (see Table 4).

**Table 3.**  
*Group Composition*

	Number of Students
Group $\leq 1$ year of implementation, <i>n</i>	
School 1	949
School 2	1105
School 3	920
Group $> 1$ year of implementation, <i>n</i>	
School 4	158
School 5	249
School 6	465
School 7	257
School 8	37

*Note.*  $n = 4793$

**Table 4.**  
*Independent Samples T-Tests for YRBS Bullying and Suicide Items by Duration of RP Implementation Groups*

	Schools $\leq 1$		Schools $> 1$		<i>t</i>
	<i>M</i>	SD	<i>M</i>	SD	
Bullying at School	0.11	0.02	0.18	0.04	-2.80*
Cyber Bullying	0.09	0.01	0.14	0.02	-3.68**
Sad and Hopeless	0.35	0.03	0.40	0.05	-1.46
Suicidal Ideation	0.15	0.02	0.22	0.04	-2.82*
Suicide Plan	0.11	0.00	0.17	0.03	-3.23*
Suicide Attempts	0.09	0.02	0.16	0.03	-3.45**

*Note.*  $n = 8$ .

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

## **Discussion**

Adolescence is a critical developmental period that presents key opportunities for biological, psychological, and social changes (Masten, 2014). Given these opportunities for change, it is important that adolescents have supportive relationships with competent adults that encourage the promotion of internal assets and provide the external resources necessary for resilience and positive growth. Adolescents spend the majority of their time in schools, and thus teachers are in a position to provide these supportive relationships in the absence of, or in addition to parents (Yeung & Leadbeater, 2010). However, much remains unknown regarding teachers' attitudes about factors that may contribute to these relationships. The goals of the current study were to explore whether teachers' beliefs regarding RP, students' mental health, growth mindsets, and teachers' perceptions of school climate were associated with students' perceptions of school climate, specifically teacher-student relationships, and students' experiences of bullying and suicidal ideation. It also examined the impact of prolonged implementation of RP on student experiences of suicidal ideation and bullying.

### **Teacher Beliefs and Student Outcomes**

Data on students' perceptions of school climate and their risk behaviors were aggregated at the school level for analyses, and consequently the sample size was the number of participating schools. Given the reduced power to detect significant relationships, effect sizes were also interpreted. Effect sizes can be useful early in intervention research for determining the potential impact of intervention and prevention

programs, particularly in pilot studies. Given the novelty of this research, the effect sizes can help guide future studies (Lam, 2016).

Associations between teachers' beliefs and students' perceptions of school climate ranged from very small to large. Teachers' beliefs about their school's climate had a large and statistically significant positive association with students' perspectives of school climate, suggesting that the more positive teachers' beliefs about their relationships with students and the school environment generally were, the more positive students felt about their school's climate and their relationships with teachers in the school. These results suggest some concordance between the teacher and student school climate measures. Previous studies have emphasized the importance of examining both teacher and student perceptions of school climate because they may have different associations with important outcomes (Koth, Bradshaw, & Leaf, 2008; Mitchell, Bradshaw, & Leaf, 2010).

A large positive association was found between teachers' beliefs regarding students' mental health needs and students' perceptions of school climate. There is a lack of research examining the relationship between mental health and school climate, though findings from LaRusso et al. (2008) suggest that teachers' ability to tune in to their students' needs are more likely to foster a positive school climate for students. Teachers who are in tune with their students' mental health needs likely demonstrate positive behaviors that contribute to students' perceptions of school climate, such as teacher empathy and respect (LaRusso et al., 2008).

A medium positive effect was found for teachers' commitment to RP and students' perceptions of school climate. This suggests that with higher teacher

commitment to RP, students' report more positive ratings of school climate. Although not statistically significant with the current sample size, these findings are consistent with both the hypothesis and previous findings, which suggest that RP can be a powerful tool to aid in creating a better school environment for students (McCluskey et al., 2008).

Finally, a very small negative effect was found for teachers' growth mindset and students' perceptions of school climate. It is possible that while teachers hold these beliefs, it is not yet evident in their interactions with students and thus the relationships are not as pronounced. Examining how growth mindset is related to teacher behaviors may shed light on whether it is relevant for shaping students' perceptions of the school climate.

Considerable variability was found in associations between teachers' beliefs and students' experiences of bullying and suicidality. Although there were some large associations, most of the twenty-four associations were quite small and thus did not support the study's hypotheses. The most surprising result was a significant large positive association between teachers' beliefs about their operating from a growth mindset and students' suicide attempts in the last year. These results suggest that the more positively teachers reported operating from a growth mindset (i.e. the ability to improve teaching strategies and grow their relationships with their most difficult students), the more students reported previous suicide attempts. This finding is contrary to the hypothesis that the more positively teachers' reported operating from a growth mindset, the less students would report negative outcomes, such as suicide attempts. A potential explanation for this association is that higher rates of suicide attempts led to higher faculty growth mindset.

That is, concerns about suicidality among students might have led teachers to adopt growth mindsets in an effort to address suicidality in students.

### **Restorative Practices Implementation**

In regard to the third research question, the findings of the current study suggest that the duration of RP implementation was associated with student outcomes, but not in the direction hypothesized. Longer school-wide broad implementation of RP in high schools was associated with poorer student outcomes; students at schools implementing RP for a longer period of time (>1 year) reported more experiences of bullying and suicidal ideation. These findings were at odds with previous research that suggested improved school climate in the presence of RP (McCluskey et al., 2008). However, McCluskey and colleagues' findings also highlighted the difficulty of broad implementation in secondary schools. For example, some teachers were hesitant to implement RP because they felt that it may reduce or eliminate their power to punish bad behavior (McCluskey et al., 2008). Similarly, in the district participating in the current study, implementation meant that some administrators and teachers received some degree of training on RP, but there were no specific requirements to guide how and to what extent RP was being implemented in individual classrooms or school-wide. Consequently, it is difficult to interpret the present study findings. Additionally, the majority of the schools that were participating in the current study were typically low-performing and consistently failed to meet district expectations. This may, in part, contribute to the unexpected findings; arbitrarily defined broad RP implementation may not be enough for schools that are facing challenges meeting students' academic and socioemotional needs. These schools may be in need of more targeted intervention, with



clear guidelines for implementation (McCluskey et al., 2008). However, in the group with shorter RP duration implementation, there was one participating school, School 2, that consistently exceeded district expectations prior to implementing RP. This may partially account for a lower overall mean in risk behaviors reported by students, given that there were only three schools in Group 1. Of note, the current study also did not directly assess implementation of RP, and instead used district reports of RP implementation and the subscale assessing teachers' reports of their commitment to RP in their schools. Even in the schools that have broad school-wide implementation for longer than a year, there is some ambiguity regarding what that actually amounts to in practice, given the lack of more objective measures of implementation. An additional explanation for these results is that schools that were experiencing more student mental health concerns started adopting RP earlier in an effort to improve their climate. However, given the quasi experimental design of the current study, schools were not randomly assigned to a duration implementation group, thus it is impossible to interpret the findings with conclusiveness.

Restorative practices are derived from principles of restorative justice (Coates et al., 2003). In theory, a major component of RP is conflict resolution (McCluskey et al., 2008). However, in practice, RP in the participating district is much more focused on the community building aspect than that of conflict resolution, and punitive methods of discipline remain a primary strategy. While this focus on affirming the importance of relationships is consistent with the more universal school implementation of RP (Hulvershorn & Mulholland, 2018), the limited focus on conflict resolution may contribute to the incongruence between teachers' beliefs and students' experiences, as well as the puzzling findings suggesting students exhibit more risk behaviors in schools

with longer RP implementation, such as more bullying. With an increased focus on conflict resolution skills and practices, perhaps the expected differences between the groups on the bullying items would be observed.

### **Limitations**

The current study had several notable limitations. First, there was not enough power to detect many statistically significant effects. Data for the students was provided from the district and therefore, researchers had little control over how the data was presented. Moving forward, individual student data should be collected, or received from the district, and nested analyses should be conducted. Multilevel modeling can provide better tests of hypotheses when data are nested. Students' data should be nested within the teachers, and teachers nested within their respective schools, allowing the analyses to retain power and still make comparisons at the school level.

As described above, there also was no objective measure of broad implementation of RP in each of the participating schools. The data and findings could have been richer with the inclusion of an objective measure of RP implementation to better understand the impact of longer RP implementation for student risk behaviors. With an objective measure, perhaps a school observation and a checklist of specific district guidelines for RP requirements, there would be more consistency across schools, and researchers would be able to more clearly understand and measure the quality of implementation as opposed to simply the duration. Also, schools were not randomly assigned to implementation, and as mentioned earlier, there may be systematic differences among schools who chose to introduce RP at different times. For example, there were four schools that were concurrently participating in a grant project that may have provided additional support for

RP implementation and other mental health services that the other schools did not receive.

There also was low student participation on the student measures collected by the school district. This may be due to there not being designated class time in the majority of the schools to complete the questionnaires. This then required students to complete them on their own time. It is understandable that the measures are not high priority for high school students to complete. In contrast, teachers completed the measure that the researcher created for this specific study during an allotted training time, and the participation was much higher. Moving forward, it may be best to have students complete a shorter measure during an elective period.

Finally, teachers' beliefs about their role may not be an accurate proxy for their actions, and therefore teachers' beliefs may not be as strongly associated with students' reported experiences. A previous study found there was incongruence between teachers' beliefs about their implementation of restorative practices and what students were perceiving (Gregory, Clawson, Davis, & Gerewitz, 2015). Specifically, researchers found that students' reports of teacher RP implementation were positively associated with perceived teacher respect, while teachers' reports of their RP implementation were not (Gregory et al., 2015). This is consistent with findings of the present study, because while teachers may hold the beliefs that students' mental health is important, RP is valuable, teacher-student relationships are meaningful, and that they can improve over time; however, that does not necessarily translate to behaviors that impact students' beliefs and behaviors.

## **Implications and Future Directions**

Richardson, Anders, Tidwell, and Lloyd (1991) found that beliefs do not always translate to practice. Specifically, teachers' beliefs often far precede a change in practice. Given the relatively short amount of time that teachers and schools have been using RP (.5-2 years), it is possible that the students have not yet reaped the benefits that RP promises. However, there is promise that RP, when implemented wholly and correctly, can positively impact teacher-student relationships and other student outcomes (Gregory et al., 2015). The district is still in the early stages of RP implementation, and this study may provide valuable information for moving forward. Particularly, there may need to be a clear measure of implementation. Clear guidelines may need to be established to quickly garner information about where schools are in terms of implementation. Other suggestions for future research and practice include assessing students' perceptions of RP implementation, as well as a more targeted approach to evaluating students' perceptions of school climate, teacher-student relationships, and risk behaviors. This study yielded useful information necessary to moving forward in research into restorative practices.

## Bibliography

- Aldridge, J. M., Fraser, B. J., Fozdar, F., Alai, K., Earnest, J., & Afari, E. (2015). Students perceptions of school climate as determinants of wellbeing, resilience and identity. *Improving Schools, 19*, 5-26.  
<http://dx.doi.org/10.1177/1365480215612616>
- American Institutes for Research (2014). *CASEL/NoVo collaborating districts initiative*. Retrieved from AIR Website: <http://www.air.org>
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence, 36*, 341-350. <http://dx.doi.org/10.1016/j.adolescence.2012.12.001>
- Benard, B. (1995). *Fostering resilience in children* (Report No. EDO-PS-95-9). Washington, DC: Department of Education.
- Benard, B., & Slade, S. (2009). Listening to students: Moving from resilience research to youth development practice and school connectedness. In R. Gilman, E.S. Huebner, & M.J. Furlong (Eds.), *Handbook of positive psychology in schools*. (pp. 353-369). New York, NY: Routledge.
- Bradshaw, C.P., Waasdorp, T.E., & Johnson, S.L. (2015). Overlapping verbal, relational, physical, and electronic forms of bullying in adolescence: Influence of school context. *Journal of Clinical Child and Adolescent Psychology, 44*, 494-508.  
<http://dx.doi.org/10.1080/15374416.2014.893516>
- Brooks, R., & Goldstein, S. (2008). The mindset of teachers capable of fostering resilience in students. *Canadian Journal of School Psychology, 23*, 114-126.  
<https://doi.org/10.1177/0829573508316597>

- Bruns, E. J., Walrath, C., Glass-Siegal, M., & Weist, M. D. (2004). School-based mental health services in Baltimore: Association with school climate and special education referrals. *Behavior Modification, 28*, 491–512
- Centers for Disease Control and Prevention (2009). Youth Risk Behavior Survey. Available at <https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm>
- Coates, R. B., Umbreit, M., & Vos, B. (2003). Restorative justice circles: An exploratory study. *Contemporary Justice Review, 6*, 265–278.
- Costello, B., Wachtel, J., & Wachtel, T. (2010). *Restorative circles in schools: Building community and enhancing learning*. International Institute for Restorative Practices.
- Dray, J., Bowman, J., Freund, M., Campbell, E., Wolfenden, L., Hodder, R. K., & Wiggers, J. (2014). Improving adolescent mental health and resilience through a resilience-based intervention in schools: Study protocol for a randomised controlled trial. *Trials, 15*, 289-297. <http://dx.doi.org/10.1186/1745-6215-15-289>
- Durlak, J. A., Domitrovich, C. E., Weissberg, R. P., & Gullota, T. P. (Eds.). (2015). *Handbook of social and emotional learning: Research and practice*. New York, NY: Guilford Publications
- Dweck, C. S. (2008). *Mindsets and math/science achievement*. Paper presented at the Carnegie Corporation of New York–Institute for Advanced Study Commission on Mathematics and Science Education, New York, NY.

- Eslea, M., & Smith, P. K. (1998). The long-term effectiveness of anti-bullying work in primary schools. *Educational Research, 40*, 203-218.  
<http://dx.doi.org/10.1080/0013188980400208>
- Essentials of School Culture and Climate Survey (2017). Accessed from  
<http://mps.milwaukee.k12.wi.us/en/District/Initiatives/Research-Development/ESCC.htm>
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health, 26*, 399-419.  
<https://doi.org/10.1146/annurev.publhealth.26.021304.144357>
- Fonagy, P., Twemlow, S. W., Vernberg, E. M., Nelson, J. M., Dill, E. J., Little, T. D., & Sargent, J. A. (2009). A cluster randomized controlled trial of child-focused psychiatric consultation and a school systems-focused intervention to reduce aggression. *Journal of Child Psychology and Psychiatry, 50*, 607-616.  
<http://dx.doi.org/10.1111/j.1469-7610.2008.02025.x>
- Gehlbach, H. (2015). *Panorama staff survey: User guide*. Retrieved from Panorama Education Website: [www.panoramaed.com](http://www.panoramaed.com)
- Gregory, A., Clawson, K., Davis, A., & Gerewitz, J. (2015). The promise of restorative practices to transform teacher-student relationships and achieve equity in school discipline. *Journal of Educational and Psychological Consultation, 25*, 1–29.  
<https://doi.org/10.1080/10474412.2014.929950>
- Henderson, N., Milstein, M. M., & Werner, E. E. (2002). *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA: SAGE Publications.

- Hulvershorn, K., & Mulholland, S. (2018) Restorative practices and the integration of social emotional learning as a path to positive school climates. *Journal of Research in Innovative Teaching & Learning, 11*, 110-123. <https://doi.org/10.1108/JRIT-08-2017-0015>
- Kaltiala-Heino, R., Rimpela, M., Rantenen, P., & Rimpela, A. (2000). Aggression at school – an indicator of adolescents at risk for mental disorders. *Journal of Adolescence, 23*, 661–674. <http://dx.doi.org/10.1006/jado.2000.0351>
- Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology, 100*, 96–104. <http://dx.doi.org/10.1037/0022-0663.100.1.96>
- Krovetz, M. L. (2008). *Fostering resilience: Expecting all students to use their minds and hearts well* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Lam, K. (2016). School-based cognitive mindfulness intervention for internalizing problems: Pilot study with Hong Kong elementary students. *Journal of Child and Family Studies, 25*, 3293-3308. <http://dx.doi.org/10.1007/s10826-016-0483-9>
- LaRusso, M. D., Romer, D., & Selman, R. L. (2008). Teachers as builders of respectful school climates: Implications for adolescent drug use norms and depressive symptoms in high school. *Journal of Youth and Adolescence, 37*, 386-398. <http://dx.doi.org/10.1007/s10964-007-9212-4>
- Lillehoj, C. J., Griffin, K. W., & Spoth, R. (2004). Program provider and observer ratings of school-based preventive intervention implementation: Agreement and relation



to youth outcomes. *Health Education & Behavior*, 31, 242-257.

<https://doi.org/10.1177/1090198103260514>

Macready, T. (2009). Learning social responsibility in schools: A restorative practice.

*Educational Psychology in Practice*, 25, 211-220.

<https://doi.org/10.1080/02667360903151767>

Masten, A. S. (2014). *Ordinary magic: Resilience in development*. New York, NY:

Guilford Publications.

Masten, A. S., Burt, K. B., Roisman, G. I., Obradović, J., Long, J. D., & Tellegen, A.

(2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology*, 16, 1071-1094.

<https://doi.org/10.1017/S0954579404040143>

Masters, G. N. (2014). Towards a growth mindset in assessment. *Practically Primary*, 19,

4.

McCluskey, G., Lloyd, G., Kane, J., Riddell, S., Stead, J., & Weedon, E. (2008). Can

restorative practices in schools make a difference? *Educational Review*, 60, 405–417. <http://dx.doi.org/10.1080/00131910802393456>

Moore, K. A., & Ramirez, A. N. (2016). Adverse childhood experience and adolescent

well-being: Do protective factors matter? *Child Indicators Research*, 9, 299-316.

<https://doi.org/10.1007/s12187-015-9324-4>

Muller, C. (2001). The role of caring in the teacher-student relationship for at-risk

students. *Sociological Inquiry*, 71, 241-255. [http://dx.doi.org/10.1111/j.1475-](http://dx.doi.org/10.1111/j.1475-682X.2001.tb01110.x)

[682X.2001.tb01110.x](http://dx.doi.org/10.1111/j.1475-682X.2001.tb01110.x)

- Murray, C. (2009). Parent and teacher relationships as predictors of school engagement and functioning among low-income urban youth. *The Journal of Early Adolescence*, 29, 376-404. <https://doi.org/10.1177/0272431608322940>
- National Center for Education Statistics (2016). *ED School Climate Surveys* (EDSCLS). Retrieved from <https://nces.ed.gov/surveys/edscls>
- National School Climate Council (NSCC, 2007). *The school climate challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy*. Retrieved from <http://nsc.csee.net>
- National Survey of Children's Health (NSCH, 2012). Data query from the Child and Adolescent Health Measurement Initiative. Accessed from <http://childhealthdata.org/browse/survey/results?q=2408&r=1>
- Oswald, M., Johnson, B., & Howard, S. (2003). Quantifying and evaluating resilience promoting factors - teachers' beliefs and perceived roles. *Research in Education*, 70, 50-64. <https://doi.org/10.7227/RIE.70.5>
- Poulton, R., Caspi, A., Milne, B. J., Thomson, W. M., Taylor, A., Sears, M. R., & Moffitt, T. E. (2002). Association between children's experience of socioeconomic disadvantage and adult health: A life-course study. *Lancet*, 360, 1640–1645. [http://doi.org/10.1016/S0140-6736\(02\)11602-3](http://doi.org/10.1016/S0140-6736(02)11602-3)
- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and

barriers. *School Psychology Quarterly*, 26, 1–13.

<http://dx.doi.org/10.1037/a0022714>

Richardson, V., Anders, P., Tidwell, D., & Lloyd, C. (1991). The Relationship Between Teachers' Beliefs and Practices in Reading Comprehension Instruction. *American Educational Research Journal*, 28, 559-586. <https://doi.org/10.3102/00028312028003559>

Rigby, K. (2002). *New perspectives on bullying*. London, England: Jessica Kingsley Publishers.

Rudasill, K. M., Reio, T. G., Stipanovic, N., & Taylor, J. E. (2010). A longitudinal study of student–teacher relationship quality, difficult temperament, and risky behavior from childhood to early adolescence. *Journal of School Psychology*, 48, 389-412. <https://doi.org/10.1016/j.jsp.2010.05.001>

Sebring, P. B., Allensworth, E., Bryk, A. S., Easton, J. Q., & Luppescu, S. (2006). *The essential supports for school improvement*. Chicago, IL: Consortium on Chicago School Research.

Shrivastava, A., & Desousa, A. (2016). Resilience: A psychobiological construct for psychiatric disorders. *Indian Journal of Psychiatry*, 58, 38–43.

<http://doi.org/10.4103/0019-5545.174365>

Stewart, T., & Suldo, S. (2011). Relationships between social support sources and early adolescents' mental health: The moderating effect of student achievement level. *Psychology in the Schools*, 48, 1016-1033.

<http://dx.doi.org/10.1002/pits.20607>

- Substance Abuse and Mental Health Services Administration (SAMHSA, 2014). Results from the 2013 National Survey on Drug Use and Health: Summary of national findings, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD.
- Suldo, S. M., Friedrich, A. A., White, T., Farmer, J., Minch, D., & Michalowski, J. (2009). Teacher support and adolescents' subjective well-being: A mixed-methods investigation. *School Psychology Review, 38*, 67-85.
- Wang, C., Berry, B., & Swearer, S. M. (2013). The critical role of school climate in effective bullying prevention. *Theory into Practice, 52*, 296-302.  
<http://dx.doi.org/10.1080/00405841.2013.829735>
- Wekerle, C., Waechter, R. L., Leung, E., & Leonard, M. (2007). Adolescence: A window of opportunity for positive change in mental health. *First Peoples Child and Family Review, 3*, 8-16.
- Werner, E., & Smith, R. (1988). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York, NY: Adams, Bannister, and Cox.
- Wyman, P. A., Brown, C. H., LoMurray, M., Schmeelk-Cone, K., Petrova, M., Yu, Q., ... & Wang, W. (2010). An outcome evaluation of the Sources of Strength suicide prevention program delivered by adolescent peer leaders in high schools. *American Journal of Public Health, 100*, 1653-1661.  
<http://dx.doi.org/10.2105/AJPH.2009.190025>
- Wyman, P. A., Sandler, I., Wolchik, S., & Nelson, K. (2000). Resilience as cumulative competence promotion and stress protection: Theory and intervention. In D. Cicchetti, J. Rappaport, I. Sandler, & R. P. Weissberg (Eds.), *The promotion of*

*wellness in children and adolescents* (pp. 133-184). Washington, DC: Child Welfare League of America.

- Yehuda, R., and Flory, J. D. (2007). Differentiating biological correlates of risk, PTSD, and resilience following trauma exposure. *Journal of Traumatic Stress, 20*, 435–447. <http://dx.doi.org/10.1002/jts.20260>
- Yeung, R., & Leadbeater, B. (2010). Adults make a difference: The protective effects of parent and teacher emotional support on emotional and behavioral problems of peer-victimized adolescents. *Journal of Community Psychology, 38*, 80-98. <http://dx.doi.org/10.1002/jcop.20353>
- Zautra, A. J., Hall, J. S., & Murray, K. E. (2010). A new definition of health for people and communities. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), *Handbook of adult resilience* (pp. 3-29). New York, NY: Guilford Press.
- Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives, 7*, 215-220. <https://doi.org/10.1111/cdep.12042>