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Before the panic sets in: The impact of a social and emotional learning (SEL) course for pre-service teachers

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Abstract

The following dissertation describes a significant problem that impacts a small, parochial university in the Illinois: beginning teachers are not prepared to meet the social emotional learning (SEL) needs of their students. A review of literature outlining the scope of the problem—including the neurophysiological, academic, and psychological impact of cumulative environmental risk, as well as the importance and lack of training typically received by pre-service teachers (PSTs) in the provision of SEL support—comprises the first chapter. The second chapter provides a description and results of a locally administered needs assessment that evaluate the work of the researcher’s university in preparing PSTs to ameliorate the SEL needs of students from high risk environments. Chapter three provides background and details for a semester-long, four-module course that was offered to PSTs during the fall, 2016 semester, titled Classroom and Individual Emotional and Behavioral Supports (CIEBS). The fourth chapter presents a plan for evaluating the impact of the CIEBS course. After the semester-long CIEBS course, the group-wide data showed significant growth in the efficacy for classroom management and preparedness for dealing with students’ stress among the treatment group, with little observable change among control participants. Analyses of this group-wide data, including case studies for each of the CIEBS course participants are included in the fifth and final chapter.

Keywords: cumulative environmental risk, social and emotional learning, trust-based relational intervention, school-wide positive interventions and supports, non-violent crisis intervention, teacher preparation, pre-service teachers
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# Table of Contents

Abstract ............................................................................................................................... ii  
Acknowledgements ............................................................................................................ iii  
Table of Contents ................................................................................................................. v  
List of Tables ..................................................................................................................... vi  
List of Figures ................................................................................................................... vii  
Executive Summary ............................................................................................................. 1  
I. Review of Literature ......................................................................................................... 4  
II. Needs Assessment ......................................................................................................... 28  
III. Introduction to Solution of POP .................................................................................. 51  
IV. Evaluation Procedure ................................................................................................... 77  
V. Findings ....................................................................................................................... 105  
References ........................................................................................................................ 166  
Appendices ....................................................................................................................... 186  
Curriculum Vitae ............................................................................................................. 238
List of Tables

Table 1.1 Literature Review Sources ................................................................. 5

Table 2.1 Needs Assessment Summary Matrix ................................................. 33

Table 2.2 Comparison of Respondents’ Risk vs. Gutman et al. Respondents’ ........ 42

Table 2.3 Mean Score for Priority, Knowledge, and Skills Questions ............... 43

Table 2.4 Correlational Analyses between PST Program Level, Risk Factors, Skills ..... 44

Table 4.1 Data Collection Tools ........................................................................ 82

Table 4.2 Quantitative Pre-Intervention Measures ............................................. 85

Table 4.3 Process Fidelity Indicators .................................................................. 99

Table 4.4 Data Collection Summary Matrix .................................................... 102

Table 5.1 Demographic Means and Medians for Treatment and Control Participants. 106

Table 5.2 TPDSS and TSSE Pre-Interventions Mean Scores ............................... 108

Table 5.3 Pre- and Post-intervention Means and Standard Deviations for Teachers’ Preparedness for Dealing with Student Stress and Teacher Efficacy Scales .......... 111

Table 5.4 Pre- and Post-intervention vignette responses: Numbers of SEL responses, and SEL responses per participant ............................................................... 113

Table 5.5 TPDSS and TSSE Individual Pre-and Post-Intervention Scores ............ 125

Table 5.6 Inter-participant Process Fidelity Indicators ....................................... 150

Table 5.7 Statements indicating course elements that impacted candidates’ knowledge and sense of preparedness to handle student stress ........................................... 163
List of Figures

Figure 3.1. Logic model for CIEBS course for pre-service teachers...............................60

Figure 3.2. Causal diagram depicting increases in teacher efficacy through CIEBS course modules.................................................................................................................61
Executive Summary

Overview of the Problem of Practice (POP)

Many of our nation’s students experience high levels of complex trauma (Copeland, Keeler, Angold, & Costello, 2007) and environmental risk (Bethell, Newacheck, Hawes, & Halfon, 2014). The impairments associated with complex trauma include affect regulation, cognition, self-concept, and behavior control (Cook, Blaustein, Spinazzola, & van der Kolk, 2003). Similarly, high levels of environmental risk negatively affect skillsets needed for academic success: literacy (Cadima, McWilliam, & Leal, 2010), language (Farah et al., 2006), cognition (Lawson, Duda, Avants, Wu, & Farah, 2013) working memory (Evans & Schamberg, 2009), and persistence (Brown, 2009; Evans, 2003). Indeed, ample evidence exists that the physical, psychological, and emotional burden of enduring high levels of cumulative risk (CR) is a driver for unequal achievement (Evans & Schamberg, 2009; Juster et al., 2011; Shonkoff & Bales, 2011; Zalewski, Lengua, Kiff, & Fisher, 2012).

In the milieu of widespread and deleterious trauma and environmental risk, teachers are not prepared to provide the social-emotional learning (SEL) support required by their students. Nationally, training for pre-service teachers to provide social and emotional learning (SEL) support seldom occurs in institutes of higher education in a systematic and comprehensive way (Bridgeland, Bruce, & Hariharan, 2013; Jennings & Greenberg, 2009; Koller, Osterlind, Paris, & Weston, 2004; Schonert-Reichl, Hanson-Peterson, & Hymel, 2015). While experts’ calls for enhanced SEL preparation for pre-service teachers (PSTs) are firmly substantiated by SEL literature (e.g., Jennings &
Greenberg, 2009; Schonert-Reichl et al., 2015), the competence of such training to enhance PSTs preparedness for dealing with student stress, and for managing classrooms has seldom been the subject of rigorous evaluation.

**Potential Solution to POP**

Thus, the present dissertation explores the impact of a semester-long SEL teacher training course, entitled *Classroom and Individual Emotional/Behavioral Supports* (CIEBS). The course included four modules: one focusing on School-wide Positive Behavior Supports (SWPBS), another focusing on Trust-based Relational Intervention (TBRI), another focusing on Non-violent Crisis Intervention (NCI), and a final module providing clinical field placement opportunities. The evaluation of CIEBS used two concurrent methodologies to evaluate differences between the course participants (n=9) and control participants (n=15). A QUAL/quan methodology examined between-group differences through quantitative measures of teacher efficacy for classroom management (Tschannen-Moran & Hoy, 2001), and preparedness for dealing with students’ stress (Onchwari, 2010), as well as vignette responses and focus group interviews. A case study methodology was also used, evaluating individual pre- and post-semester changes on the quantitative measures, clinical placement cooperating teacher interviews, and individual interview responses.

**Findings**

After the semester-long CIEBS course, the group-wide data showed statistically significant growth in the efficacy for classroom management and preparedness for dealing with students’ stress among the treatment group, with little observable change among control participants. The participants pointed to the
neuroscience of complex trauma, as taught through the TBRI module, as a critical link to understanding students, and to the active learning provided through the NCI and field placement modules as critical to enhancing their efficacy for classroom management.
I. Review of Literature

A discussion of the theories that frame this literature review begins the chapter. The reviewed literature is then divided into four parts (Table 2.1): (a) the impact of high cumulative risk (CR) environments, (b) schools’ and teachers’ responses to students from high CR environments, (c) in-service teacher training for SEL, and (d) pre-service training for SEL. The principal subject of the dissertation study is addressed in part d: pre-service teacher training in the provision of SEL support. Due to the paucity of research studies that have been conducted on this principal subject, the majority of the literature reviewed (parts a-c) addresses studies that relate to this principal subject rather than studies on the principal subject itself.
Table 1.1  

<table>
<thead>
<tr>
<th>Part</th>
<th>Number of Studies</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Impact of high CR</td>
<td>16</td>
<td>Bethell et al. (2014); Brown (2009); Cadima et al. (2010); Candelaria et al. (2011); Ellis &amp; Del Giudice (2014); Evans (2003); Evans &amp; English (2002); Evans &amp; Schamberg (2009); Farah et al. (2006); Juster et al. (2011); McEwen &amp; Stellar (1993); Nilsson et al. (2012); Simpson &amp; Belsky (2008); Trentacosta et al. (2008); Worthman &amp; Panter-Brick (2008); Zalewski et al. (2012)</td>
</tr>
<tr>
<td>b. Schools’ and teachers’ responses</td>
<td>9</td>
<td>Brown et al. (2004); Caprara et al. (2006); Curry &amp; O’Brien (2012); Graham et al. (2011); Jennings &amp; Greenberg (2009); Koller et al. (2004); Long &amp; Long (1974); Ransford et al. (2009); Skaalvik &amp; Skaalvik (2010)</td>
</tr>
<tr>
<td>c. In-Service Training for SEL</td>
<td>6</td>
<td>Ebersöhn et al. (2015); Flook et al. (2013); Kemeny et al. (2013); Kimber et al. (2013); Roeser et al (2013); Talvio et al. (2013)</td>
</tr>
<tr>
<td>d. Pre-Service Training for SEL</td>
<td>2</td>
<td>Soloway (2011); Waajid et al. (2013)</td>
</tr>
</tbody>
</table>

Theoretical Framework

Sociocultural theory provides the framework for understanding the influence of environmental risk, and social cognitive theory provides the framework for understanding enhancing PSTs’ ability to provide supports to students from high risk environments.

Sociocultural Theory

Four tenets of sociocultural theory comprise the essence of what Vygotsky (1978) held as the essential drivers for human development: (a) the confluence of speech and tools, (b) the role of language and social interaction, (c) the Zone of Proximal Development (ZPD), and (d) the need for concrete understandings and experience to
precede abstract thought. The use of speech allows human behavior to move from impulsive and spontaneous to structured, premeditated and reasoned. It is through speech that humans control themselves in a way that other animals cannot. This research led Vygotsky to conclude that language, learning, and development each derive from social experience.

The ideas of sociocultural theory provide an important framework for understanding children who have experienced high degrees of cumulative risk in their environments. With its emphasis on social interaction in development, the theory contributes the notion that learning is not confined to schools and teachers, but first occurs in homes and communities (Resnick, 1987). Sociocultural theory would assume that high degrees of cumulative environmental risk would impact children’s learning. The literature reviewed in the forthcoming sections provides evidence for the ways in which this impact does, in fact, occur, and highlights its neurophysiological, psychological, behavioral, and academic reverberations.

**Social Cognitive Theory**

Social cognitive theory (Bandura, 1977, 1986, 1997) posits that human agency is determined by three interactive factors: an individual’s environment, behaviors, and personal factors. Personal factors include an individual’s efficacy beliefs. Bandura (1977) holds that personal efficacy is influenced through four mechanisms: previous accomplishments, social modeling (vicarious experiences), social (verbal) persuasion, and psychological responses. Though the theory initially looked for the factors that impacted patients’ responses to psychological therapy (Bandura, 1977), the four media
whereby efficacy is established and increased have since been connected with the practice of teaching (Hoy & Spero, 2005).

Teacher efficacy holds that a teacher’s conviction that they are able to produce desired results leads to teacher behaviors that are likely to yield such results (Tschannen-Moran & Hoy, 2007; Tschannen-Moran, Hoy, & Hoy, 1998). Higher collective teacher efficacy is linked with improved student academic outcomes in both reading and math (Goddard, Hoy, & Hoy, 2000). Teacher efficacy also influences students’ perceptions of their own math performance and potential (Midgley, Feldlaufer, & Eccles, 1989). Teachers with higher efficacy beliefs provide more affective care (Sakiz, Pape, & Hoy, 2012), use more behaviors that lead to academic success (Gibson & Dembo, 1984), and manage classrooms more effectively (Tschannen-Moran & Hoy, 2001).

Efficacy beliefs are malleable early on, but become rigid for experienced teachers (Hoy & Spero, 2005; Pajares, 1996). There is a general trend of an increase in teacher efficacy belief within the pre-service teaching years, followed by a drop in efficacy beliefs for novice teachers (Hoy & Spero, 2005). Friedman (2000) points to a “professional efficacy discrepancy” (p. 597)—a mismatch between perceptions of teaching and its day-to-day realities—as a threat that often diminishes efficacy among novice teachers. Teacher efficacy is influenced by the same four factors that influence personal efficacy. While Bandura (1997) hypothesized that mastery experiences would be particularly powerful for enhancing teacher efficacy, studies have found both mastery experience and social persuasion particularly powerful for enhancing novice teacher efficacy (Hoy & Spero, 2005; Mulholland & Wallace, 2001; Tschannen-Moran & Hoy, 2007). For this reason, it is important that any intervention that is intended to enhance
teacher efficacy considers Bandura’s (1977) four influencers, with special attention to mastery experiences and social persuasion.

**Cumulative Risk’s Impact**

**Cumulative Risk and Neurophysiology**

John Bowlby (1978), who first formulated attachment theory, used the term “neurophysiological” to describe the impact that (in)secure attachment has on an individual’s mind and body. In their article about the transdisciplinary nature of chronic stress’s impact over a lifetime, Juster et al. (2011) comment, “There are complex interactions of hormones and biomarkers with neurophysiological systems and structures; constant interactions between biological, social, behavioral, and spiritual factors at the individual level” (p. 761). Juster et al. synthesized a body of literature that supports Bowlby’s (1978) theory: brains and bodies among those who experience accumulated risk differ from those who do not. Put differently the environment in which someone lives gets “under their skin”. Findings that support the concept of neurophysiological variance related to one’s environment follow.

**Neural regions.** Three brain regions that respond to stress — the hippocampus, the amygdala and the prefrontal cortex — are of particular importance for academic and socio-behavioral reasons. Juster et al. (2011) explain:

The brain’s ultimate role during stress responses is to detect threat and adapt. In addition to the pituitary and hypothalamic activities, there are three major brain structures involved in the regulation of stress response: (a) the hippocampus linked to memory and cognition, in addition to being implicated in negative feedback regulation of the [hypothalamic-pituitary axis] (HPA) axis; (b) the
amygdala responsible for fear conditioning and emotional processing with outputs to autonomic and neuroendocrine regulatory systems; and (c) the prefrontal cortex involved in cognition and coping strategies and exerting top-down control over subcortical structures. (p. 726)

The prefrontal cortex (PFC), which is “involved in cognition and coping strategies and exerting top down control over subcortical structures” (Juster et al, 2011, p. 726) is impacted by the home environment. Lawson et al. (2013) found that parental education levels significantly correlated with atypical cortical thickness in two neural regions (the right anterior cingulate gyrus and left superior frontal gyrus). Another aspect of SES—family income—did not (by itself) correlate with variance in the 10 measured cortical areas. Farah et al. (2006) demonstrate how the home environment impacts PFC. Farah et al. compared brain scans from 30 low SES African American children between the ages of 10 and 13, with brain scans from 30 age-matched middle SES African American children. The authors found that the disparity in cognitive development among poor children is not equal across all brain systems: the most extreme disparities are found in language (left perisylvian) and memory (medial temporal). Working memory (lateral PFC) and cognitive control (anterior cingulate cortex) were also correlated with SES disparities. These findings contribute uniquely to the literature by showing “cognitive ability is not depressed across the board among children of low SES. Rather, abilities that have been linked to specific neurocognitive systems are disproportionately affected” (Farah et al., 2006, p. 169).

load is defined as the “wear and tear” (McEwen & Stellar, 1993, p. 2094) that stress causes to an individual’s neural, neuroendocrine, cardiovascular, and immune systems. Empirical studies have substantiated McEwen and Stellar’s (1993) concept (e.g., Evans, 2003; Evans & English, 2002; Evans & Schamberg, 2009; Worthman & Panter-Brick, 2008; Zalewski et al., 2012)), showing that the physiological systems in question do, in fact, have a measurable response to heightened stress levels. Allostatic load is measured by tabulating the number of abnormally high stress-related biomarkers in an individual (for example, blood pressure, heart rate, cortisol, epinephrine, and norepinephrine levels (Evans & Schamberg, 2009)).

High degrees of cumulative risk exposure correlate with higher allostatic load (Evans, 2003). Evans and Schamberg (2009) studied 195 Caucasian young adults in search of correlations between number of years in poverty, allostatic load, and working memory (WM). The authors found that the number of years a child is poor is predictive of higher allostatic load. Evans and English (2002) contributed findings that link poverty with cumulative risk, showing that poverty (a component of cumulative risk (CR) correlates with the presence of other components of CR, and with higher AL. The authors studied 287 low SES Caucasian 8-to-10-year-olds in five rural New York counties, seeking whether the experience of poverty has similar behavioral and psychophysiological correlations as had been previously found for minority urban poor children. Evans and English found positive correlations between poverty and the number of stressors experienced, including higher resting blood pressure, cortisol, and epinephrine.
Examining the relationship between cortisol and risk factors is another way of measuring the hypothalamic-pituitary response to long-term stress. Zalewski et al. (2012) dichotomized eight individual risk factors, and compared these with poverty status and cortisol levels. This team of researchers found that low morning cortisol levels significantly correlated with poverty status, that cumulative family adversity was most predictive of low cortisol levels, and that parenting styles (maternal warmth and negativity) were both correlated with lower income and higher risk, as well as partially accountable for lower cortisol levels.

**Adaptive Calibration.** While allostatic load empirically demonstrates ways in which cumulative risk impacts children physiologically, the concept may be incomplete. This critique arises from proponents of “adaptive calibration,” an aspect of evolutionary sociobiological theory that coincides with Bowlby’s (1978) attachment theory (Ellis & Del Giudice, 2014; Simpson & Belsky, 2008). Adaptive calibration holds that the allostatic load model is overly concerned with costs borne by environmental risk, and that it does not consider the benefits of an individual’s body preparing itself for a life of future adversity. Whereas allostatic load presumes that physiological response to stress leads to dysfunction, the adaptive calibration model presumes that one’s physiology adapts in preparation for survival (Ellis & Del Guidice, 2014; Simpson & Belsky, 2008).

Worthman and Panter-Brick’s (2008) findings support this notion. These researchers studied 107 Nepali boys divided into groups according to their living environments: one group was homeless, one squatter, one urban middle class, and one villager. An allostatic load measure was created to find whether the boys’ body chemistries differed depending upon their living situation. Worthman and Panter-Brick
found broad variance between subcomponents of allostatic load measurements, depending upon a child’s living situation. The authors conclude that the stress wrought from various living environments impacts individuals’ bodies in similar ways to others within the same context. This finding implies that allostatic load may be harmful in some ways (e.g., working memory (Evans & Schamberg, 2009)), but helpful for survival (Simpson & Belsky, 2008).

**Cumulative Risk and Psychology**

In addition to its importance for evolutionary sociobiology, attachment theory also provides a psychological construct. Attachment security is one aspect of evolutionary attachment theory, and describes the benefit derived by most infants who receive sensitive interaction from their primary caregiver. Infants who do not receive adequate interaction are theorized to lack species-typical secure attachment (Ainsworth, 1979; Bowlby, 1978). Using correlational analyses to study 112 African American mother-infant dyads, Candelaria, Teti, and Black (2011) examined the relation between the individual risk factors that comprise cumulative risk (CR), CR as a separate category, and attachment security. The researchers gathered several observational and health data, including gestational age, birth weight, poverty threshold, education, maternal self-efficacy, maternal depression, and maternal sensitivity. According to Candelaria et al., socio-demographic and psychological risks were negatively related to infant attachment security, and were significantly mediated by maternal sensitivity.

Two other studies show the psychological impact of cumulative risk. Evans (2003) found higher cumulative risk exposure to correlate with higher allostatic load and also found that higher cumulative risk exposure correlates with higher psychological
distress and lower global self-worth. Similarly, Nilsson, Gustafsson, and Svedin (2012) studied the impact of interpersonal (e.g., physical attack) and non-interpersonal (e.g., natural disaster) traumatic events over the course of an adolescent’s life. Interpersonal and non-interpersonal traumatic events were measured among 462 adolescents. Nilsson et al. (2012) found that the number of adverse family circumstances correlates positively with both interpersonal and non-interpersonal traumatic events, and that all three factors correlate to symptoms of psychological traumatization in adolescents.

**Cumulative Risk and Socio-Behavioral Outcomes and School-related Outcomes**

**Socio-behavioral Outcomes.** In addition to the socio-behavioral results of abnormal activity in the prefrontal cortex (Lawson et al., 2013), several other links between socio-behavioral outcomes and cumulative risk have been made. Trentacosta et al. (2008) used regression analyses to determine whether cumulative risk factors correlated with behavioral outcomes at age two, and at age four among 557 low-income children. The authors found that cumulative risk and parenting styles were each highly correlated with both externalized behavioral problems, such as aggression and non-compliance with rules, and internalized behavioral problems, such as anxiety and depressive symptoms.

Two studies found that cumulative risk correlates with problems in persistence, a disposition that has both sociological and academic implications. The first is from Evans (2003), who found that higher CR correlates with shorter patience in delayed gratification exercises and less persistence. Brown (2009) used correlational analyses to find whether 103 Head Start preschool students from economically disadvantaged families would show persistence in the face of challenge. Children coded with “entity theory of
intelligence” (meaning they behaved in ways that allowed psychologists to infer that the preschoolers understood that their own intelligence was unchangeable) were less likely to persist in the face of challenge; cumulative poverty risks and attention problems also predicted lack of persistence.

**Academic Outcomes.** Working memory (WM) is an important component of the cognitive information processing theory, wherein new information presented to a learner is held within working memory, which has limited capacity, until it can be transferred to Long Term Memory (Schunk, 2008). Deficiencies in WM have a clear impact on academic success. Evans and Schamberg (2009) found that the number of years a child is poor predicts higher allostatic load and predicts lower WM in young adulthood. However, when chronic stress is controlled for, lower socio-economic status does not, in fact, predict lower WM. In addition to discrepancies in WM, Farah et al. (2006) found that the brain systems that operated differently among low SES subjects were those systems that impact language, memory, and cognitive control.

Academic struggles have been linked to high CR among preschoolers. In addition to the problems with persistence observed among high CR preschoolers, Brown (2009) found that cumulative risk and attention problems each predicted deficiencies in academic tasks for preschoolers. Cadima et al. (2010) sought the impact of cumulative risk (CR) on literacy skills among 106 Portuguese 5-year-olds. CR significantly correlated with four literacy sub-skills (vocabulary, print concepts, phonological awareness, and letter identification). Cadima et al. found that the impact of CR was less pronounced for older students, which the authors posit as attributable to a year of schooling.
Bethell et al. (2014) studied the number of adverse childhood experiences reported for nearly 100,000 children through the National Survey of Children’s Health. School engagement was lower and chronic disease was higher among students with higher numbers of adverse childhood experiences. Also, the possession of resilience (found by including the survey question, “staying calm and in control when faced with a challenge” (p. 2107)), and the presence of a medical home (a primary care medical service provider) both correlated negatively with high the number of risk factors present, and allayed the potential deleterious impacts of adverse childhood experiences.

The Role of Schools

The findings presented thus far provide a small sample of the abundance of sociological, neurological, physiological, psychological, and economic findings being published and discussed within and across each of these disciplines (Heckman & Carneiro, 2003; Juster et al., 2011; Shonkoff & Bales, 2011) regarding environmental impact. The identified problem that influences a small, parochial teacher training program Illinois takes the minds and bodies of children with high CR levels, not as its subject, but as its backdrop. The subject itself looks at schools’ and teachers’ responses to students’ high risk environments and the consequences of this involvement. The following section will begin with a discussion of the prosocial classroom mediational model, preparation to deliver social emotional learning (SEL) supports, teacher efficacy among high poverty populations, and the ways in which teachers are or are not prepared to intervene for student from high CR environments. It will then examine studies that have researched intervention strategies designed to help students with high levels of cumulative risk.
Teacher Efficacy among Low SES Populations

Gibson and Dembo (1984) confirmed the theory of teacher efficacy into a measurable construct, by using the Teacher Efficacy Scale to establish that higher teacher efficacy correlates with the teacher behaviors that lead to student academic growth. Teachers with high efficacy use strategies that are supportive to learning (Caprara, Barbaranelli, Steca, & Malone, 2006; Gibson & Dembo, 1984). Teachers who have high efficacy enjoy their work more (Caprara et al., 2006) and experience less emotional burnout than other teachers (Skaalvik & Skaalvik, 2010). Brown, Anfara, and Roney (2004) studied the efficacy of teachers from six high performing, high-income middle schools and six low performing, low-income schools near Philadelphia. They found that teachers who served low-income, low performing students demonstrated a lack of confidence that their students would succeed. This finding is concerning because teacher efficacy in linked with teacher effectiveness: those who do not think they cannot affect change in their students are often right.

Long and Long's (1974) 40-year-old study, Teacher-Candidates’ Poverty Perceptions, sheds light on why teachers in low performing, low-income schools may hold lower teacher efficacy. Before having contact with low income pupils, PSTs from two Midwestern universities perceived disadvantaged children as comparing unfavorably to more advantaged children, especially in the development of language and in academic attainment. It is possible that similar low expectations may persist in today’s classrooms, as an additional environmental risk factor for children who already have the many potential effects of cumulative risk stacked against them.
The Prosocial Classroom

In their prosocial classroom mediational model, Jennings and Greenberg (2009) suggest that social emotional competence (SEC) among teachers paves the way for (a) well-implemented classroom management, (b) supportive student-teacher relationships, and (c) effective delivery of social emotional learning (SEL) programs. Within this model, these three drivers foster a healthy classroom culture and improved academic, social, and emotional student outcomes. Awareness of oneself and others, management of oneself and one’s relationships, and responsible decision-making are sub-competencies that comprise SEC. With SEC in place, the “burnout cascade” (p. 492), which leads to punitive classroom management, unhealthy classroom environments, and repeated classroom disruptions may be supplanted by a “positive feedback loop” (p. 494) wherein enjoyment, efficacy, and commitment to education characterize a teacher’s career.

The work of Ransford, Greenberg, Domitrovich, Small, and Jacobson (2009) supports the prosocial classroom mediational model. The authors examined whether elementary teachers’ (n=109) psychological states (of burnout or teacher efficacy) impacted the way they implemented Promoting Alternative Thinking Strategies (PATHs), an empirically-backed SEL program for preschoolers (Hertzig & Farber, 2003; Ransford et al., 2009). Those teachers who experienced high levels of burnout were less likely to administer optional components of the PATHs curriculum, while those with high teacher efficacy were more likely to administer these optional components. Teachers who perceived that they were well trained or well-supported in their implementation of PATHs were also more likely to implement the program frequently and well (Ransford et al., 2009). These findings uphold the portion of the prosocial classroom mediational
model, which predicts that teachers with higher SEC will be better equipped to deliver SEL. The study also contributes that teachers who feel well prepared to deliver SEL programming do a better job in this implementation.

Graham, Phelps, Maddison, and Fitzgerald (2011) asked 508 Australian teachers to list the factors that most impact their students’ mental health. The study found that teachers are aware that students’ family and home lives impact their students’ mental health. A common theme in the teachers’ responses was that teachers saw the mental health needs of their students as important, but “looked primarily to the outside ‘experts’ to assist them with the issues” (Graham et al., 2011, p. 49). The authors took findings like this as an indicator that teacher beliefs in the importance of mental health was high, but that their teacher efficacy regarding impacting mental health was low. Similarly, Koller et al. (2004) found that both first year teachers and their cooperating mentor teachers viewed students’ mental health needs as very important. The veterans and novice teachers also felt underprepared to meet the mental health needs that were present in their classrooms, including their own mental health needs.

Curry and O’Brien (2012) provide two case illustrations of first year teachers with varying levels of social and emotional competence (SEC). In one case, a novice teacher without a wellness plan found herself overwhelmed by learning deficits, tired and hungry students, and parents who seemed uninvolved in their children’s education. Due to her inability to manage the stress of teaching, the teacher lost contact with her friends and the drive to teach with creativity. The teacher reported that she entered into a negative cycle of depression, and that she hoped to find a job outside of the field of education after her first year. In her first year of teaching, the “burnout cascade” (Jennings & Greenberg,
had overtaken her career. A second case illustrated a different pattern. A first year teacher had developed healthy life patterns during her final two years of undergraduate teacher training that allowed her to cope with the emotions of teaching. Once she began her career, she continued using wellness practices, focusing on her physical health and her spiritual well-being. While these two case illustrations cannot be generalized to the teaching profession as a whole, they demonstrate, “how a wellness plan can help provide stability, a focus on internal locus of control, and support for new teachers in the school to career transition” (Curry & O’Brien, p. 185). The authors conclude by challenging teacher education programs to infuse wellness strategies within their teacher education programs.

**In-Service Teacher Training for SEL**

A team of Swedish researchers studied teacher responses to receiving eight, two hours training sessions in an SEL program titled “Social and Emotional Training” (Kimber, Skoog, & Sandell, 2013). The training involved discussions of child development, observations and discussions about a troubled child, strategies for becoming proactive in the classroom, routines and structure, student and parent communication skills, and encouragement of teacher leadership. Throughout the training, teachers wrote about their experiences in a “process diary.” One-hundred-twenty-two diaries were collected and examined using qualitative thematic analysis. The responses from teachers were categorized within 12 codes, and then placed within five themes: positive shifts in professional, personal, and classroom climate development, the need for collaboration, and unease. Reflecting upon the references found throughout the process diaries, the authors concluded that (a) most teachers discussed attitude changes rather
than distinct activities within the training, and (b) teachers were uneasy with the prospect of SEL support increasing workload or shifting their role.

An asset-based intervention called Supportive Teachers Assets and Resilience (STAR) was conducted at three primary and one secondary low SES South African schools (Ebersöhn, Loots, Eloff, & Ferreira, 2015). Asset-based programs involve “... joint ownership and responsibility, practical solutions, a caring and supportive environment, building individuals’ strengths, and ennoblement, together with collaboration and the establishment of partnerships and networks” (p. 270). The concept of shared responsibility is theorized to lay the groundwork for providing psychosocial support to students in a way that is sustainable. In addition to training on the asset-based approach, STAR aimed to provide psychosocial support that would eventually equip teachers to become protective presences for their vulnerable students. Ebersöhn et al. (2015) used a comparative case study research design, mining field notes, photographs, research diaries, and focus group audio-recordings among teachers. Three themes arose from the study, each of which led to social and emotional care for students: (a) intrapersonal positive formation of identity, (b) formation of management skills, and (c) interpersonal formation of group skills.

The efficacy of SEC training program was elucidated by Kemeny et al. (2012) in a study of eighty-two female teachers. The participants were provided with training in several aspects of SEC (i.e., concentration, mindfulness, empathy compassion, recognition of one’s own emotions) for forty-two hours, spread over eight weeks. The study gathered pre-intervention, post-intervention, and five-week follow up data on changes in emotion-related behavior. Negative affect—depression scores, rumination
after negative events, and anxiety—decreased after training, and at five-month follow up. This study provides strong evidence that training in SEC may impact teachers SEC, and this impact can endure over time.

Another study examined the feasibility, acceptability, efficacy, and short-term impact of a mindfulness training (MT) course conducted for 113 American and Canadian school teachers (Roeser et al., 2013). This course consisted of 11 sessions, covering guided mindfulness, group discussions, small-group activities, and homework assignments, as well as instructions on how mindfulness may be used to regulate stress and emotion. Post-intervention and three month follow-up studies revealed that the program was acceptable for participants (98% reported they would recommend the MT course), and feasible. Those who participated fully in the program used the mindfulness techniques in their daily lives. Post-intervention measures of mindfulness, stress, burnout, anxiety, and depression symptoms each showed large effect sizes (> .60) from the intervention. Higher measures in mindfulness and self-compassion were found to mediate higher the impacts of MT on stress reduction at the three month follow up. This study demonstrates that teacher training in mindfulness can be feasible, acceptable and efficacious.

Flook, Goldberg, Pinger, Bonus, and Davidson (2013) took the findings from Kemeny, et al. (2012) and Roeser, et al. (2013)—that mindfulness can be taught to teachers to their own benefit—and assesses whether MT leads to better management of stress, burnout, and teaching. Ten teachers were trained in the Mindfulness-Based Stress Reduction program modified for teachers (mMBSR), while eight comprised a control group. Of the measurements taken, statistically significant effects were found in the
control group that concur with both Kemeny, et al. (2012) and Roeser, et al. (2013): decreased psychological symptoms and burnout, and increased mindfulness and self-compassion. A unique contribution of this study is its measurement method: classroom observers found participants to show statistically significantly greater classroom organization, and fewer errors of commission in the affective attention they paid to their students.

Teacher Effectiveness Training (TET) was used for four days, spread over six months, among 43 Finnish elementary and middle grades teachers (Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2013). The TET program involves developing empathy through practice with active listening, social awareness, positive, and confrontational communication. The medium for this training involves instructor presentations, and skill building exercises, as well as large group and small group discussions. Participants’ overall experiences with the course, understanding of class content, reactions to the course, and general well-being were assessed after the four-day training. Applicability and acceptability of the course was high among all participants. While no change in knowledge on the SEL content test occurred among the control group, a statistically significant increase on the SEL content test was observed among TET participants. Also, written reactions to seven potentially confrontational school events showed that participants used components of the training more than their control group counterparts. Overall well being was not significantly impacted by the training. This study indicates that SEL training among teachers can be acceptable for teachers, and can influence their knowledge and application of SEL skills.
Pre-Service Teacher Training for SEL

Problems of teacher unpreparedness (with adequate social and emotional competence (SEC) or ability to deliver SEL supports) may be related to the quality of training that teachers receive as much as the individual qualities of the novice teachers themselves. A study on 605 in-service teachers across the United States found that a gap exists between teachers’ desire to learn and implement SEL strategies and their training to do so. Fully 81% of teachers reported desiring more training in SEL, and only 31% of teachers reported that they received pre-service SEL training (Bridgeland et al., 2013).

Schonert-Reichl et al. (2015) found that (a) SEL competencies are not a focus within teacher preparation state standards, and (b) few states promote students’ SEL competencies in a comprehensive way. While Illinois is one of the few states in the country to prescribe social and emotional learning standards for K-12 students (Bridgeland et al., 2013), the extent of pre-service teachers’ SEL training is largely left to the institutes of higher education (IHEs) where their preparation takes place.

Scans of teacher preparation state standards and reviews of teacher education course syllabi indicate that compared to the SEL core competencies outlined by the Collaboration for Social and Emotional Learning (CASEL), SEL training for pre-service teachers (PSTs) is wanting (Collaborative for Academic, Social, and Emotional Learning (CASEL), 2013; Schonert-Reichl et al., 2015). In coding state requirements from all 50 states, looking for social and emotional competence (of teachers), SEL preparation (for students), and learning context, Schonert-Reichl et al. (2015) found three key themes: (a) SEL competencies are not a focus within teacher preparation state standards, (b) few states promote students’ SEL competencies in a comprehensive way, and (c) almost
every state requires candidates to acquire knowledge about learning context. At the conclusion of this report, Schonert-Reichl et al. provide seven recommendations for the advancement of SEL within pre-service teacher education. The first two relate to bolstering state standards with more of a comprehensive influence on SEL. The third, fourth, and fifth suggestions relate to enhancing the training PSTs receive in their college classes. Would such training make a difference?

Waajid, Garner, and Owen (2013) addressed this question in their qualitative study about the impact of embedding course content on SEL within an undergraduate teacher training course. Along with training in curriculum and instruction, unit and lesson planning, and teaching strategies, the 15 participating PSTs received training in providing SEL support. At the end of the course, the participants were asked to write about SEC’s impact on learning, and the behavior teachers should employ to enhance SEC among students. As the researchers coded the PSTs’ responses, three themes arose: (a) PSTs reported that they saw a connection between SEC and learning, (b) they reported adopting a student-centered rather than teacher-centered approach, and (c) they reported a desire to learn more about the importance and potential impact of SEL. These themes led Waajid et al. (2013) to conclude that embedding SEL content into their pre-existing college course was a capable means for leading PSTs to a deeper understanding of children’s social and emotional competence.

Similarly, the dissertation study written by Soloway (2011) explored the impact of the Mindfulness-Based Wellness Education (MBWE) program taught within a pre-service teacher training course titled Stress and Burnout: Teacher and Student Applications. The study used grounded theory, and interviewed 23 of the course
participants to determine the impact of the MBWE training on the PSTs’ college experience. The study found that the involvement in MBWE improved the ways that the participants engaged in the rest of their teacher training courses, by improving course engagement, interpersonal relationships, and student experiences. The candidates also reported that their social and emotional competence (SEC) during practicum experience improved, as they were able to enter into practicum more calmly and listen to their students more actively.

**Statement of the Problem**

Developments in neuroscience from the last 30 years show evidence that the physical, psychological, and emotional burden of enduring poverty is a driver for unequal achievement (Brown, 2009; Juster, et al., 2011; Shonkoff & Bales, 2011; Zalewski, et al., 2012). The problem is clear: when children endure high levels of cumulative risk, they often face difficulties with scholastic achievement. This problem is heightened by the fact that teachers are unprepared to handle the social and emotional burden of students from high environmental risk environments (Bridgeland et al., 2013; Jennings & Greenberg, 2009; Koller et al., 2004; Schonert-Reichl et al., 2015). Less clarity exists for teachers and schools regarding their roles in the lives of such children.

The paucity of research on school roles for children with environmentally wrought neurological, socio-behavioral, psychological, and academic problems drives this study. The study’s ultimate objective is to locate tools and techniques for providing social and emotional learning (SEL) support that may be disseminated to PSTs during their teacher induction courses. These tools and techniques are to be “research-based” in two ways. First, these tools must be proven to be effective among students from high risk
environments. Second, the selected tools should mesh well with the findings underlying problem of practice, and outlined in the secondary literature review that follows in chapter III.

Statement of “initial” POP research questions

The researcher’s application to the Johns Hopkins University Doctor of Education program included the following first iteration of the Problem of Practice:

Teaching in Chicago, I saw two trends that form the backdrop for the Problem of Practice I have identified. I noticed, first, that students who had experienced trauma in their homes and communities brought with them emotional problems that inhibited their academic success. I also observed that my teaching colleagues and I were ill equipped to address the emotional pain of our students. Academic success – the goal our teacher preparation programs had equipped us to pursue – often lay beneath shells of emotional pain. The Problem of Practice I have identified is that teachers are unprepared to help students effectively process their emotional trauma, and are thus inadequately prepared to teach them. (Stipp, 2013)

At the end of the first year, this initial statement led to the crafting of two research questions:

- What levels of priority, knowledge, and skill related to students with high levels of cumulative environmental risk exist among PSTs at a small, parochial teacher training program in the Midwestern United States?

- What is the nature of preparation that is be beneficial for pre-service teachers to become equipped for helping students with high levels of impact from cumulative risk?
The first research question was addressed through a needs assessment that sought the perceived levels of preparation for delivering SEL support among PSTs at Central Prairie Christian University, a private parochial university in the Midwestern United States. The needs assessment also sought the opinions of stakeholders regarding the nature of SEL preparation provided by the university’s School of Education. These results are discussed in Chapter II. The second research question has been addressed in the dissertation study conducted during the fall 2016 semester. The literature guiding this study will be discussed in Chapter III, the research methodology will be described in Chapter IV, and the findings, implications, and conclusions will be discussed in Chapter V.
II. Needs Assessment

Context of Study

The researcher serves as a faculty member in a teacher training program at Central Prairie Christian University (CPCU) (pseudonym), a small, parochial institution in the Midwestern United States. The university has approximately 3,000 undergraduate students, 305 of which comprise the teacher education program. Many of its teacher candidates are placed for clinical and student teacher placement in Central School District (CSD) (pseudonym), a nearby district in which 79% of students are classified as “low income.” The students who attend school in this context fit the profile of the students described in the POP: low SES students who have experienced multiple home-related stressors that affect neurophysiology, and impact academic and non-academic performance.

Will our teacher candidates be ready for these students? Research related to teachers’ and PSTs’ attitudes toward low SES students indicates that teachers lack confidence that low SES students will succeed (Brown et al., 2004; Long & Long, 1974). One possible explanation for this lack of confidence is that teachers may not have adequate knowledge and understanding of the physiological, neurological, psychological, and emotional impact of enduring poverty. Another is that teachers may not have adequate skills in implementing adaptations, interventions, or calming techniques that may help students perform better academically. The needs assessment described in the present chapter sought to determine whether deficiencies in levels of priority, knowledge, and skills relating to helping children from high risk environments exist among CPCU’s teacher candidates. It also sought the perspectives of key stakeholders, connected with
both CPCU and CSD, regarding their perceptions of CPCU’s preparation of PSTs for delivering social and emotional learning (SEL) support.

**Design Overview.** A mixed method design was used. First, an on-line questionnaire was administered to 161 pre-service teacher candidates at CPCU. Respondents were asked to rank their priority (how important is it?) their knowledge (what is your level of knowledge/training?) and their skill (rank your level of skill/familiarity with) from 1-5 on a Likert scale. The qualitative portion of the needs assessment was conducted through 14, four-question interviews with School of Education and CSD stakeholders (three student teachers, three novice teachers, three area administrators, three university faculty members, and two pre-service teachers). Responses were coded using two grounded theory coding approaches: initial and focused coding (Saldaña, 2013).

**Needs Assessment Goals and Research Questions.** Two primary goals drove the study. The first was to determine the way pre-service teachers in the CPCU School of Education think about the home environment and its impact on academic and non-academic outcomes. Three research questions—each related to this primary goal—were: (a) how do pre-service teachers prioritize the emotional well-being of their future students? (b) how much do pre-service teachers perceive that they know about the impact of environmental risk on academic/non-academic outcomes?, and (c) how much skill/familiarity with responses to environmental risk do pre-service teachers perceive themselves to have attained? The needs assessment helps to provide a baseline: a way to inform the ways in which social and emotional learning skills and knowledge of
cumulative environmental risk are currently addressed by our teacher education programs.

The second primary goal is to determine the perception of the university School of Education stakeholders regarding our pre-service teacher candidates’ preparedness for delivering social and emotional learning (SEL) support. The research question used to explore this goal is: How is the CPCU School of Education preparing candidates to provide SEL support to students from high risk environments?

A secondary goal of the needs assessment is to seek correlations between personal characteristics of respondents and their priorities, knowledge, and skill regarding responses to students from high cumulative risk environments. Correlational analyses were conducted in order to analyze the relation between the respondents’ answers to the three levels of questions (priorities, knowledge, and skills), with their age, race, gender, level in the teacher education program, and number of years in the teacher education program. Whether a high environmental risk background from the teacher candidates or years in the teacher training program impacts respondents’ priorities, knowledge, and skills was of particular interest for these analyses.

Methodology

Sample and Participant Selection

To begin the needs assessment study, each of the 305 education majors at the university was invited to join the quantitative study through e-mail. Incentives were not offered, but reminders were sent every three days for two weeks. The 161 pre-service teachers who responded to the questionnaire were a homogenous group: mostly white (93%), female (82%), and between the ages of 17-23 (94%). An identifying area where
heterogeneity not was found was in the respondents’ program level. In the CPCU Teacher Education Program, levels are divided as follows: Level I students are education majors who have taken one or two education courses and have not yet been formally admitted to the program. Most Level I students are freshmen. Thirty-four percent of respondents \( (n = 57) \) were in Level I. Level II students are able to take content-specific methods courses, and upper division education classes required for passing program requirements, but have not yet student taught. Forty percent of respondents \( (n = 67) \) were in level II. Level III students are those who are student teaching. Twenty-five percent of respondents \( (n = 42) \) were in level III.

The interviewees were selected during the spring 2016 semester based on their dual involvement with the CPCU School of Education and with CSD. Each sub-group of interviewees was selected in a different way. All current CPCU student teachers who served in CSD during the spring 2016 \( (n=12) \) semester were contacted via e-mail and invited to participate in the interview. The first three to agree were interviewed directly after completing their student teaching requirements, during the week before their graduation. A list of novice teachers (with fewer than three years of experience) who were also CPCU School of Education graduates was identified by the CPCU placement coordinator. The four individuals who fit this description were sent invitations to participate. Three responded, and were interviewed. Three CPCU School of Education faculty members were invited to participate in person. These faculty members have varying levels of experience teaching pre-service teachers and supervising student teachers: one veteran faculty member (20+ years of experience), one mid-career faculty member (5-19 years of experience), and one new faculty member (<5 years of
experience). Each faculty member has been involved in CSD in varying capacities (one grew up near the district; one taught there for 16 years; one completed their own undergraduate student teaching there. Five invitations were sent before three administrators consented to join the study. Two senior-level students who had taken a pilot-version of a course designed to provide SEL tools to pre-service teachers, as well as 20 clinical placement hours in CSD also agreed to interview, and did so after their final examination for the SEL-related course.
Table 2.1

Needs Assessment Summary Matrix

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Variables</th>
<th>Data Gathering Approaches</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: (Quan) How do pre-service teachers prioritize the emotional well-being of their future students?</td>
<td>PSTs’ self-assessed priorities</td>
<td>3 Likert-scale (1-5) questions; see Table 3.2</td>
<td>• Correlational analyses with program level and number of personal risk factors present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Independent samples T-tests comparing program level to aggregate “priority” score.</td>
</tr>
<tr>
<td>Q2: (Quan) How much do pre-service teachers perceive that they know about the impact of environmental risk on academic/ non-academic outcomes?</td>
<td>PSTs’ self-assessed knowledge</td>
<td>4 Likert-scale (1-5) questions; see Table 3.2</td>
<td>• Correlational analyses with program level and number of personal risk factors present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Independent samples T-tests comparing program level to aggregate “knowledge” score.</td>
</tr>
<tr>
<td>Q3: (Quan) How much skill/ familiarity with responses to environmental risk have pre-service teachers attained?</td>
<td>PSTs’ self-assessed skill/ familiarity</td>
<td>3 Likert-scale (1-5) questions; see Table 3.2</td>
<td>• Correlational analyses with program level and number of personal risk factors present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Independent samples t-tests comparing program level to aggregate “skill/familiarity” score.</td>
</tr>
<tr>
<td>Q4: (Qual) How is the CPCU School of Education preparing candidates to provide SEL support to students from high risk environments?</td>
<td>2-4 Four interview questions</td>
<td></td>
<td>Initial and Focused Coding Methods</td>
</tr>
</tbody>
</table>
Measurement Tools

Table 2.1 provides a summary matrix of the quantitative and qualitative data collected in the needs assessment. Four distinct variables have been operationalized for the purpose of the needs assessment: PSTs’ prioritization of cumulative risk (CR) and emotional well-being, PSTs’ self-assessment of their knowledge of CR’s impact, and PSTs’ self-assessment of their skills to intervene for students from high environmental risk circumstance, and candidates’ personal experience with environmental risk.

Priority, Knowledge/Training, Skills.

PSTs’ Level of Priority regarding Environmental Risk and Emotional Well-being. Priority was measured using three Likert-style (1-5) questions: How important is it (a) that teachers understand students' emotional well-being? (b) that teachers understand the links between environmental risk and students' functioning?, and (c) that you as a teacher candidate are able to develop your skills in interventions, techniques, and adaptations for students who are known to come from difficult home circumstances?

PSTs’ Knowledge/Training on the Impact of CR. Knowledge and training regarding cumulative risk’s impact on school was measured using four Likert-style (1-5) questions: (a) Rank your level of training in understanding students’ emotional well-being. (b) Rank your level of knowledge about the effect of cumulative risk on students' brains. (c) Rank your level of knowledge about the impact of cumulative risk factors on students' academic functioning (i.e., reading, math skills). (d) Rank your level of knowledge about the impact of cumulative risk factors on students' non-academic functioning (i.e., focus, persistence, delayed gratification, resilience).
**PSTs’ Skills in Intervening for students with from high CR environments.**

Skills/familiarity with interventions directed toward students from high risk environments were measured using three Likert-style (1-5) questions: Rate your level of skill/familiarity with (a) interventions, techniques, and adaptations for students who are known to come from difficult home circumstances. (b) interventions, techniques, and adaptations for students who present with the following chronic academic problems: reading deficits, math deficits, writing deficits. (c) interventions, techniques, and adaptations for students who present with the following chronic non-academic problems: persistence; focus; delayed gratification; resilience; self-regulation.

**Cumulative Environmental Risk.** Cumulative risk is measured in various ways throughout the literature (e.g., Candelaria et al., 2011; Evans & Schamberg, 2009; Zalewski et al., 2012). Gutman, Sameroff, and Eccles (2002) measured cumulative risk among 837 socioeconomically diverse African American seventh grade students through interviews with their primary caregivers. The questionnaire used in Gutman et al. was adapted for the present study: respondents were asked to recall their home circumstance during their seventh grade year and report on the presence/absence of ten risk factors. As in Gutman et al., the number of risk factors present gave each respondent a CR score (0-10). For each factor, one of two dichotomous categories — “risk” and “non-risk” — were determined. For some categories such as Primary Caretaker Education, the lowest possible category (high school degree or less) equated with risk. But, “in the case of continuous variables where objective categorical definitions of risk were not available, the presence of risk was defined according to the lower quintile (20%) of the sample” (Gutman et al., 2002, p. 378). So that comparisons between pre-service teachers and the
Gutman, et al. (2002) respondents could be made, the participants were asked to answer the CR questions with their life situation during their seventh grade in mind. The measure of each risk factor is explained below, with divergences from Gutman et al. noted.

**Primary Caretaker (PC) Education.** Presence of risk in this area was found by asking the participants PC’s highest level of education completed. Options were “high school degree or less,” “some college,” “college degree,” and “advanced degree.” “High school degree or less” was the risk category.

**PC Depression.** This category was determined with the question, “To the best of your knowledge, was your primary caregiver depressed during your seventh grade year?” A Likert-style scale was used, 1 = never; 3 = sometimes; 5 = almost always. “Sometimes” or more was the risk category.

**PC marital status.** Two options were offered for primary caretaker (PC) marital status. “Married/lived with a partner,” and “not married,” were the options. “Not married” was the risk category.

**Number of children in the Household.** Two options were offered for number of children under 18 on a full-time basis. “1 or 2” and “3 or more” were the options; “3 or more” was the risk category.

**Family Stressful Events.** Respondents were asked to recall which of a list of stressful events occurred in their household during their seventh grade year. Occurrence of three or more of these events indicated “risk” within this category. Potential stressful events were, “parent became the victim of a violent crime,” “someone close to your family became the victim of a violent crime,” “mother changed jobs for a worse one,” “mother got demoted, had trouble at work, or trouble with her boss,” “mother took a cut
in wage or salary,” “mother got laid off or fired,” “someone close to your mother was seriously ill or injured,” “someone close to your mother died,” “mother's close friend or relative had a child die,” “you or a sibling had a serious injury or accident,” and “you or a sibling got seriously ill.”

**Family Income.** Whereas Gutman et al. asked mother’s their income and determined which families were at the lowest quintile, the present study asked PSTs to estimate how their family income ranked with other families in their home county, either top 80%, 61-80%, 41-60%, 21-40%, or bottom 20%. The bottom 20% was the risk category.

**Highest Occupation in the Household.** Gutman et al. (2002) asked mothers to identify the occupation of the highest wage earner in their family, and then used the U.S. Census Bureau’s 1980 Occupational Classification System to determine whether this occupation was at or below the level of unskilled worker. As an alternative to determine whether this risk factor was present, this study defined “unskilled workers” as those who generally have no specific education level or experience and low income. It then asked whether the highest wage earner in the family was an unskilled worker. Answers of “yes” were categorized within the risk category.

**Three neighborhood comparisons.** Gutman et al. (2002) examined three different neighborhood risk factors: percent of neighborhood living in poverty (10% or more signifying “risk”), percent of households in a neighborhood headed by females (40% or more signifying “risk”), and percent receiving welfare (8% or more signifying “risk”). For each of these categories PSTs were asked to recall their seventh grade neighborhoods. If they indicated that more than 10% of families in their neighborhood
lived in poverty, more than 40% of households in their neighborhood were headed by females, or that 8% or more of household in their neighborhood received welfare, “risk” was determined.

**Stakeholder perceptions.** Stakeholder perceptions of the CPCU School of Education’s present level of functioning in preparing candidates to deliver SEL support were assayed through four questions. Questions one and two were asked to all respondents, while questions three and four were asked only to current teacher candidates, student teachers, and novice teachers.

1. Please comment on your perception of the work done by the CPCU Teacher Education Program to prepare candidates in understanding students’ emotional well-being.

2. “Environmental risk” refers to the number of risk factors present in an individual’s home. How well does our program prepare candidates to understand the links between environmental risk and students’ functioning?

3. Does your understanding of the connection between environmental circumstances and classroom performance come mostly from your training at CPCU, mostly from your life experience, or from an approximately equal combination of the two?

4. Describe specific courses, readings, class activities, or learning experiences in your time at CPCU that prepared you to provide social and emotional learning (SEL) support.
Procedure

Quantitative data collection methods. A Survey Monkey questionnaire was used to collect the above-mentioned quantitative data (Appendix A). Participant contact information was gathered from a spreadsheet of contact information of current CPCU School of Education students. Respondents were sent an e-mail (Appendix B) with a link to the survey. Follow-up e-mails were sent to those who did not respond after three days and again after five days. The survey remained open for six days. All subjects offered informed consent (Appendix C); anonymity was offered, so Internet Protocol (IP) addresses and identifying information were not tracked.

Demographic results were analyzed using the descriptive statistics provided by Survey Monkey. Data were exported, stored, and further analyzed using SPSS. Of particular interest for this study was whether a student’s program of study or experience with high levels of cumulative risk in adolescence correlated with their priority level, knowledge, and skills. For this reason, correlational analyses were conducted among these factors.

Qualitative data collection methods. Before each interview, the participants signed letters of informed consent (Appendix D). Eleven of the 14 interviews took place in the researcher’s office. The three exceptions were from the CSD administrators, who hosted the interviews in their own offices. Interviews lasted from four to 15 minutes. In five cases, post-interview references that were relevant to the study were noted and later added to the transcripts. All interviews were recorded on an iPad using the Super Note application (“Super Note,” 2016). Audio files were then sent to the transcription service provided by Scribie.com (“Scribie Audio/Video Transcription,” 2016). Upon reviewing
the transcriptions for accuracy, the researcher then uploaded the text from each interview to the Nvivo data management system for coding (“What is NVivo?,” 2016).

**Data Analysis.**

**Data management.** Survey data completed electronically were collected via a password protected Survey Monkey account that belongs to CPCU’s Benner Library. Respondents received an e-mail request to participate in the survey. Survey Monkey settings that provide for anonymity were selected: responses were made anonymous, and IP access were turned off so that respondents’ answers could not be traced to the computers on which they respond. Demographic results were analyzed using the descriptive statistics provided by Survey Monkey. Data were exported, stored and further analyzed using SPSS. All responses remain stored in a locked office, on the researcher’s computer, which is password protected. Similarly, interviews were recorded on an iPad which is password protected. The audio files were uploaded to the researcher’s password-protected Dropbox account.

**Quantitative statistical tests.** Mean scores for each question were examined using descriptive statistics provided within Survey Monkey. Correlational analyses were used to determine if there was a relation between a PST’s program level, the number of risk factors present during adolescence, and their self-assessed priority, knowledge, and skill. In addition, independent samples t-tests were conducted to determine how program level or experience with personal environment risk impacted respondents’ priorities, knowledge, or skills.

**Qualitative data coding.** Interview data were coded in two steps that align with grounded theory methodology (Saldaña, 2013). The first was initial coding, which
involves “breaking down qualitative data into discrete parts, closely examining them, and comparing them for similarities and differences” (Saldaña, 2013, p. 100). This process was used to compile a large number of codes. Secondary coding was completed using the “focused coding” method to analyze the large number of codes, synthesize, re-organize, and re-analyze these data to determine which themes arise. The Nvivo software helped in organizing the responses that pertained to the qualitative research question: How is the CPCU School of Education preparing candidates to provide SEL support to students from high risk environments? Specifically, Nvivo was used to drag meaningful statements into “nodes.” Once each interview was closely examined for meaningful statements, focused coding was conducted, which helped in finding commonalities, trends, and ultimately, the study’s themes.

Results

Quantitative. As race, gender, and age were homogenous, so was the level of cumulative environmental risk endured. Of all respondents (n = 112), 70% had zero or one risk factors their childhood. The mean number of risk factors experienced by the surveyed PSTs during their seventh grade year was 1.24. For the socioeconomically diverse African American seventh graders in Gutman et al., the mean number of risk factors endured was 3.52. See Table 3.2 for a comparison of the cumulative risk endured during the respondents’ seventh grade year against those studied in the Gutman et al. (2002) study. A comparison of means for PSTs with zero or one risk factors (70%; n=104) versus those with two, three, four, five, or six risk factors present (30%, n=48), revealed minimal difference in the means of the priority, knowledge, or skills questions.
## Table 2.2
Comparison of Respondents’ Risk vs. Gutman et al. Respondents’

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Risk Present If...</th>
<th>% from respondents</th>
<th>% from Gutman et al. (2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Education</td>
<td>High school or less</td>
<td>11%</td>
<td>43%</td>
</tr>
<tr>
<td>Maternal Depression</td>
<td>Sometimes or more</td>
<td>19%</td>
<td>22%</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Not married</td>
<td>7%</td>
<td>27%</td>
</tr>
<tr>
<td>Number of Children in Household</td>
<td>3 or more</td>
<td>39%</td>
<td>21%</td>
</tr>
<tr>
<td>Family Stressful Events</td>
<td>3 or more</td>
<td>4%</td>
<td>15%</td>
</tr>
<tr>
<td>Family income</td>
<td>Bottom 20% of families in the country</td>
<td>4%</td>
<td>20%</td>
</tr>
<tr>
<td>Highest occupation in Household</td>
<td>Unskilled worker</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Percent Neighborhood Poverty</td>
<td>10% or more</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>‘Percent Neighborhood Female Headed Households</td>
<td>41% or more</td>
<td>14%</td>
<td>20%</td>
</tr>
<tr>
<td>Percent Neighborhood Welfare Recipient</td>
<td>8% or more</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Mean Number of Risk Factors</td>
<td>1.36</td>
<td>3.52</td>
<td></td>
</tr>
</tbody>
</table>


Table 2.3  
*Mean Score for Priority, Knowledge, and Skills Questions*

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>SD</th>
<th>Participants Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important is it that teachers understand students’ emotional well-being?</td>
<td>4.81</td>
<td>.47</td>
<td>162</td>
</tr>
<tr>
<td>How important is it that teachers understand the links between environmental risk and students’ functioning?</td>
<td>4.63</td>
<td>.65</td>
<td>163</td>
</tr>
<tr>
<td>How important is it that you as a teacher candidate are able to develop your skills in interventions, techniques, and adaptations for students who are known to come from difficult home circumstances?</td>
<td>4.87</td>
<td>.37</td>
<td>161</td>
</tr>
<tr>
<td><strong>Priority Aggregate Score</strong></td>
<td>4.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How would you rank your level of training in understanding students’ emotional well-being?</td>
<td>3.38</td>
<td>.66</td>
<td>162</td>
</tr>
<tr>
<td>How would you rank your level of knowledge about the effect of cumulative risk on students’ brains?</td>
<td>3.12</td>
<td>.87</td>
<td>162</td>
</tr>
<tr>
<td>How would you rank your level of knowledge about the impact of cumulative risk factors on students’ academic functioning?</td>
<td>3.34</td>
<td>.77</td>
<td>161</td>
</tr>
<tr>
<td>How would you rank your level of knowledge about the impact of cumulative risk factors on students’ non-academic functioning?</td>
<td>3.31</td>
<td>.78</td>
<td>162</td>
</tr>
<tr>
<td><strong>Knowledge Aggregate Score</strong></td>
<td>3.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank your level of skill/ familiarity with interventions, techniques, and adaptations for students who are known to come from difficult home circumstances.</td>
<td>3.34</td>
<td>.94</td>
<td>161</td>
</tr>
<tr>
<td>Rank your level of skill/ familiarity with interventions, techniques, and adaptations for students who present with chronic academic problems.</td>
<td>3.48</td>
<td>.91</td>
<td>161</td>
</tr>
<tr>
<td>Rank your level of skill/ familiarity with interventions, techniques, and adaptations for students who present with chronic non-academic problems.</td>
<td>3.31</td>
<td>.97</td>
<td>161</td>
</tr>
<tr>
<td><strong>Skills Aggregate Score</strong></td>
<td>3.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2.4

Correlational Analyses between PST Program Level, Risk Factors, and Skills

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Program Level</th>
<th>Number of Risk Factors Present during 7th Grade</th>
<th>S1 - skill with interventions for students from high CR</th>
<th>S2 - skill familiarity with interventions for chronic academic problems</th>
<th>S3 - skill familiarity with interventions for chronic non-academic problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>-1.45</td>
<td>.065</td>
<td>.132</td>
<td>.154</td>
<td>.150</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>-1.45</td>
<td>.065</td>
<td>.132</td>
<td>.154</td>
<td>.150</td>
</tr>
<tr>
<td>N</td>
<td>167</td>
<td>163</td>
<td>161</td>
<td>161</td>
<td>161</td>
</tr>
<tr>
<td>Number of Risk Factors Present during 7th Grade</td>
<td>.145</td>
<td>1</td>
<td>.016</td>
<td>-.006</td>
<td>.026</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.145</td>
<td>1</td>
<td>.016</td>
<td>-.006</td>
<td>.026</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.145</td>
<td>1</td>
<td>.016</td>
<td>-.006</td>
<td>.026</td>
</tr>
<tr>
<td>N</td>
<td>163</td>
<td>163</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>S1 - skill with interventions for students from high CR</td>
<td>.132</td>
<td>.016</td>
<td>1</td>
<td>.733**</td>
<td>.744**</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.132</td>
<td>.016</td>
<td>1</td>
<td>.733**</td>
<td>.744**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.132</td>
<td>.016</td>
<td>1</td>
<td>.733**</td>
<td>.744**</td>
</tr>
<tr>
<td>N</td>
<td>161</td>
<td>161</td>
<td>161</td>
<td>161</td>
<td>161</td>
</tr>
<tr>
<td>S2 - skill familiarity with interventions for chronic academic problems</td>
<td>.134</td>
<td>-.000</td>
<td>.733**</td>
<td>1</td>
<td>.796**</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.134</td>
<td>-.000</td>
<td>.733**</td>
<td>1</td>
<td>.796**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.134</td>
<td>-.000</td>
<td>.733**</td>
<td>1</td>
<td>.796**</td>
</tr>
<tr>
<td>N</td>
<td>161</td>
<td>161</td>
<td>161</td>
<td>161</td>
<td>161</td>
</tr>
<tr>
<td>S3 - skill familiarity with interventions for chronic non-academic problems</td>
<td>.150</td>
<td>.028</td>
<td>.744**</td>
<td>.768**</td>
<td>1</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.150</td>
<td>.028</td>
<td>.744**</td>
<td>.768**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.150</td>
<td>.028</td>
<td>.744**</td>
<td>.768**</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>161</td>
<td>161</td>
<td>161</td>
<td>161</td>
<td>161</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The average score for the three priority questions was 4.77. The average score for the knowledge/training questions was 3.29. The average score for the skills questions was 3.39. Mean scores for each question are reported in Table 3.3. Of the 10 questions, the highest ranked question ($\mu = 4.81$) was “How important is it that you as a teacher candidate are able to develop skills in interventions, techniques, and adaptations for students who are known to come from difficult home circumstances? The lowest ranked question ($\mu = 3.25$) was, “How would you rank your level of knowledge about the effect of cumulative risk on students’ brains? 

Correlational analyses (Table 3.4) were used to determine if there was a relation between a PST’s program level, the number of risk factors present during adolescence, and their self-assessed priority, knowledge, and skill. There were no statistically
significant differences in statistically significant correlation existed between participants’ Program Level and their response to one of the three skill questions: “Rank your level of skill/familiarity with interventions, techniques, and adaptations for students who present with chronic academic problems.” An independent samples t-test revealed a statistically significant gap between mean Level I students’ response to this question (3.19) and the mean Level II response (3.66). The mean level of confidence for level III students in this area was 3.56, indicating that this sample of PSTs loses confidence in their abilities to intervene in academics after they enter the classroom.

The respondents ranked their actual knowledge and skills regarding students from high-risk environments lower than they ranked their priorities of acquiring this knowledge/skill. The average score for three priority questions was 4.77, for four knowledge/training questions was 3.29, and for three skills questions was 3.39. An aspect of cumulative risk that may be considered “technical” by respondents is its neurophysiological impact. This is reflected by the fact that the question “How would you rank your level of knowledge about the effect of CR on students’ brains,” was the lowest ranking question of the 10 priority, knowledge, and skill questions.

Qualitative. The first cycle coding process (initial coding) involved deep reflection (Saldaña, 2013) on the 14 interview transcripts, applying a new code to each statement that offered a new idea, looking for similarities with statements already coded, and adding similar statements to previously determined codes. The analysis found 139 references (statements), organized into 62 distinct meaningful units (codes).

Second cycle coding was conducted through focused coding (Saldaña, 2013), a process that required the researcher to determine which codes aligned well with others,
organizing those codes into categories and sub-categories. Seven general categories (parent nodes) were pinpointed, most of which were divided into sub-categories (child nodes). One overarching theme arose from the data: CPCU School of Education stakeholders reported a lack of preparation for its teachers for providing SEL and/or understanding the impact of environmental risk. Forty-three references, from all 14 sources, substantiated this theme. Prominent among this theme was the notion that SEL training was “insufficient.” For example, a pilot course participant commented, “It’s (SEL) addressed early on, but again, it's sort of a lip service sort of thing.” When discussing how well the program taught her about environmental risk, a novice teacher stated,

I would say not very well, just because I had no idea. We talked about how poverty affects kids. I remember people saying that, ‘Kids that live in poverty are just gonna struggle in different ways.’ I don't ever remember the specifics of that.

(Novice Teacher #1)

Another novice teacher stated that she was not better prepared. “I think I could've done better with that if I would've known more about this and if I was trained more in this kind of stuff because I think this is really valuable information.”

There were statements about positive preparation for delivering SEL coming from the CPCU School of Education experience. These statements were an eclectic set of “positives,” citing student teaching, five different courses, off-handed statements made from professors, and general positive feelings about CPCU. Of the novice teachers, student teachers, and course pilot participants, the only two participants who reported that their preparation for delivering SEL came mostly from their experience at CPCU (rather
than life experience) were the two pilot course participants who were finishing an SEL focused class. This distinction is important, as it provides preliminary evidence pointing to the possibility that the SEL course that these two candidates experienced may be a beneficial solution to the identified problem of practice.

Another prominent theme in the data was that respondents noted a disconnect between teacher candidates and students, due to mismatches in socioeconomic status, school experience, and life experiences of CPCU teacher candidates and students at CSD. One district administrator stated, “My concern that I have with [Central Prairie’s] preparation for kids in this area, classroom management, and dealing with families in crisis, which we have so many in [Central] School District.” A novice teacher corroborated this point. “Especially going right in to teaching in [Central School District], it's a huge culture shock from what I'm used to and kind of like from what I learned.” Another novice teacher shared similarly,

I think if there was some way that you could . . . And this is just because I work in [Central], if you could emphasize the effect that poverty has on a student's emotional and behavioral myths, I think that would be important because most of the kids that go to [Central Prairie] are middle class kids in school. (Novice Teacher #2)

Discussion

The needs assessment paints a picture of a School of Education whose students want more training in delivering SEL support training that is currently not offered in a systematic way. The findings of the questionnaire and the interviews complement one another, and provide evidence that the nation-wide problem of SEL’s under-emphasis in
teacher education (Bridgeland et al., 2013; Schonert-Reichl et al., 2014) exists at CPCU as well. The needs assessment revealed that the PSTs believe that it is important to address the needs of students from high environmental risk homes.

The quantitative study alone suggests that CPCU teachers value knowing about environmental risk, and developing skills and tools to ameliorate its impacts. However, the quantitative study does not gather data about CPCU’s actual work in equipping students to provide SEL supports. The qualitative study fills this gap, by showing a lack of preparation for its candidates to provide SEL support, characterized by preparation that is either missing, insufficient, or scattered, and—congruent with analysis provided by the PSTs risk experience data—personal lives that are mismatched between students form high risk environments.

**Constraints and Implications**

There are several limitations to this study. Its measure of students’ adolescent environmental risk relies upon students’ recollections of their seventh grade home circumstances. These recollections may be faulty. A more direct study, which asked questions of respondents’ parents would have been more valid and reliable. Similarly, the priority, knowledge, and skills questions were each closed-ended, Likert style, self-assessment questions. The fact that the questions regarding cumulative risk are being asked may indicate to respondents that cumulative risk *should* be a priority. Open-ended questions may have provided a more pure window into what PSTs prioritize, know, and can do. For instance, asking the question, “How important is it that teachers understand the links between environmental risk and students’ functioning?” may lead a respondent to think that it must be important because the questionnaire (and researcher) is asking
about it. To truly know how the respondents’ thoughts, open-ended questions would have been of greater value. Moving forward, it may be worth exploring the possibility of polling teacher candidates from other universities, using an adapted questionnaire and the focus group interviews. There may be interesting findings that emerge from a larger sample size, and among a cross-section of pre-service teachers that has experienced higher levels of cumulative environmental risk.

Interpretations of this study should be made with care. While the finding that PST SEL preparation is insufficient aligns with national trends (Schonert-Reichl et al., 2015), the quantitative data are unique to the context of CPCU, and should only be read as such. The findings of each study are unique to the circumstances, experiences, and environment surrounding teacher education students at CPCU. The professionals and students selected for interview were those most familiar with CSD. The strength of this approach is that it ensures that respondents know first-hand the nature of students for which this Problem of Practice study was designed. However, the findings may have differed if a neighboring district with higher SES students in its demographic were targeted.

In their *Handbook of Social and Emotional Learning* chapter on teacher preparation, Schonert-Reichl et al. (2015) recommend that “teacher candidates need to learn about the latest innovations and science in SEL and its practical application, with intentional and specific attention to all domains of SEL” (p. 416) and “Preservice teacher education programs need to redesign their curricula so as to combine course content on SEL and practical application of SEL concepts into classroom teaching” (p. 416). The needs assessment here described substantiates this broad need locally. The PSTs at CPCU, together with the university’s stakeholders, report a lack of training for providing
SEL support. The “latest innovations and science in SEL, and its practical application” (Schonert-Reichl et al., 2015, p. 416) will comprise the intervention described in the following chapter.
III. Introduction to Solution of POP

Overview of Solution to POP

Despite the well-documented relation between teacher affective care and positive classroom outcomes (Resnick et al., 1997; Sakiz, Pape, & Hoy, 2012; Solomon, Klein, Hintze, Cressey, & Peller, 2012), both novice and veteran teachers report a lack of preparation for the social-emotional support required by their students (Bridgeland et al., 2013; Koller et al., 2004). Nationally, training for pre-service teachers to provide social and emotional learning (SEL) support does not often occur in institutes of higher education in a systematic and comprehensive way (Schonert-Reichl et al., 2015). The needs assessment presented in the previous chapter verifies that this nation-wide problem is in place within Central Prairie Christian University’s School of Education.

An intervention aimed at abating this trend locally is the introduction of a course for pre-service teachers (PSTs) called “Classroom/Individual Emotional and Behavioral Supports” (CIEBS). Participants include the university’s special education majors, who are required to take the course. Other education majors may take the course as an elective. CIEBS is comprised of four modules. Three weeks cover School-Wide Positive Behavior Intervention and Supports (SWPBIS), an evidence-based approach that is utilized by many of our nation’s schools (Benner, Nelson, Sanders, & Ralston, 2012). Four weeks cover Trust-Based Relational Intervention (TBRI), a therapeutic approach designed to give teachers, parents, and caretakers conceptual frameworks and tools to help students who have experienced high levels of complex trauma (Call, Purvis, Parris, & Cross, 2014). Four weeks teach the Nonviolent Crisis Intervention (NCI) system, which provides a conceptual framework for the stages in the escalation of student
behavior, and steps to deescalate problem behavior (Calabro, MacKey, & Williams, 2002). The fourth module spans four weeks, and involves observation and hands-on participation shadowing a special education teacher, as well as classroom visits and discussions with university supervisors. (For a full description of the course’s content, methods, and teaching strategies, see Appendix E).

CIEBS is a stand-alone course, whose objective is to prepare PSTs with knowledge of the impact an individual’s environment has on learning, and tools that will enhance their teacher efficacy and preparedness for providing SEL supports. The mix of modules chosen aims to strike the balance of (a) theory-based: tied to educational, psychological, and child developmental theory, (b) research-backed: building upon literature showing that content covered in the modules may work toward meeting the course’s objectives, (c) acceptable: perceived by stakeholders as helpful contributions to pre-service teacher training; (d) effective: perceived by stakeholders to enhance pre-service teacher skill that extends beyond theoretical explorations, and (e) feasible: perceived by course participants and the university’s School of Education stakeholders as fitting the needs of pre-service teachers and classrooms alike.

The following section will present the literature behind the four course modules. First, the four modules will be introduced. A literature review will be used to evaluate the course’s first two priorities (theoretical framework and empirical backing). Following the literature review, the course’s social validity (acceptability, effectiveness, and feasibility) will be discussed and analyzed based on a set of two questions which were posed to 14 Central Prairie Christian University (CPCU) School of Education Stakeholders. The questions were asked in conjunction with the two other questions that were used in the
needs assessment (see Chapter II). The responses are analyzed in the present chapter, as they assessed respondents’ opinions regarding components of the CIEBS course itself rather than the need for enhanced SEL training at CPCU.

Literature Review

Module Overviews

School-wide Positive Behavior Supports (SWPBS) introduction. School-wide positive behavior supports (SWPBS) is a system designed to provide three tiers of behavioral support to students within a school (Bradshaw, Mitchell, & Leaf, 2010; Horner, Sprague, Sugai, & Walker, 2000). Primary (tier I) supports are provided for all students. These involve initiating a SWPBS problem solving team (Duda, Dunlap, Fox, Lentini, & Clarke, 2004; Ross & Horner, 2014), stating positive (“be safe”) rather than negative (“don’t run in the hallway”) instructions, posting expectations for appropriate behavior around the school (Ross & Horner, 2014), providing universal training and positive behavior incentives (Horner et al., 2000), as well as a token economy system (Farkas et al., 2012; Solomon et al., 2012). Secondary (tier II) supports are provided for students who exhibit mild to moderate problem behavior through an intensified reward system, targeting certain problem behaviors, as well as social skills training (Benner et al., 2012; Simonsen, Britton, & Young, 2010; Solomon et al., 2012). Tertiary (tier III) supports are provided for students with ongoing intensive behavioral needs. Tertiary supports involve conducting a functional behavior assessment and behavior intervention plan, and providing an educational environment and behavioral incentives that are most likely to support positive student behavior (Benedict, Horner, & Squires, 2007; Crone & Horner, 2003; Duda et al., 2004; Simonsen et al., 2010).
SWPBS is worthy of inclusion as a course module for two reasons. First, SWPBS and similarly conceived programs are ubiquitous in our nation’s schools. The United States federal government has called for schools to engage in proactive and preventative, rather than reactionary, punitive, and exclusionary approaches to managing behavior (Dwyer, Osher, & Warger, 1998; Horner et al., 2000). In response to this call, many states and districts have elected to use SWPBS as it is an evidence-based, universal intervention model of intervention (Benner et al., 2012; Bradshaw, Koth, Thornton, & Leaf, 2009; Bradshaw et al., 2010; Horner et al., 2000).

The second reason SWPBS merits review relates to special education pre-service teacher training. For special education teachers, confidence in handling student problem behavior is paramount. Teacher attrition has been linked to teachers’ perceptions of their inability to manage behavior and emotions in children (Adera & Bullock, 2010). One of the primary reasons that novice special education teachers leave the profession is unpreparedness for classroom and behavior management (Boe, 2014). Classroom management training as it is usually addressed by institutes of higher education (IHEs) tends to be overly theoretical and impractical, with insufficient focus on concrete steps and skills that can be taken to provide emotional and behavioral support for students (Oliver & Reschly, 2014). The SWPBS module is designed to help provide concrete, rather than abstract behavior management techniques that will work in concert with the school and district-wide programs that are already in place. The participants’ homework assignments include watching a video introduction on SWPBS, reading three peer-reviewed journal articles on SWPBIS along with a textbook chapter on conducting Functional-Behavior Assessment (FBA), and completing an FBA/ BIP based on a case
study. At the end of the session, there is a quiz on the theoretical frameworks and central components of SWPBS (Appendix F).

**Trust-based Relational Intervention (TBRI) introduction.** TBRI was designed by the Institute of Child Development at Texas Christian University to aid parents, teachers, or other caretakers in fostering the emotional well-being of children and youth; particularly those who have endured complex trauma. The program’s three core principles are empowerment, connection, and correction. Through empowerment, caretakers learn to prioritize a safe and secure environment, addressing the sensory, nutrition, and physical health needs of children and youth. The connecting principles focus on observational awareness, self-awareness, attachment skills, playful engagement, and attunement. The correcting principles focus on protective behavioral strategies, responsive behavioral strategies, such as the IDEAL response (i.e., immediate, direct, efficient, action-based, and leveled at behaviors) (Purvis, Cross, Dansereau, & Parris, 2013). Initially designed for adoptive parents, TBRI has recently “turned to the needs of children and teachers in an academic environment” (Call et al., 2014, p. 2).

The TBRI module class sessions focus on the content from two DVDs created by Texas Christian University’s TBRI program: *Children from Hard Places and the Brain,* and *Trust-based Parenting.* (The content from *Trust-based Parenting* is widely applicable to all caregivers, including teachers (Call, 2015)). The researcher/professor procured permission to use the TBRI materials and create skeleton notes based on the TBRI DVDs from Texas Christian University’s Institute for Child Development in January, 2016 (Appendix G). Students completed skeleton notes for each session, and discussed their notes and reactions to the DVD content each day. There was also time
allotted to discuss reactions, comments, and questions stemming from the homework assignments. The participants’ homework assignments included reading and answering pre-written questions from several chapters of TBRI’s introductory manual *The Connected Child* (i.e., Purvis, Cross, & Sunshine (2007)). In addition, participants read four peer-reviewed journal articles on the impact of TBRI, listen to one radio show, and watch one video. At the end of the module, there was a quiz on the theoretical frameworks and central components of TBRI (Appendix H).

**Nonviolent Crisis Intervention (NCI) introduction.** Nonviolent Crisis Intervention (NCI) provides a series of conceptual frameworks for understanding and responding to anxious or escalating behaviors (Schubert, 2007). The program is used in health care facilities, correctional institutions, and schools (Calabro et al., 2002). Central components of the program include training in (a) CPI Crisis Developmental Model, (b) Nonverbal Communication, (c) Paraverbal Communication, (d) Verbal Communication, (e) Precipitating Factors, (f) Rational Detachment and Integrated Experience, (g) Staff Fear and Anxiety (h) Decision Making, (i) Physical Disengagement Skills, (j) Physical Holding Skills, and (k) “Postvention.” While the comprehensive NCI training involves 12 to 14 hours of instruction on each of these components, the Abridged Nonviolent Crisis Intervention provides 6 to 8 hours of instruction on preventive, verbal and nonverbal techniques, while de-emphasizing the physical components of NCI (Nonviolent Crisis Intervention, 2015). The reason for choosing the abridged over the comprehensive version of NCI is that the principles covered in the abridged portion are applicable to many teaching contexts, whereas the additional lessons addressed in the comprehensive
version would only be used in the unusual situations that require frequent intensive physical restraint.

Three conceptual frameworks are central to the lessons taught and reinforced throughout the abridged NCI program: the CPI Crisis Development Model, the Verbal Escalation Continuum, and the “Control, Orient, Patterns, Investigate, Negotiate, and Give” (COPING) Model. The CPI Crisis Development Model categorizes disruptive behavior and helpful staff/teacher responses. Level one is anxiety among students, and supportive response from teachers; level two is defensive behavior among students, and directive response from teachers; level three is risk behavior, and (potential) physical intervention from teachers, and level four is tension reduction for students and establishing therapeutic rapport from teachers. The Verbal Escalation Continuum categorizes five levels of verbal escalation, along with suggested staff responses: (1) questioning (suggested responses: downplay the challenge; stick to the topic; set limits); (2) refusal (set limits); (3) release (allow venting); (4) intimidation (take threats seriously; seek assistance); (5) tension reduction (establish therapeutic rapport). The COPING model is designed to help staff establish therapeutic rapport after a crisis situation, thinking systematically about helping a client/student to re-establish calm after a “risk behavior” incident (Nonviolent Crisis Intervention Foundation Course Instructor Guide, 2015).

The researcher/professor attended a four-day training on NCI in November, 2015, and became certified to train others in its use (Appendix I). The NCI sessions follow scripted lessons from Crisis Prevention Institute’s NCI program. The participants’ homework assignments included reading one peer-reviewed journal article, preparing an
in-class presentation of a group calming technique, and conducting a case study analysis for a self-abusive or self-stimulating child. At the end of the session, a quiz on the tools and techniques presented in NCI is administered (Appendix J). This quiz is included in the materials published by Crisis Prevention Institute.

**Field placement introduction.** One month into the course, candidates spend two full school days per week for four weeks assisting and observing in classrooms in a local school the Central School District (pseudonym), in which 79% of students are classified as “low income.” The students who attend school in this context fit the profile of the students described in the POP: poor, and having experienced multiple home-related stressors. The literature on environmental risk indicates that the population of students in this district likely experiences emotional and behavior problems stemming from their home environments (Evans, 2003; Trentacosta et al., 2008).

Students shadow a licensed special educator in an inclusion, resource, or self-contained setting, observing, and engaging in hands-on participation with students. Homework assignments during this module include conducting a Functional Behavior Assessment of one student within the school setting, and conducting an analysis of group behavioral change over the course of the school day. Three textbook chapters on classroom and behavior management are assigned during the field placement weeks.

**Theoretical Foundation**

Together, the theories of planned behavior (Ajzen, 1991) and teacher efficacy (Andreou & Rapti, 2010; Gibson & Dembo, 1984) support the hypothesized flow of knowledge and skills from course-based activities to long-term teacher preparedness for provision of SEL support (see Logic Model, Figure 4.1). The theory of planned behavior
posits, “to the extent that a person has the required opportunities and resources, and intends to perform the behavior, he or she should succeed in doing so” (Ajzen, 1991, p. 182). This theory suggest that the PSTs’ work in planning how they intend to respond to student in emotional distress or from high risk environments will benefit theses PSTs’ decision making with their own students.

Bandura (1997) posits that personal efficacy is increased through four avenues: experiences, social modeling (vicarious experiences), social persuasion, and psychological responses. The proposed intervention targeted the first three (see Causal Diagram, Figure 4.2). Importantly, mastery experiences and social persuasion—the two components most strongly supported by theory and research (Hoy & Spero, 2005; Mulholland & Wallace, 2001; Tschannen-Moran & Hoy, 2007)—are provided throughout the semester. Experiences were gained through the PSTs’ eight days of clinical placement. Social modeling occurred through the video demonstrations of TBRI and physical enactments of NCI techniques. Social persuasion was targeted through the readings, videos, class presentations and discussions throughout the course. In addition to these theories that span the course as a whole, each of the four modules rest upon its own theoretical base.
Figure 3.1: Logic model for CIEBS course for pre-service teachers. SEL = Social and emotional learning; TBRI = Trust Based Relational Intervention; SWPBIS = School-wide Positive Behavior Interventions and Supports; NCI = Nonviolent Crisis Intervention; PST = Pre-service teachers
**SWPBS in Theory.** SWPBS is built on complementary theories: behaviorism and social learning theory (Bradshaw et al., 2010). Behaviorism is a broad theory of human behavior, a component of which purports that providing stimuli is an effective way to control an individual’s conduct (Skinner, 1965). Behaviorism’s influence is seen in SWPBS as all students receive “tokens” or “caught being good” tickets, which can be exchanged for prizes (Solomon et al., 2012). Another important theory at play with SWPBS is social learning theory, which explains that humans behave in the same way as those around them (Bandura, 1986). The creation of a positive climate through SWPBS is
designed to influence school culture, which rests on the rationale that a healthy school climate will influence all students toward desired behavior.

**TBRI in Theory.** TBRI is built on two complementary theories: complex trauma, and attachment theory (Purvis et al., 2013). Complex trauma refers to, "the experience of multiple, chronic and prolonged, developmentally adverse traumatic events, most often of an interpersonal nature," (van der Kolk, 2005, p. 402), and occurring within a child’s unstable caregiving system. The impairments associated with complex trauma are several: biology, affect regulation, cognition, self-concept, dissociation, and behavioral control (A. Cook et al., 2003). Attachment theory focuses on the impact of the caregiver-infant relationship, particularly on this relationship’s potential to impact neurobiological and behavioral patterns that persist into adulthood. Formulated by Bowlby (1978) and Ainsworth (1979), attachment theory posits that (un)nurturing care in a child’s early years has a neurophysiological impact (Bowlby, 1978). Primary caretakers commit to their infants, “nongenomic behavior transmissions” (Schore, 2000, p. 36) patterns which result in either secure or insecure attachment styles. Insecure caregiver-infant relationships in general, and disorganized attachment styles more specifically, correlate closely with maladaptive behaviors over an individual’s lifespan. The authors of TBRI refer to the program as “trauma informed,” and “attachment based” (Purvis et al., 2013), meaning that the intervention was designed for children and youth who have experienced complex trauma, with the understanding that biological and behavioral insecure attachment patterns are likely in place among this population (Evans, 2003; Trentacosta et al., 2008).
NCI in Theory. The theory behind NCI is focused on adult learning and preparedness for crisis management techniques rather than students and their response to those techniques. NCI lessons target both declarative and procedural knowledge (Nonviolent Crisis Intervention, 2015). Schraw (2006) (as cited in Woolfolk, 2012, p. 296) explains that declarative knowledge includes information that can be stored in one’s mind and retrieved for later use, while procedural knowledge involves ability to complete a task. Declarative knowledge is provided in NCI training through the Term, Definition, Example procedure, which is used to describe the sub-components of the Crisis Developmental Model, the Verbal Escalation Continuum, and the COPING strategy for establishing therapeutic rapport. To address procedural knowledge, hands-on approaches are used. The procedural knowledge offered through NCI includes practice using a supportive stance, practicing with de-escalation through role play, and practice using non-invasive, non-harmful physical restraints (Nonviolent Crisis Intervention, 2015).

Field Placement in Theory. The prevalent use of field placement among teacher preparation programs (Maheady, Smith, & Jabot, 2014) is undergirded by socio-cultural theory. Vygotsky’s (1978) conclusion—that social experience brings about language, learning, and development—supports the importance of field experience as a module for this course. Resnick (1987) offers that sociocultural theory ought to be applied to instructional practices, by arguing that teaching which is confined to the school (in this case, university) setting is inauthentic, and therefore not useful. With sociocultural theory as a basis, Resnick (1987) concludes that instead of learning in isolation from its natural context, schools should offer real-world apprenticeships and opportunities for
collaboration between peers. In the field of teacher education, this “real-world apprenticeship” is often gained through field placement (Maheady et al., 2014).

Empirical Foundation

**SWPBS empirical backing.** With large samples, several group design studies (Bradshaw et al., 2010; Horner et al., 2000) have shown that using school-wide positive behavior supports (SWPBS) decreases problem behaviors in general education settings. As the CIEBS course is required for special education majors in the researcher’s university, the following section explores the quality of evidence for SWPBS among students with disabilities. An article about the impact of SWPBS on teacher efficacy is also reviewed.

Benner et al. (2012) conducted a randomized control trial to seek the impact of SWPBS on students with externalizing behavior disorders. The treatment group consisted of 44 kindergarten through grade three students from SWPBS schools, while the control group had 26 same-age peers in “business as usual” schools. Using the Stage Observation System as the assessment tool, the researchers found statistically significant decreases in problem behavior in the treatment group. However, decreases in problem behavior in the treatment group were not as pronounced among high poverty schools (Benner et al., 2012).

Farkas et al. (2012) sought whether the behavioral and social validity impacts that have been observed in randomized control trials (Benner et al., 2012; Bradshaw et al., 2010) would likewise be present in alternative school settings. In addition, Farkas et al. (2012) sought to measure fidelity of implementation in an alternative school, as this had not been assessed in prior research. Using the School-wide Evaluation Tool along with an
internally created fidelity measure, fidelity of implementation within alternative schools met acceptable standards. The numbers of student acceptable behaviors increased, while office discipline referrals decreased. Alternative school staff also reported high satisfaction with SWPBS.

In a similar study, Simonsen et al. (2010) did a monthly evaluation of school staff’s provision of opportunities to respond appropriately and their numbers of positive interactions. The impact of SWPBS was also measured with school-wide data measuring numbers of students exhibiting physical aggression, as well as numbers of serious behavioral incidents. Opportunities to respond and positive interactions remained at a high level between baseline and intervention, while physical aggression and serious behavioral incidents each decreased substantially.

Duda et al. (2004) provide another example of SWPBS occurring among students with disabilities. Two three-year-olds with disabilities, one with Down syndrome, and one with emotional disturbance were provided positive behavior support, which included behavior intervention plans based on functional behavior assessments. The independent variable in this study was the provision of SWPBS support, involving class-wide adaptations concurrently with individualized, tertiary level support. For both students, engagement in class activities increased while problem behaviors decreased.

In addition to the research showing that SWPBS reduces behavioral infractions, even among students with the most challenging problem behaviors (Duda, Dunlap, Fox, Lentini, & Clarke, 2004; Farkas et al., 2012; Simonsen, Britton, & Young, 2010), there is also evidence that the support system is beneficial for teachers. In a five-year randomized control study of 2,596 staff members within 37 schools, Bradshaw et al. (2009) found
that use of SWPBS over time had a statistically significant positive impact on schools’ organizational health, relationships between staff members, academic instruction, and resource influence. Similarly, Kelm and McIntosh (2012) found that teachers who implemented SWPBS (n=22) had higher teacher efficacy scores than a control group (n=40). The effect size on the Teacher Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001) was greater than .80 (Kelm & McIntosh, 2012), meaning that the use of SWPBS had a marked impact on the teachers (Lipsey, 1998).

**TBRI empirical backing.** Five single subject studies, conducted in various settings, have found desirable outcomes from TBRI’s usage. The settings for these studies included one school, two camps for children with complex trauma, and two residential treatment centers for children with extreme disruptive and violent behavior. Individual behavior, psychological, and neurotransmitter data were collected, (Purvis, McKenzie, Razuri, Cross, & Buckwalter, 2014; Purvis et al., 2014), along with school-wide behavioral measures (Parris et al., 2015).

One study was conducted in a school. Parris et al. (2015) studied the overall impact of TBRI on school climate by comparing the number of incident reports for aggressive or disruptive behavior before the intervention, each year for the two years when TBRI was implemented. Incident reports went from 902 the baseline year (2010-11) to 59 in implementation year two (2012-13). Triangulating this quantitative data, school staff noted a change in school culture, and attributed this change to the introduction of TBRI (Parris et al., 2015).

Two other studies involved individual patients. McKenzie, Purvis, and Cross (2014) studied the impact of TBRI with a five-year-old girl with a diagnosis of reactive
attachment disorder and extreme violent behavior (such as repeatedly attacking her siblings). After a 20-week TBRI intervention, the behavior patterns in the patient improved drastically, with parent-report measures moving from clinical to normal range behaviors. In addition to the behavioral improvements, neurotransmitter measures (of epinephrine, glutamate, histamine, and phenyl ethylamine) also showed moves toward the optimal range (McKenzie et al., 2014). Similarly, Purvis et al., (2014) studied the impact of TBRI with a 16-year-old girl who demonstrated extreme self-injurious and violent behaviors who was housed at a residential treatment facility. After six weeks of intensive intervention provided by a TBRI trainer, and long-term TBRI support provided by TBRI staff, incidents of seclusion and restraint dropped from 12.3 per month to 4.7 per month. However, neurotransmitter levels remained outside optimal range.

Two studies evaluated the impact of TBRI on students who attended a summer camp created for the purpose of providing support to adopted children. Twelve participants, ages three through fourteen and at high risk for complex trauma attended a TBRI-based therapeutic day camp (Purvis & Cross, 2006). Children's salivary cortisol levels were lower during the 5 week camp than at pre-test, or at post-test, and two weeks after the camp ended. Statistically significant decreases in depression and sense of connectedness to family were also observed through the Child Depression Inventory (CDI) and Family Drawings assessment. Similarly, Purvis, Cross, Federici, Johnson, and McKenzie (2007) studied TBRI’s impact at a therapeutic day camp for 19 patients, this time assessing changes in disruptive child behavior, and in secure attachment. Progress was observed in this camp, particularly among the younger participants. The sub-domains in which campers moved closer to the normal range were: attachment, self-regulation,
pro-social behavior, executive functioning, and aggressive behavior (Purvis, Cross, Federici, et al., 2007).

**NCI Empirical Backing.** Non-violent Crisis Intervention is used in schools, particularly among student groups whose problem behavior escalates to a level of violence (Paulauskas, 2011). However, there is no research base supporting NCI’s use in schools. There is, however, research that addresses NCI’s use in other settings. The first three studies report positive impact in mental health and emergency department settings, while the fourth study demonstrates that the impacts of NCI are not always positive.

Calabro et al. (2002) examined the impact of training 118 mental health service providers in nonviolence prevention intervention, along with another psychological intervention, “Handle with Care.” A 34-question measure was used before and after the intervention to determine participants’ knowledge (nine multiple choice questions), attitudes (eleven Likert scale questions), self-efficacy (eight Likert scale questions), and behavioral intention (six Likert scale questions). Statistically significant short-term increases were found in each of the four measures, with knowledge being impacted more than the other four measures.

Gillam (2014) studied the impact of training emergency department staff members in NCI on the number of potentially violent "Code Purples" used over the course of the year. Before the study began, 42% of staff were trained. After one year, 75% received training. Reductions in code purples occurred when several staff members had experienced training between 0 - 150 days prior. "When greater percentages of staff were trained in NCI in the previous 90 - 150 days, monthly code purple incidences
decreased” (Gillam, 2014, p. 182). However, after 150 days, efficacy of the intervention waned.

The work of Beaulieu et al. (2008) is built upon the findings that when staff are comfortable with the behavioral modification approach they will be using among patients, they perceive themselves to be more capable of lessening patients’ agitation without using physical restraint (Gilbert & Counsell, 1999). To find out how CPI’s Nonviolent Crisis Intervention impacts patients a study was conducted among 84 employees in an inpatient brain injury rehabilitation center. The 20 patients in this center had their charts reviewed monthly to determine variance on the agitated behavior scale (ABS), whether restraint was used on patients, and whether “as needed” medications increased or decreased. Levels of agitation, occurrence of physical restraint, and use of “as needed” medication did not change over the course of the yearlong study. The authors concluded that NCI was not effective in bringing about the desired change.

Similarly to Beaulieu et al. (2008), Temple, Zgaljardic, Yancy, and Jaffray (2007) examine the staff of brain trauma patients, assessing their level of difficulty in dealing with patients before training in NCI, immediately after, and at one month follow up. Thirty questions were given for pre- and posttest, divided between the difficulty in dealing unmotivated/non-cooperative patients, sexual advances from patients, depression from patients, aggression from patients, being put down by other staff in front of patients, and dealing with family issues. The total score from this test demonstrated that marked decrease from pre-test to both T1 and T2 (though the effect was somewhat lessened at T2). This indicates that NCI was effective in lessening the difficulty of dealing with challenging situations among staff at a rehabilitation center for patients with brain injury.
**Field placement empirical backing.** While the theory of field placement is founded squarely upon sociocultural theory, there is sparse research on the impact of field placement on student teacher outcomes. One exception is from Prater and Sileo (2004). This study responded to Buck, Morsink, & Griffin's (1992) claim that questions regarding special education preparatory field work were yet to be answered by research literature. Among those questions, are, “what does field experience do for students?” and “how long should student teaching last?” By surveying 115 institutions of higher education (IHEs) engaged in training special education teachers, Prater and Sileo (2004) aimed to provide a picture of the present *modus operandi* for student teaching among special education teacher preparation programs. Among its findings were the IHEs self-reported weaknesses: insufficient synchronization between university course content and student teaching experience, and difficulties in finding "racially, ethnically, and culturally diverse student populations in inclusive settings" (Prater & Sileo, 2004, p. 54).

**Social Validity of CIEBS Course**

To determine whether the four modules of the CIEBS course were socially valid, 14 School of Education stakeholders were interviewed regarding their views on the modules’ importance, content, methods, and teaching strategies. (For a description of participants, data collection, and coding techniques, refer to Chapter II: Needs Assessment). The research question that was addressed in the interviews, and which pertains more closely to the present chapter than to the needs assessment, is “What is the assessment of the CPCU School of Education stakeholders regarding feasibility, acceptability, and effectiveness of the CIEBS course?” To answer this question, each
stakeholder was asked to read the description of the course (appendix E), and respond to two questions:

(1) Which of the following best describes your assessment of the importance the above-described course for our candidates? (a) not important, (b) vital for special education majors, and potentially helpful for general education majors who want additional training in this area to take as an elective, (c) vital for all education majors: we should mandate that all teacher education majors take this course. (Respondents were asked to expound upon their answers).

(2) After reading the details regarding the concepts, methods, and teaching strategies planned for the CIEBS course, please provide: (a) your opinion on the course’s concepts, methods, and teaching strategies (b) any suggestions for additions, deletions, or modifications to the course.

Results

Initial coding of the 14 interview transcripts found 139 references (statements), organized into 62 distinct meaningful units (codes). From the outset, references regarding specific modules were disaggregated from those regarding the course as a whole, by dividing these references into folders. In some cases, remarks that reflected feedback on more than one component of the class were coded within more than one folder. Initially, there were 103 references made about CIEBS as a whole, 23 references about SWPBS, 16 references on TBRI, 16 about NCI, and 18 references about field placement. Focused coding involved analyzing and reorganizing each reference into nodes. Where possible, references were coded along the pre-determine categories of acceptability, effectiveness,
and feasibility for the course as a whole, and for each individual module. Data that did not fit these categories received other codes.

**SWPBS responses.** SWPBS was the most familiar of the three in-class modules. Eighteen references (from eight different sources) singled out SWPBS as an acceptable component. One CSD administrator stated:

I've not heard of PBIS as well as crisis interventions like CPI being included in a course. Those are normally trainings that come after you gotten your teachers job. So, to be proactive and prepare teachers with knowledge of those interventions and strategy before they even come out of college, I think it's gonna be a huge factor for those teachers.

One CPCU faculty member shared, “So now, we get this vision of, ‘Here is what other schools are doing and the supports that they're doing in regards to a school-wide issue.’

Three respondents commented on the SWPBS system’s effectiveness, while zero respondents made comments about the module’s feasibility.

**TBRI responses.** Six respondents made comments indicating that they viewed the TBRI module as acceptable. Two respondents made comments indicating that they saw the module as effective, and zero comments were made about its feasibility. The two students who piloted the CIEBS course during the spring, 2016 semester were particularly positive about the content they learned during the CEIBS course. One of them commented, “Especially the TBRI module . . . especially. That one really gives you a look at the background of your students and where they're coming from and changes your view of their behavior significantly. That I would almost say, definitely for all majors.” A CSD administrator shared the importance of building relationships, which is a
central tenet of TBRI, “. . . because I can tell you, all of these are about building the relationship with the child and the parents. That's the biggest gain you're gonna make. They have to know that you really care.”

NCI responses. Responses indicating NCI’s acceptability were made by five of the fourteen respondents, its effectiveness was affirmed by two respondents, and its feasibility by zero. One novice teacher reported, “The crisis intervention is something I would say that in my experience would be the most helpful or important to me because I have kids that are in crisis at home and that carries over to them being crisis in school.”

Field Experience response. Five respondents made comments that reflected acceptable feelings toward the field experience module, four commented on its effectiveness, and two commented on its feasibility. Two notable concerns were offered. One was that having the “right” cooperating teacher, who understands SEL support is important; the second is that the field experience should occur in general education as well as special education classrooms, because students with emotional and behavior needs often do not have diagnosed disabilities.

Overall CIEBS course responses. Collectively, the respondents were highly favorable toward the course. Seventy-one of the 103 overall course comments (from all fourteen respondents) reflected responses of high acceptability for the course as a whole. For example, one novice teacher stated, “I think they're all very valuable and I see areas in all of them that would help me now.” A CPCU faculty member stated, “I could see as someone who was a [K-12] educator, how important it would be if I would have had that information when teaching.” Eight respondents communicated high levels of effectiveness. A novice teacher stated, “So yes, you're not planning on necessarily being
a special education teacher, but if you can have a broader base of knowledge going into teaching then you're going to be ready, you won't just be completely dazed when something happens. You won't be clueless.” A pilot course participant remarked, “This class is the one that taught me the most about social and emotional learning and that was the TBRI and PBIS and the NCI,” and “My opinion is that it was all really great and really helpful… I don't think I would modify anything because if we didn't have everything we had, all the study guides that went along with it, the readings, the exams, I wouldn't have gained this much knowledge by now.” Four respondents communicated that the course requirements seemed feasible. Eleven comments fit within the category, “concerns and suggestions.” These concerns involved “nuts and bolts” of the class, such as the length of the lines in the skeleton notes, or using the “honor system” where students report how much of the assigned readings were completed.

**Importance.** Responses to the first question revealed that twelve of the fourteen respondents thought the course should be mandated for all education majors. The two who opined that CIEBS should be mandated only for special education majors cited concerns about full course loads, and recommended that components of the course be mandated for all CPCU PSTs.

**Conclusions**

The CIEBS course aims to ameliorate the problem of teacher unpreparedness to deliver SEL support within one university teacher preparation program. The research here discussed sheds light on the ability of the course’s four modules to provide a combination of rigor and empirical backing for participants. Among the four modules, SWPBS has the highest degree of empirical backing. Its theoretical foundations—behaviorism and social
cognitive theory—will be topics that course participants will have covered previously in their college careers. As such, the rigor of this module will likely be less intensive than others. TBRI is only recently being conducted in schools, and its empirical backing for the school setting is thin. However, the rigor behind its components (i.e., attachment security, complex trauma, and neurology of trauma) will likely challenge participants, giving them an opportunity to discuss the confluence of sociology, neuroscience, child development, and education (Juster et al., 2011; Zalewski et al., 2012) in a way that is likely to be new for each of them. The empirical backing and rigor of NCI are both low relative to SWPBS and TBRI. However, the course participants may view the program’s many practical tools and conceptual frameworks as valuable contributions to their preparation. The field placement portion of the course does not have strong empirical support despite its widespread use among institutions of higher education. That the CIEBS placement provides access to classrooms in an ethnically diverse and low socio-economic status area is an advantage to course participants, as such placements are relatively uncommon for special education pre-service teachers (Prater & Sileo, 2004).

Likewise, the qualitative analysis found that each of course’s modules, concepts, and teaching strategies were acceptable. Indeed, all respondents reported that the training as outlined would be helpful for CPCU’s PSTs.

**Research Questions**

The theory, literature, and social validity supporting each the CIEBS course as a whole, and each of the CIEBS modules taken individually was strong enough that the research/professor found it acceptable to proceed with offering the CIEBS course as the intervention to the Problem of Practice. Formal evaluation of the course occurred during
the fall 2016 semester, and involved a mixed methods study using four research questions:

(RQ1) Quantitative: What were the differences between changes in efficacy for classroom management and preparedness for dealing with students’ stress between the treatment and control groups?

(RQ2) Qualitative: In what ways were the participants’ knowledge of SEL techniques impacted through the course?

(RQ3) Qualitative: Which elements of the CIEBS course impacted PSTs’ knowledge and sense of preparedness to handle student stress?

(RQ4) Mixed Methods: To what experiences do individual course participants attribute their changes in teacher efficacy for managing the classroom and sense preparedness for handling student stress?
IV. Evaluation Procedure

The present chapter discusses the procedures that were used to evaluate the Classroom and Individual Emotional and Behavioral Supports (CIEBS) course during its first full offering, in the fall 2016 semester at Central Prairie Christian University (CPCU). The chapter is divided into three parts. The first is a discussion of the characteristics of the evaluation, framed according to the recommendations of Newcomer, Hatry, and Wholey (2010). The part consists of a discussion of the research methodology, and an exploration of the participant selection process. The final part is comprised of data collection tools and data analytic methods.

Evaluation Characteristics

Six dichotomized attributes of evaluation studies are suggested by Newcomer, Hatry, and Wholey (2010): quantitative vs. qualitative, formative vs. summative, ongoing vs. one-shot, objective vs. participatory, goal-based vs. goal-free, and problem orientation vs. non-problem orientation. Regarding methodology, the evaluation will use a mixed methods design, involving qualitative focus group procedures and quantifiable questionnaires as well as case study analyses. This evaluation is formative rather than summative, because the evaluation is informing the CPCU School of Education regarding how the course might be altered. The evaluation is “one-shot” rather “ongoing,” because it will determine the course’s impact on participants after one semester. The researcher/professor taught the CIEBS course, so the evaluation is participatory rather than objective.

Recommendations for university programs to improve teacher preparation in social and emotional learning (SEL) support exist in the literature (e.g., Jennings &
Greenberg, 2009). However, these recommendations are not formalized into university accreditation or state teacher preparation standards (Schonert-Reichl et al., 2014; Schonert-Reichl, Hanson-Peterson, & Hymel, 2015), in the manner of other teacher preparation standards (e.g. “Council for Exceptional Children Initial Preparation Standards,” 2015). Waajid, Garner, and Owen (2013) explain,

> While we await the development of the adoption of robust local and national educational policies that “call for” the development of implementation of affectively-based interventions in all schools and the appropriation of funds for this purpose, we must forge ahead with alternative ideas about how to train teachers to deal with emotions in the classroom (p. 32-33).

The lack of national or state standards related to social and emotional learning supports (Bridgeland et al., 2013) indicates that the present evaluation will be closer to “goal-free” (i.e., driven by internal forces) than “goal-based” (i.e., driven by external forces). Finally, the evaluation aligns with Newcomer et al.’s (2010) “problem free” rather than “problem based” criteria (Newcomer et al., 2010), because the evaluation is not being requested by outside agencies, but is being conducted proactively, to improve the practice of the university’s teacher education program.

Three conditions provided by the evaluability assessment (EA) tool (Strosberg & Wholey, 1983) have been used to determine whether the course is ripe for evaluation. The first condition of evaluability is the clarity of the objectives. The short-range objectives are demonstrated in the Logic Model, Figure 4.1 (a duplicate of Figure 3.1). These objectives are clear and measurable: candidates will pass post-tests from each of the three course-based modules (regarding TBRI, SWPBIS, and NCI)
with 85% accuracy. The course’s medium-term objective is that participants will have higher efficacy in managing behavior and handling student stress than their colleagues who have not taken the course. Because these medium-range objectives involve a quantifiable comparison with colleagues, they are both clear and measurable.

**Figure 4.1:** Logic model for CIEBS course for pre-service teachers. SEL = Social and emotional learning; TBRI = Trust Based Relational Intervention; SWPBIS = School-wide Positive Behavior Interventions and Supports; NCI = Nonviolent Crisis Intervention; PST = Pre-service teachers

The second condition of evaluability is the plausibility of objectives (Strosberg & Wholey, 1983). To consider this criterion, it is important to consider whether the four discrete modules of the course (i.e., SWPBS, TBRI, NCI, and field experience) have
research support. For each module the answer is, “yes,” although as explained in Chapter III, the rigor of the research and the applicability of such research to teacher education settings varies between modules.

A final condition to consider before evaluating the course is the evaluation’s usefulness. The findings of the present study were shared with the CPCU School of Education dean and faculty members. At the conclusion of the study, CPCU School of Education faculty members heard a presentation of the study’s findings. These stakeholders will use the results of the evaluation to consider the benefit and feasibility of adding the CIEBS course as a required course for all education majors in our university, to make it a strongly suggested elective course, or to maintain its current status as a course required for special education majors and elective for other education majors.

**Research Questions and Methodology**

The study used two concurrent methodologies to answer its four research questions. The four research question are:

(RQ1) Quantitative: *What were the differences between changes in efficacy for classroom management and preparedness for dealing with students’ stress between the treatment and control groups?*

(RQ2) Qualitative: *In what ways were the participants’ knowledge of SEL techniques impacted through the course?*

(RQ3) Qualitative: *Which elements of the CIEBS course impacted PSTs’ knowledge and sense of preparedness to handle student stress?*
(RQ4) Mixed Methods: To what experiences do individual course participants attribute their changes in teacher efficacy for managing the classroom and sense preparedness for handling student stress?

The first methodology was a between-group, QUAL/quan embedded (or “nested”) mixed methods design, and served to provide insight into the quantitative RQ1, as well as the qualitative RQ2 and RQ3. The qualitative portion was the most heavily weighted, while the quantitative was nested within the qualitative, and served to add an element of measurable change in participants. Mixed methods allow for the two data collection measures to complement one another: results from a quantitative study with a small sample of course participants would not provide meaningful results, unless bolstered and explained by qualitative data. Similarly, participants’ open-ended responses are strengthened when triangulated by any numerical findings (Creswell & Plano Clark, 2011). The descriptions of research methodology in the present section briefly mentions the data collection techniques. A more thorough description of each measure is provided in the forthcoming “Data Collection Tools” section. A demonstration of all data collection, and how the data fit within two research methodologies is found in Table 4.1.

The qualitative portion of the between-group evaluation occurred in three phases. First, control and treatment groups’ responses to vignettes were analyzed for between-group differences in the nature of responses provided before and after the intervention period (i.e., the fall 2016 semester). Treatment participants’ focus group interview responses comprised the second phase. Interviews with the participants’ cooperating teachers (CTs’) comprised the phase of the between-group portion of the CIEBS evaluation.
Table 4.1 *Data Collection Tools*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Qualitative</th>
<th>Group Comparison</th>
<th>Quantitative</th>
<th>Individual Case Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents</td>
<td>Schedule</td>
<td>Respondents</td>
<td>Schedule</td>
</tr>
<tr>
<td>Vignette Responses</td>
<td>Tx and C</td>
<td>Pre- and Post</td>
<td>TSSE-CM</td>
<td>Pre- and Post</td>
</tr>
<tr>
<td>Focus Group Interviews</td>
<td>Tx</td>
<td>Post</td>
<td>TPDSS</td>
<td>Pre- and Post</td>
</tr>
<tr>
<td>CT Interviews</td>
<td>CTs of Tx</td>
<td>Mid-course</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** CT = cooperating teacher; Tx = treatment group; C = control group; TSSE-CM = Teacher Sense of Self-efficacy for Classroom Management; TPDSS = Teachers’ Preparedness in Dealing with their Students’ Stress; qual. = qualitative; quan. = quantitative

The quantitative portion of the study sought changes in participants’ Teacher Sense of Self-Efficacy for Classroom Management (TSSE-CM) (Tschannen-Moran & Hoy, 2001), and Teachers’ Preparedness in Dealing with their Students’ Stress (TPDSS) (Onchwar, 2010). The study employed an *untreated control group design with dependent pretest and posttest samples* design (Shadish, Cook, & Campbell, 2002). This design allowed for an exploration of whether differences in outcomes were attributable to the CIEBS course intervention. A control group was sought that would match the CIEBS course (and evaluation study) participants. The initial plan for assigning members to the control group was the use of *value-added for additional covariate* (VAAC) design. Within VAAC, control variables, or co-variates, are used to match program participants.
with the control group participants (Henry, 2010). The specific covariates used in the selection of the control group will be described in the following section.

The second methodology was a case study methodology, which served to provide insight into qualitative RQ2 and RQ3, and the mixed methods RQ4. Case studies were compiled for each of the course participants. To this end, data that were used in the between-group portion of the study were disaggregated by individual course participant. The quantitative measures (pre- and post-intervention TSSE-CM and TPDSS data), pre- and post-intervention vignette responses, and CT interviews were used again, this time for individual stories, rather than group-wide trends. In addition to these data sources, mid-course module quizzes and individual post-course interviews were analyzed in order to provide a more complete picture of the experience of each course participant.

Participants

Treatment Participants

Course participants were special education majors who were already admitted into the CPCU Teacher Education Program before the semester began. Program admission requires being in good academic standing with the university, a 2.50 grade point average (GPA), completion of five education courses, one writing course, and one math course, with a grade of “C” or better, and a 22 or higher on the ACT Composite with writing (or an equivalent score on a similar test). Each of the nine students who enrolled in the course was a Junior or Senior level Special Education Major who was required to pass the course as a graduation requirement. The course was made available to other education majors (e.g., Elementary Education, Social Science Education) who had likewise been admitted to the teacher education program. However, there were no students who chose
to take the course as an elective. Students in the course were not required to participate in the study. Class members were informed verbally and in writing that they did not need to have the answers to their questions included in the study, and could elect to provide or deny consent to participate, and that participation in the evaluation would not affect their grades or standing in the course (see letter of informed consent, Appendix K, and script for pre-test administration, Appendix L). All nine course participants consented to join the study.

**Control Participants**

The control group was recruited through an e-mail announcement (Appendix M) made to all CPCU teacher candidates who had already been admitted to the Teacher Education program. Fifteen teacher candidates responded to the e-mail and communicated their willingness with the researcher/professor, and signed letters of informed consent (Appendix N). Each of the 15 respondents participated in the control group. The co-variates used in the analysis were the combined results of the Teacher Sense of Self Efficacy for Classroom Management (TSSE-CM) (Tschannen-Moran & Hoy, 2001), Teachers’ Preparedness in Dealing with their Students’ Stress (TPDSS) scales (Onchwari, 2010). In addition to the TSSE-CM and PHSS, several demographic data were gathered from both treatment and control participants: (a) number of years working with children and youth in a professional setting, (b) prior experience working with students from high risk environments, (c) personal risk experience of teacher candidates, (d) major (i.e., special education or non-special education), (e) number of credit hours completed, (f) grade point average.
In keeping with the VAAC design, the control participant group was analyzed to determine which members of the group would provide the highest amount of statistical similarity to the treatment group. The highest possible score on the TSSE-CM is nine; the minimum pre-test score among all 24 participants was 4.13, and the maximum was 7.88. The average from the nine treatment participants on the TSSE-CM was 5.97, and the average among the 15 control participants was 6.62. The highest possible score on the TPDSS is also nine. The average from the nine treatment participants on the TPDSS was 5.97, and the average among the 15 control participants was 6.18. (See Table 4.2 for a demonstration of the quantitative pre-test measures) Because the treatment and control groups were so similar, and because the possibility of attrition threatened to decrease the number of control participants, all 15 of the control participants remained in the study.

<table>
<thead>
<tr>
<th>Table 4.2 Quantitative Pre-Intervention Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSSE-CM (maximum possible score = 9)</td>
</tr>
<tr>
<td>Treatment (n=9)</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>TPDSS (maximum possible score = 9)</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Mean</td>
</tr>
</tbody>
</table>

*Note:* TSSE-CM = Teacher Sense of Self-efficacy for Classroom Management; TPDSS = Teachers’ Preparedness in Dealing with their Students’ Stress

**Cooperating Teachers**

The course participants’ cooperating teachers (CTs), who supervised the teacher candidates during the field experience module, were also invited to participate in the study. In addition to this work of supervision, these teachers also work daily with students from high cumulative risk environments. The CTs’ involvement in the evaluation served two purposes. The first was to solidify and contextualize the social
validity of the course established in the Chapter IV study. Having already established through coding interview responses that certain CPCU stakeholders found the course acceptable, effective, and feasible, it was also important to hear the opinions of the cooperating special educators who supervised the course’s participants. It was important to ascertain whether the CTs themselves view CIEBS and its modules as beneficial. The second purpose of involving the CTs was to learn how these cooperating teachers perceived the course to be impacting the course participants over the duration of their time working with students.

The nine CTs were invited to participate via e-mail during the week of October 10, 2016 (Appendix O). Eight of the nine cooperating teachers were willing to participate. The participating CTs signed letters of informed consent (Appendix P), and responded to the TSSE-CM and TPDSS scales as the first stage of involvement. The second stage involved a face-to-face interview in which the CTs responded to four interview questions (Appendix Q), which sought the CTs’ opinions of the CIEBS course, and their opinions of the feasibility of using the four modules in their daily work, as well as their perception of the course’s impact on their assigned teacher candidate.

**Representativeness and Attrition**

While the above-mentioned steps were taken in order to provide for statistically similar treatment and control groups, it should also be acknowledged that there is a limit of representativeness of the treatment. The treatment group was comprised entirely of special education majors; the control group of non-special education majors. This mismatch, a necessity in the professional context at hand, will be listed and discussed as a limitation of the study. The invitations to participate in the study (Appendices L, M, and
O) were designed to appeal to the candidate’s sense of altruism (S. C. Cook, Godiwalla, Brooks, Powers, & John, 2010), asking them to help our university make its course offerings relevant, meaningful, and useful for future cohorts. No participants from either the treatment or control group dropped out of the study.

Data Collection

Figure 4.2. Causal diagram depicting increases in teacher efficacy through CIEBS course modules

Measures

Teacher Sense of Self-Efficacy for Classroom Management (TSSE-CM).

The CIEBS course’s theoretical alignment with Bandura’s (1977, 1997) theory of self-efficacy (Figure 4.2, a duplicate of Figure 3.2) is not sufficient to determine whether the course does, in fact, improve teachers’ efficacy. For this reason, a measure of the
respondents’ teacher efficacy for classroom management was completed before and after
the course. Beginning with Gibson and Dembo (1984), several measures have been used
to assess teacher efficacy. Recently, the Ohio State Teacher Sense of Self-Efficacy Scale
(TSSE) has been recognized as the gold standard among various teacher efficacy
assessment tools (Duffin, French, & Patrick, 2012). The TSSE may be measured either as
an aggregate, 24-item score, or by its three, eight-item subscales: teacher efficacy for
instructional strategies, teacher efficacy for student engagement, and teacher efficacy for
consists of the aggregate TSSE, with the eight items included for the TSSE-CM
highlighted. On the TSSE, respondents answer a series of 24 questions (e.g., How much
can you do to control disruptive behavior in the classroom?), using a nine-point Likert
scale, with each odd number labeled with a possible answer and each even numbered
choice providing an “in-between” option among the odd-numbered choices. Odd-
numbered choices are labeled (1) Nothing, (3) Very Little, (5) Some Influence, (7) Quite
a Bit and (9) A Great Deal.

From its inception, the TSSE has been used with pre-service teachers (PSTs) and
in-service teachers alike (Tschannen-Moran & Hoy, 2001). Pajares (1996) found that
teacher efficacy is malleable early among teachers, but becomes rigid once established.
Thus, the pre-service period is an important stage for teacher efficacy. As Duffin et al.
(2012) remark:

The quality of teacher education programs, which provide instructional
opportunities, experiential teaching activities, feedback, and effective models for
PSTs, play an important role in the establishment of pre-service teacher efficacy
beliefs. Therefore, monitoring pre-service teacher education programs to act upon
the findings and create learning opportunities for pre-service teachers that will
build the knowledge, skill, and efficacy beliefs necessary to be successful
practitioners in the field upon program completion. (p. 829)

While a confirmatory factor analysis (CFA) found that teacher efficacy is
reflective of teaching practice even among PSTs, the CFA’s tri-dimensional probe did not
find unique results across the TSSE’s three dimensions among PSTs (Duffin et al., 2012).
This finding suggests that the aggregated, 24-item teacher efficacy scale may be more
sensitive to change from the CIEBS course than any one of the three disaggregated sub-
weights. Nevertheless, the TSSE for classroom management (TSSE-CM) has been selected
for analysis. The rationale for this decision is that the CIEBS course is most likely to
influence skills for classroom management; it follows that this construct would be most
sensitive to change stemming from this course. Even though TSSE-CM is the
predetermined variable of interest, the entire 24-item scale was completed by
respondents; the other two subscales and the broader aggregate TSSE scores were also
calculated for all participants. In addition to analyzing changes in TSSE-CM, it is also
important to evaluate whether general teaching efficacy or the other subscales (efficacy in
student engagement and efficacy in instructional strategies) change.

**Teachers’ Preparedness in Dealing with their Students’ Stress (TPDSS).** The
TSSE-CM is an incomplete tool for evaluating the impact of the CIEBS course, because
the course is not only focused on improving classroom management skills, but in
enhancing a PST’s ability to provide social and emotional learning supports more
broadly. For this reason, an abridged version of the TPDSS (Onchwari, 2010) was used to
measure how the course participants felt about managing student behavior before and after the course. The portion of the TPDSS that is being adapted for the present evaluation is a 55-item, Likert-style questionnaire, with items that ask the respondents to rank their perceptions of their own ability to help students manage a hypothetical student’s stressful situation. The 55 items are categorized between “family related stressors” (e.g., death of a parent), “school-related stressors” (e.g., change in peer acceptance), and “society related stressors” (e.g., jail sentence of parent). Unlike the TSSE, the TPDSS assessment has not undergone the rigorous scrutiny and construct validation. For this reason, the researcher has adapted the TPDSS scale, synthesizing the 55 items into eight general categories, while keeping the five Likert-style descriptions provided in the original publication. (See Appendix S for the original, and Appendix T for adapted version). For example, the five family-loss related items in Onchwari (2010) (death of a sibling, death of a parent, death of a pet, separation of parents, divorce of parents) were combined to one item titled, “family-loss related stressors.” Such synthesis is helpful for two reasons. First, the briefer questionnaire provides for a less burdensome assessment for participants. Second, the distinctions provided from one loss to the next are not addressed by the CIEBS course. The general CIEBS principles of creating expectations, incentivizing, empowering, connecting, correcting, and de-escalating do not differentiate between one stressor and another. Responses to categories of stress were sufficiently precise for the present evaluation.

Response to vignettes. Vignettes were provided to both the treatment and control participants. The vignettes described the situation of a student involved in self-injurious behavior that appeared to be related with the student’s home environment (see Appendix
Participants were provided five minutes to write how they would respond to the student described in the vignette.

**Module quizzes.** Appendices F, H, and J contain the module quizzes for the SWPBS, TBRI, and NCI modules respectively. The module quizzes provide mid-course “touchstones:” data that were analyzed to determine whether connections between mastery of module content may relate with changes in teacher efficacy or preparedness for managing student stress. This data provide a richer picture when the case study analyses are conducted for each individual course participant.

**Focus Group Interviews.** At the culmination of the course, participants were invited to discuss the impact of the course on their teaching. In two groups (of four and five participants each), course participants were handed a two-page summary of the course (Appendix E) and the course schedule (Appendix P), and were then asked four questions (Appendix W). The questions solicited the participants’ opinions regarding the course’s usefulness for a broader audience of PSTs (beyond special education PSTs), their opinions about the course’s concepts, methods, and teaching strategies, the class elements that appeared to be most useful, and those elements that were most impactful on the participants’ confidence in managing classrooms and dealing with student stress.

**Individual Interviews.** Immediately following the focus group interviews, and using the same handouts as provided in the focus group interviews (Appendices E and V), course participants were asked two additional questions individually (Appendix X). These questions targeted the qualitative stories behind the two quantitative scales. The questions asked the respondents to tell about the ways their efficacy for managing
behavior and preparedness for dealing with student stress changed over the course of the semester.

Procedure

Data Collection. The researcher proctored the written pre- and post-tests, while another CPCU School of Education faculty member conducted the focus groups and individual interviews. Demographic data—measuring grade point average (GPA), major, number of college credit hours completed, years of experience with students, and years of experience with students from high risk environments—were collected before the pre-test (Appendices Y and Z). At that time, all participants chose pin numbers that were used to ensure confidentiality throughout the data collection process. The control group chose six-digit numbers, while the treatment group chose four-digit numbers. The pin numbers allowed for pre- and post-intervention between-group data to be analyzed with participant confidentiality kept from the researcher/professor. For the treatment group, demographic data, the TSSE, the TPDSS, and vignette responses were collected on the first day of class, before the course syllabus was introduced. Control group participants were given the same measures during the first week of the semester. The post-tests were given during the final week of classes, before final examinations. These post-tests were provided in close proximity to the course in order to reduce or eliminate the possibility that time between treatment and measurement could conflate the study’s findings (Shadish et al., 2002).

Two focus groups and nine one-on-one interviews were convened during the final week of classes. A colleague of the researcher/professor conducted these interviews. Using a colleague to conduct the interviews rather than the student researcher/professor
helped to lessen the social interaction threat to internal validity, decreasing the likelihood that respondents were answering with the reactions of their researcher/professor in mind. Responses to the focus group questions, individual interviews, and vignettes were transcribed through the Scribie.com transcription service (“Scribie Audio/Video Transcription,” 2016), and later coded in Microsoft Word.

After the QUAL/quan between group study data were analyzed, the data for the case studies was then compiled. The case study data relied upon course participant names. For this reason, the confidentiality of the students that had been kept for the between-group comparison was no longer beneficial. The treatment participants’ four-digit pin numbers were utilized to determine which TSSE-CM, TPDSS, and vignette responses belonged with which course participants. This technique allowed the researcher/professor to combine pre- and post-intervention data from the TSSE-CM, the PDSS, and vignettes, with mid-course module quizzes, cooperating teacher interviews, and end-of-course interviews. The audio recordings of interviews were not heard, and the data was not linked with student names until after the semester course grades were conferred. Anonymity was maintained throughout the study (i.e., pseudonyms are used to ensure that course participants are not identifiable by readers of the study).

Data management. TSSE-CM, TPDSS, and vignette responses were written responses. Both pre- and post-intervention versions of these documents were scanned and stored on the researcher/professor’s password protected computer, which is housed in a locked office. Mid-course module quizzes were collected and stored in a locked drawer in the researcher/professor’s desk. Focus group and individual interview data were recorded
on an iPad that is password protected. The audio files were uploaded to the researcher/professor’s password-protected Dropbox account.

**Data Analysis**

**Qualitative Data Coding**

Two different methods were used for the coding required in this evaluation. To analyze the vignette responses, structural coding was employed. Structural coding is useful for applying a topic of inquiry to a set of data (Saldaña, 2013). In the case of the vignette responses, the responses provided clues for determining which aspects of the course come to the participants’ minds. *A priori* coding was used with the following themes, each of which stem from the three classroom-based modules: *positive expectations, incentives, behavior assessment* (from SWPBS); *empowering, connecting, correcting, IDEAL response* (from TBRI); *de-escalating, Crisis Development Model, the Verbal Escalation Continuum, and the COPING Model* (from NCI) and *other potentially helpful responses*.

Answers to the focus group and individual questions were coded using two grounded theory methods: initial and secondary level coding (Saldaña, 2013). Initial coding involves “breaking down qualitative data into discrete parts, closely examining them, and comparing them for similarities and differences” (Saldaña, 2013, p. 100). This process was used to compile a large number of codes. Secondary coding was then employed to analyze the large number of codes, synthesizing and re-organizing these data to determine which themes arise.
**Statistical Tests**

Two sample (or independent sample) t-tests were used to determine whether the treatment group achieved higher teacher efficacy for classroom management (TSSE-CM), or higher preparedness in dealing with student stress (TPDSS) from pre-test to post-test. The anticipated effect size for the present study was .80: a large effect size for social science research (Lipsey et al., 2012). This conjecture was based on two studies that found similar effect sizes using teacher efficacy as a dependent variable. Kelm and McIntosh (2012) found that teachers at schools where SWPBS was disseminated through training and implemented for one year had greater efficacy than teachers in similar, non-SWPBS schools. Johnbull, Hardiman, and Rinne (2013) studied the impact of teaching 27 in-service teachers utilizing the Brain-Targeted Teaching model, the first component of which addresses the emotional climate of learning (Hardiman, 2012). Large (> .80) effect sizes were found in each case.

While both studies address in-service rather than pre-service teachers, their findings of large effect sizes are relevant for the CIEBS evaluation for three reasons. First, there are no studies that address changes in pre-service teacher efficacy resultant from SEL training; in-service teacher training is the closest comparison. Second, the training content in the two studies (SWPBS and Brain Targeted Teaching) is similar to the SWPBS and TBRI modules. Finally, efficacy among pre-service teachers is more malleable than among in-service teachers (Duffin et al., 2012; Hoy & Spero, 2005), meaning that the trainings in the CIEBS course may have even more of an impact in a pre-service college course than in an in-service professional development program.
The anticipated effect size (> .80) fits well for a study with few participants. With a power of .80 (making the likelihood of Type II error four times that of Type I error (Lipsey, 1998)), 15 treatment participants would have been needed for a two-tailed test to detect a difference from pre- and post-intervention. While only nine participants enrolled in the course, the statistical analyses conducted are useful in establishing the testing procedure that may produce statistically significant findings if this study is to be replicated with larger sample sizes. Several factors could threaten the power of this study. Lessening effect size would increase the needed sample size. A medium effect size (.50) would require 34 participants, while a small effect size (.20) would require 199 participants. A two-group without a pre-/post measure instead of matched pairs would require 170 participants. For this reason, it is imperative that the study use pre-post data. A larger sample would enhance the study’s sensitivity. However, a larger study is not feasible given the limitations in place at CPCU.

**Process Evaluation**

In addition to the outcome evaluation discussed above, the process of the implementation must also be evaluated (Rossi, Lipsey, & Freeman, 2003). The process evaluation question will ask, “Is the CIEBS course implemented in a manner that is likely to impact PSTs’ knowledge and ability to provide SEL support?” This question is reasonable and appropriate (Rossi et al., 2003), as it evaluates only the implementation of the course, rather than a component of the course (inappropriately narrow), or of the teacher training program in its entirety (inappropriately broad). As fidelity indicators delineated below describe, the question is also answerable, practical, and measurable.
Fidelity of Implementation for Evaluation. Fidelity may be defined as the extent to which actual program implementation matches intended program implementation (Century, Rudnick, & Freeman, 2010). For a semester-long course, there are many possibilities for the fidelity of implementation to “drift” from its initial design. The logic model (figure 4.1) contains components which may not be implemented as intended, or which may drift over time. Because the activities from each of the four course modules are already designed, the area of concern for fidelity is within the students’ participation and in the researcher/professor’s implementation.

For CIEBS, fidelity is conceptualized as the extent to which each of the five implementation fidelity indicators achieve high fidelity implementation; that is, the extent to which drift is avoided. These indicators are undergirded by three broader concepts identified by Dusenbury, Brannigan, Falco, and Hansen (2003): participant responsiveness, program adherence, and dose. Evaluating the quality of each of the indicators of process fidelity will provide a pathway to examine the ways which the program is implemented as planned, ruling out a Type III error (Dusenbury et al., 2003). Short term outcomes of the logic model showing strong acceptability and growth in PSTs’ knowledge and perceived skills will ultimately be uninteresting if one cannot “rule in” the possibility that the treatment itself may have been the change agent.

In addition, program implementation data overlaid onto the logic model may provide clues for how to accurately interpret short-term outcome data (Holliday, 2014). As the study will not be a randomized control trial, experimental control will not build probabilistic assurances that differences in outcomes are not due to treatment effects. For this reason, rival explanations for participant growth cannot be entirely discounted.
(Leviton & Lipsey, 2007). However, fidelity of implementation does pave the way for the arrows in the theory of treatment to traverse from inputs, through the CIEBS course “black box” to expected outputs in a reasonable, if not entirely conclusive way.

In four of the five fidelity indicators, measures of high fidelity, low fidelity, and unacceptable fidelity have been assigned. High fidelity for each of the program components means that a course’s procedures were enacted ideally, or nearly ideally. Low fidelity status indicates that a component is not enacted as it was intended, but that the participant’s data may still be useful to the study. The unacceptable fidelity category was also added, as it is possible that procedures may go wrong. This final category will help to evaluate whether participants should be eliminated from the evaluation study altogether, or whether some course modules are presented with more or less fidelity than others.

**Indicators of Fidelity of Implementation.** The five indicators of treatment fidelity outlined below are related to the logic model presented previously (Figure 4.1). The five indicators found in the process data collection matrix (Table 4.3) are the same five “participation” outputs from the logic model. If any indicators were to match the criteria for unacceptable fidelity, this will indicate that the process of the course itself may not have been implemented with fidelity. These indicators provide a baseline level of acceptability for the inputs (completion of the four course modules). With these indicators in place, a standard for the many ways that “drift” or low fidelity may occur is set.
### Table 4.3

*Process Fidelity Indicators*

<table>
<thead>
<tr>
<th>Fidelity Indicator</th>
<th>Data Source(s)</th>
<th>Data Collection Tool</th>
<th>Frequency</th>
<th>Responsibility</th>
<th>High Fidelity</th>
<th>Low Fidelity</th>
<th>Unacceptable Fidelity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurate completion of skeleton notes</td>
<td>Skeleton notes</td>
<td>Skeleton notes</td>
<td>2x per week (every class session)</td>
<td>Teacher assistant</td>
<td>81 -100% accuracy</td>
<td>60 – 80% accuracy</td>
<td>&lt;60% accuracy</td>
</tr>
<tr>
<td>Homework readings/ assignments completed</td>
<td>Students self-reported data</td>
<td>Readings completion chart</td>
<td>Every class session for which readings are assigned</td>
<td>Students/ Teacher Assistant</td>
<td>81 -100% completion</td>
<td>60 – 80% completion</td>
<td>&lt;60% completion</td>
</tr>
<tr>
<td>Class attendance</td>
<td>Daily head count</td>
<td>Attendance Chart</td>
<td>2x per week (every class session)</td>
<td>Teacher Assistant</td>
<td>2, 1, or 0 absences</td>
<td>3 or 4 absences</td>
<td>&gt;3 absences</td>
</tr>
<tr>
<td>Class sessions implemented as intended</td>
<td>Professor’s self-reported data</td>
<td>Professor’s session reflection sheet</td>
<td>2x per week (every class session)</td>
<td>Professor</td>
<td>1 or 0 deviant sessions per module</td>
<td>2 or 3 significantly deviant sessions per module</td>
<td>&gt;3 significantly deviant sessions per module</td>
</tr>
<tr>
<td>Successful completion of field placement hours</td>
<td>Field Placement time sheet</td>
<td>Field Placement time sheet</td>
<td>≥ 20 hours, as arranged by student</td>
<td>Students</td>
<td>20+ hours</td>
<td>&lt;20 hours</td>
<td></td>
</tr>
</tbody>
</table>

*Accurate completion of skeleton notes.* Skeleton note pages (Klemm, 1976) will demonstrate the percentage of the in-class notes students have correctly completed. Two of the three classroom-based modules consist of in-class notes. The skeleton notes for the eight-session TBRI module were created by the researcher/professor, and have already been read and approved by the TBRI’s publishers (Call, 2016). The skeleton notes from the eight-session NCI module come from the program’s published materials (*Nonviolent Crisis Intervention Foundation Course Instructor Guide*, 2015). The researcher/professor collected and evaluated skeleton notes after the culmination of the TBRI and NCI modules. Skeleton note completion data goes a step beyond analyzing attendance data,
allowing the researcher/professor to determine that the students who are sitting in the class are, in fact, engaged in the lectures, videos, and discussions (Klemm, 1976). The skeleton notes also provide data about those students who did not receive the intervention as intended. For these students, the course has been implemented with high (>80% correct annotations), low (60-80% correct), or unacceptable (<60% correct) fidelity.

**Homework readings/assignments completed.** In order for the course participants to receive the full measure of CIEBS course “treatment,” they will need to complete required class preparation assignments. This involves reading peer-reviewed journal articles and textbook chapters, watching videos, and listening to one audio podcast episode. For the readings/assignments fidelity indicator, a formula was used to determine fidelity. Half of the score was derived from students’ self-reported “completion of homework assignments” sheet, and the other half came from the percentage of the assigned “Connected Child” study guides the students completed within the TBRI module. The benchmarks used for completion of skeleton notes applied to homework/reading assignments: **high** (>80% complete assignments), **low** (60-80% complete), or **unacceptable** (<60% complete) fidelity.

**Class attendance.** Attendance is conceptualized as an indicator of intervention participants’ engagement (e.g., Budd, Garbacz, & Carter, 2015). For this reason, attendance will provide another measure of process fidelity. An attendance sheet (which also contains readings/assignments data) was gathered and confirmed by all course participants at the course’s culmination. Those participants who had two or fewer absences were **high fidelity** attendees; those with three or four absences, **low fidelity** attendees. Those with greater than four absences had **unacceptable fidelity** levels.
Class sessions implemented as intended. Each of the course’s 30 sessions was planned before the semester began. If the course implementation would have deviated from the planned session substantially, the course sessions will not have been implemented with fidelity, jeopardizing the fidelity of the intervention as a whole. To evaluate this indicator, the researcher/professor answered yes/no to the following question at the end of each class session: “Did 90% of the class’s planned instruction occur?” This data was recorded in the course binder, next to the class session’s description. One or zero “no” responses per module signified high fidelity, two-to-three “no” answers signified low fidelity, and greater than three “no” answers signified unacceptable fidelity.

Successful completion of field placement hours. During field placement, participants shadowed a special education CT, observing and engaging in hands-on participation. Those candidates who completed 20 or more field placement hours (as indicated by their field placement timesheet) completed this portion with high fidelity, while those who complete fewer than 20 hours failed to attain an acceptable level of fidelity. Placement timesheets were due for submission on the last day of class.

Summary Matrix

A matrix that shows all of the above-described data points combined onto one graphic is included as Table 4.4. The data collected include two quantitative measures, the qualitative vignette responses, the end-of-course focus groups, the cooperating teacher interviews, the individual interviews with all course participants, and the mid-course quizzes on each of the three classroom-based modules.
### Table 4.4 Data Collection Summary Matrix

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Role of Indicator</th>
<th>Data Source(s)</th>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years working with children and youth in professional setting</td>
<td>Demographic data</td>
<td>Treatment and control group</td>
<td>One time – before the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Prior experience working with students from high risk environments</td>
<td>Demographic data</td>
<td>Treatment and control group</td>
<td>One time – before the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Major (special education or general education)</td>
<td>Demographic data</td>
<td>Treatment and control group</td>
<td>One time – before the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Number of credit hours completed</td>
<td>Demographic data</td>
<td>Treatment and control group</td>
<td>One time – before the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Grade point average</td>
<td>Demographic data</td>
<td>Treatment and control group</td>
<td>One time – before the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Teachers’ Preparedness in Dealing with their Students’ Stress (TPDSS)</td>
<td>Quantitative</td>
<td>Treatment and control group</td>
<td>Two times – before and after the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>(Scale adapted from Onchwari, 2010)</td>
<td></td>
<td>(Scale adapted from Onchwari, 2010)</td>
<td>Two times – before and after the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Vignette responses</td>
<td>Qualitative</td>
<td>Treatment and control group</td>
<td>Two times – before and after the course</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>Focus Group Responses</td>
<td>Qualitative</td>
<td>Treatment group</td>
<td>One time – after the course</td>
<td>Research colleague</td>
</tr>
<tr>
<td>Individual Interviews</td>
<td>Qualitative</td>
<td>Treatment group</td>
<td>One time – after the course</td>
<td>Research colleague</td>
</tr>
<tr>
<td>Cooperating Teacher Interviews</td>
<td>Qualitative</td>
<td>Cooperating teachers of Treatment Group</td>
<td>One time – at the midway point of the</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>SWPBS module quiz</td>
<td>Mediating variable</td>
<td>Treatment group</td>
<td>One time – after SWPBS module</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>TBRI module quiz</td>
<td>Mediating variable</td>
<td>Treatment group</td>
<td>One time – after TBRI module</td>
<td>Professor/Researcher</td>
</tr>
<tr>
<td>NCI module quiz</td>
<td>Mediating variable</td>
<td>Treatment group</td>
<td>One time – after NCI module</td>
<td>Professor/Researcher</td>
</tr>
</tbody>
</table>
Audience

This evaluation will be useful for other teacher education programs. While the calls for enhancement of SEL training from IHEs is strong (e.g., Bridgeland et al., 2013; Jennings & Greenberg, 2009; Schonert-Reichl et al., 2015), there is a paucity of research on the type of course that may serve to improve this training. Soloway (2011) explored the impact of a mindfulness-based stand-alone course, while Waajid et al. (2013) explored the benefits of embedding mindfulness training into pre-existing courses. The present study, utilizing the CIEBS course, evaluated a different type of SEL training: a semester-long course dedicated to three discreet SEL approaches. The present study will provide additional guidance for IHEs as they consider various options for enhancing SEL training for PSTs.

The evaluation will also be of interest for policy makers or accreditation bodies charged with adjusting teacher preparation standards to reflect schools’ needs. With large numbers of our nation’s students coming from high risk environments (Bethell et al., 2014), calls have been made for accreditation bodies to pressure IHEs to enhance their provision of SEL training for PSTs (e.g., Waajid et al., 2013). Depending on its findings, the present study may join with similar studies to inform policymakers while they are determining whether there is reason to believe that such an enhancement holds promise to benefit pre-service teachers.

The study may also be of interest to the authors and publishers of the three classroom-based modules: SWPBS, TBRI, and NCI. Despite the wide body of research on SWPBS in K-12 schools, there is little research on the impact of training PSTs in its use. (Hill and Flores's (2014) study on using a token economy system to incentivize PSTs
to use PBIS among K-12 students is one exception). While TBRI is being used in teacher training, its impact has not yet been studied among PSTs. In the same way, the impact of NCI has not been studied among PSTs. The authors and researchers who have studied these programs will likely read the between-group qualitative and quantitative comparisons and the individual case studies with interest.

Ultimately, this evaluation may be used by Central Plains Christian University (CPCU) School of Education administrators and faculty to determine whether and how CIEBS may be expanded for the university’s other pre-service teachers in future semesters. The target audience for the present study consists of the CPCU vice president of academic affairs, the School of Education dean, as well as the other School of Education faculty members. Each of these stakeholders desires to know how their teacher education candidates perceive the importance of SEL and their own abilities to provide SEL support. Collectively, these stakeholders have the authority to advance the change of course offerings to match changing program needs. At CPCU, the process of changing required course offerings is democratic and collegial. Changes to graduation requirements require that alterations be supported by research that then is included in the conversations that must precede any programmatic changes. These programmatic changes can come through changes in standards from the Illinois State Board of Education, changes accreditation in requirements from the Council for the Accreditation of Educator Preparation (CAEP), or the internal recognition of a need to stay “up to date” with educational trends as expressed through ongoing research or stakeholder feedback.
V. Findings

This chapter provides the findings from the evaluation of the CIEBS course that was offered at CPCU during the fall 2016 semester. The first section provides demographic data for the treatment group of course participants, the control group, and the cooperating teachers who supervised the course participants. The second section provides findings from both quantitative and qualitative sources that were used to make comparisons between the treatment and control groups. Individual case studies for each of the nine course participants comprise the third section. The fourth section discusses social validity data, expanding upon the social validity already established in Chapter III. Process implementation fidelity and its measurement are described in the fifth section. A discussion of the study’s overarching themes, including answers to the four research questions, implications, and limitations concludes the chapter.

Demographic Data

Pre-service Teachers

All participants in the study had been admitted into the CPCU teacher education program, which requires that the candidates achieve a 2.50 grade point average (GPA) in 30 or more credit hours, an ACT (or equivalent alternate test) score of 22 or better, and a passing grade (of C or better) in five education courses, one mathematics course, and one college writing course. The treatment group (n=9) consisted entirely of junior and senior special education majors who were currently enrolled in the CIEBS course, and were taking the course as a graduation requirement. The control group (n=15) consisted of majors in elementary education (n=6), math education (n =4), social science education (n =2), music education (n =1), English education (n =1) and science education (n =1).
Table 5.1
Demographic Means and Medians for Treatment and Control Participants

<table>
<thead>
<tr>
<th></th>
<th>Number of credit hours</th>
<th>GPA</th>
<th>Years working with children/youth</th>
<th>Years working with high risk children/youth</th>
<th>TPDSS</th>
<th>TSSE-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>Mean</td>
<td>78</td>
<td>3.53</td>
<td>5.33</td>
<td>2.67</td>
<td>5.97</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>70</td>
<td>3.45</td>
<td>4</td>
<td>0</td>
<td>5.5</td>
</tr>
<tr>
<td>Control</td>
<td>Mean</td>
<td>96.7</td>
<td>3.73</td>
<td>2.6</td>
<td>1.6</td>
<td>6.18</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>100</td>
<td>3.80</td>
<td>2</td>
<td>1</td>
<td>6.25</td>
</tr>
</tbody>
</table>

Note: GPA = Grade point average on a 4.0 scale; TSSE-CM = Teacher Sense of Self-efficacy for Classroom Management; TPDSS = Teachers’ Preparedness in Dealing with their Students’ Stress

Table 5.1 provides mean scores from demographic data for all evaluation participants. Credit hours completed for the special education major treatment group ranged from 63 to 102 (mean (µ) = 78; median = 70); while the control group ranged from 60 to 150 (µ =96.7; median = 100). The GPAs of the treatment group ranged from 3.20 to 4.00 (µ = 3.53; median = 3.45), while those of the control group ranged from 3.20 to 3.98 (µ =3.73; median = 3.80).

Experience working with children was measured in two ways. The first was a response to the prompt “Number of years working with children and youth in a professional setting.” “Professional setting” was defined as a setting where the individual is paid for working, including summer jobs and babysitting. Among individuals in the treatment group, the number of years working with children and youth in a professional setting ranged from 2 to 12 (µ = 5.33; median = 4), while the number of years for those individuals in the control group ranged from 0 to 8 (µ = 2.6; median = 2). The second experience indicator was gauged through responses to the prompt, “Number of years working with students from high risk environments.” To clarify the definition of “high
risk,” the “cumulative risk” components provided by Gutman, Sameroff, and Eccles (2002) were provided as referents. Children and youth from risk environments experience two or more of the following: low income, high numbers of family stressful events, high percentage of neighborhood poverty, high percentage of neighborhood welfare receipt, high percentage of female heads of household, low maternal education, maternal depression, mothers who are not married, high numbers of family stressful events.

Experience with high-risk children and youth among individuals in the treatment group ranged from 0 to 12 years (µ = 2.67; median = 0). The size of the gap between mean and median for working with students from high-risk environments is explained by skewed data. One course participant had worked in a local low-income high school for 12 years as an administrative assistant, while five participants had zero years of experience working with high-risk children/youth. Experience levels for the control group ranged from zero to five years (µ = 1.6; median = 1).

As described in Chapter V, the data collected for TSSE-CM and the TPDSS was utilized in selecting a control group that would provide a statistical match with the treatment group. The covariates used in the analysis were the results of the Teachers’ Preparedness in Dealing with their Students’ Stress (TPDSS) and Teacher Sense of Self Efficacy for Classroom Management (TSSE-CM) scales. The mean scores for the TPDSS for the treatment group was 5.97 (out of 9 possible points), while the mean scores for the control group was 6.18. The treatment group averaged 5.97 (also out of 9 possible points), on the TPDSS, while control group averaged 6.62. (Table 5.2 provides pre-intervention data for the all three subscales of the TSSE, the TSSE aggregate, the TPDSS, as well as a score combining the TSSE-CM and the TPDSS). The VAAC design calls for
the selection of a group of control participants that match the treatment group of the
selected covariate. However, because the treatment and control pre-test measures for the
TSSE-CM and the TPDSS were so similar, and because of the possibility of attrition
from control participants, the researcher/professor determined it beneficial to include all
control participants in the study rather than selecting a narrower group that could provide
an even closer between-group statistical match.

Table 5.2

<table>
<thead>
<tr>
<th></th>
<th>TPDSS</th>
<th>TSSE-CM</th>
<th>TSSE-SE</th>
<th>TSSE-IS</th>
<th>TSSE-Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(n=9)</em></td>
<td>5.97</td>
<td>5.97</td>
<td>6.21</td>
<td>5.99</td>
<td>6.06</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(n=15)</em></td>
<td>6.18</td>
<td>6.62</td>
<td>6.78</td>
<td>6.86</td>
<td>6.75</td>
</tr>
<tr>
<td><strong>Cooperating</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(n = 8)</em></td>
<td>7.34</td>
<td>7.47</td>
<td>6.91</td>
<td>7.50</td>
<td>7.29</td>
</tr>
</tbody>
</table>

*Note:* TPDSS = Teachers’ Preparedness in Dealing with their Students’ Stress TSSE = Teacher Sense of Self-efficacy; CM = Classroom Management IS = Instructional Strategies; SE = Student Engagement

Cooperating Teachers

All of the course participants’ cooperating teachers (CTs) were special educators
with at least five years of experience working in the field of special education. Eight of
the nine CTs consented to participate, while one did not. Seven students worked in
Central School District (CSD); the eighth teacher worked in a neighboring district, but
began her career working in CSD. As such, all eight participating CTs possessed first-
hand experience teaching students with disabilities who also were from high-risk home
environments. The CTs completed the TPDSS and TSSE measures before completing
their interviews. The group-wide scores among CTs are reported in Table 6.2 along with
the participant and control group data, but is not a focus of this study. The individual responses to the TPDSS and TSSE from the eight participating CTs will, however, add an interesting layer onto the individual course participants’ case studies.

**Between-Group Data**

**Quantitative**

The quantitative portion of the study serves to answer RQ1 (*What were the differences between changes in efficacy for classroom management and preparedness for dealing with students’ stress between the treatment and control groups?*). After the semester-long CIEBS course, the group-wide data showed substantial growth in the TSSE-CM and TPDSS scales among the treatment group, and little observable change among the control group (See Table 5.3). Independent-samples t-tests were conducted, determining that the growth of the treatment group was statistically significant in both measures. The treatment group’s mean TPDSS score increased from 5.97 (out of 9) before the intervention, to 7.42 after the intervention, a statistically significant increase (*p* < .05). During that time, the control group mean increased from 6.18 to 6.27. The effect size—calculated using *Cohen’s d* formula—was 1.18. Being greater than .8, this was a large effect (Lipsey et al., 2012). The treatment TSSE-CM score increased from 5.97 (out of 9) before the intervention, to 7.74 (*p* < .001). During that time, the control group mean increased from 6.62 to 6.88. The effect size for the TSSE-CM scale (1.7) was also large.

In addition to the TSSE-CM, the evaluation also gathered data on the other teacher efficacy scales measured within the TSSE: teacher efficacy for instructional strategies (TSSE-IS), teacher efficacy for student engagement (TSSE-SE), and the
aggregate TSSE measure, which combines all three subscales. The data presented in Table 6.3 demonstrates statistically significant growth for the treatment group on the TSSE-SE ($p<.05$), the TSSE-IS ($p<.01$), as well as the aggregate TSSE ($p<.01$). There was also statistically significant growth among the control group in TSSE-IS ($p<.01$), a finding that is likely explained by the control group’s enrollment in teacher education courses that are focused on equipping participants with skills in instructional strategies. The effect sizes were large in all five of the quantitative measures. An analysis of the meaning of the statistically significant growth and large effect sizes is provided in the forthcoming “discussion” section.
Table 5.3
Pre- and Post-intervention Means and Standard Deviations for Teachers’ Preparedness for Dealing with Student Stress and Teacher Efficacy Scales

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment (n=9)</th>
<th>Control (n=15)</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Intervention</td>
<td>Post-Intervention</td>
<td>Pre-Intervention</td>
</tr>
<tr>
<td>TPDSS</td>
<td>5.97 (1.18)</td>
<td>7.42 (1.05)*</td>
<td>6.18 (.99)</td>
</tr>
<tr>
<td>TSSE-CM</td>
<td>5.97 (.99)</td>
<td>7.74 (.59)***</td>
<td>6.62 (1.15)</td>
</tr>
<tr>
<td>TSSE-SE</td>
<td>6.21 (1.40)</td>
<td>7.46 (.71)*</td>
<td>6.78 (.43)</td>
</tr>
<tr>
<td>TSSE-IS</td>
<td>5.99 (1.15)</td>
<td>7.78 (.59)**</td>
<td>6.86 (.72)</td>
</tr>
<tr>
<td>TSSE-Aggregate</td>
<td>6.06 (1.11)</td>
<td>7.66 (.59)**</td>
<td>6.75 (.67)</td>
</tr>
</tbody>
</table>

Note: Standard deviations reported in parentheses. TPDSS = Teachers’ Preparedness in Dealing with their Students’ Stress TSSE = Teacher Sense of Self-efficacy; CM = Classroom Management IS = Instructional Strategies; SE = Student Engagement (*p<.05; **p<.01; ***p<.001 for independent samples t test)

Qualitative

Vignettes

Vignette responses were used to provide insight into RQ2 (In what ways were the participants’ knowledge of SEL techniques impacted through the course?). Both before and after the semester, all participants were asked to read a vignette of a student named “Nancy” who exhibited self-injurious behavior (Appendix A), and were provided five minutes to write how they would respond to this student. Structural coding (Saldaña, 2013) was used to determine which SEL approaches came to the participants’ minds upon reading the vignettes. The themes sought coincided with the three classroom-based modules: positive expectations, incentives, behavior assessment (from SWPBS); empowering, connecting, correcting, IDEAL response (from TBRI); and de-escalating, Crisis Development Model, the Verbal Escalation Continuum, and the COPING Model
(from NCI). A final category—other potentially helpful responses—was used to collect candidates’ useful SEL ideas that did not fit within the three classroom-based modules. The other potentially helpful responses provided by respondents fell within four subcategories: “collaboration/get help,” “remain calm as the teacher,” “ensure safety of other students,” and “remove harmful objects.”

The data in Table 5.4 demonstrates the stagnancy in the number of ideas recorded among the control group from before and after the semester, along with a drastic increase in ideas recorded by the treatment group. All 15 control participants began the semester by reading the vignette and collectively recording three ideas related to SWPBS (.2 per respondent), five related to TBRI (.33), one related to NCI (.07), and 13 other potentially helpful responses (.87). The total number of ideas generated by the control group before the semester was 22, or 1.47 helpful SEL responses per participant. Post-semester vignette responses were similar. Collectively, the group wrote zero ideas related to SWPBS, zero related to TBRI, one related to NCI (.07), and 17 “other potentially helpful responses” (1.13). The total number of ideas generated by the control group after the semester was 18, or 1.2 helpful SEL responses per participant.
Table 5.4
Pre- and Post-intervention vignette responses: Numbers of SEL responses, and SEL responses per participant

<table>
<thead>
<tr>
<th></th>
<th>Control Pre-Intervention (n =15)</th>
<th>Control Post-Intervention (n =15)</th>
<th>Treatment Pre-Intervention (n=9)</th>
<th>Treatment Post-Intervention (n=9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWPBS</td>
<td>3 (.2)</td>
<td>0 (0)</td>
<td>3 (.33)</td>
<td>3 (.33)</td>
</tr>
<tr>
<td>TBRI</td>
<td>5 (.33)</td>
<td>0 (0)</td>
<td>3 (.33)</td>
<td>13 (1.44)</td>
</tr>
<tr>
<td>NCI</td>
<td>1 (.07)</td>
<td>1 (.07)</td>
<td>2 (.22)</td>
<td>11 (1.22)</td>
</tr>
<tr>
<td>Other potentially helpful response</td>
<td>13 (.87)</td>
<td>17 (1.13)</td>
<td>10 (1.11)</td>
<td>3 (.33)</td>
</tr>
<tr>
<td>Total</td>
<td>22 (1.47)</td>
<td>18 (1.2)</td>
<td>18 (2)</td>
<td>30 (3.33)</td>
</tr>
</tbody>
</table>

Note: SEL responses per participant in parentheses. SEL = Social and Emotional Learning; SWPBS=Schoolwide Positive Behavior Supports; TBRI = Trust Based Relational Intervention; NCI = Non-violent Crisis Intervention

Pre-semester responses from the treatment group were similar to the control group. The nine treatment participants began the semester by reading the vignette and collectively recording three ideas related to SWPBS (.33 per respondent), three related to TBRI (.33), two related to NCI (.22), and 10 other potentially helpful responses (1.11). The total number of ideas generated by the control group before the semester was 18, or two helpful SEL responses per participant. Post-intervention number responses for SWPBS remained at three. The number of TBRI responses increased from three (.33 per respondent) to 13 (1.44), while the number of NCI responses increased from two (.22) to 11 (1.22). The number of “other potentially helpful responses” decreased from 10 (1.11) to three (.33). The total number of responses increased from 18 (2) to 30 (3.33). Before the intervention, 44% (eight out of 18) treatment group responses were aligned with one of the three classroom-based modules. After taking the CIEBS course, this figure rose to 90% (27 out of 30). The total number of responses also rose from 18 to 30, a 67%
increase. During this time frame, the control group’s number of total helpful SEL responses decreased from 22 to 18.

In addition to the number of SEL responses provided by participants, there was a change in the nature of the responses. The three assessment groups with lower numbers of responses (i.e., both pre-semester groups, and the post-semester control group) shared one commonality: analysis of the self-abusive student within the vignette. By contrast, the post-intervention treatment group spent less time analyzing the student in the vignette and more time offering ideas for ways they would intervene. For example, in the pre-intervention vignette response one candidate stated, “Maybe she is banging her head on the desk because the root of her behavioral problem is a home issue and she brought it to school with her.” By contrast, the same candidate’s post-intervention vignette response included four positive SEL responses, but zero guesses about the reasons for her behavior. Another hypothesized about the sources behind Nancy’s behavior in both responses, but his post-intervention responses showed the signs of having learned the process of functional behavior assessment through SWPBS Tier III, rather than simply guessing about Nancy’s history.

In the control group, and in the pre-intervention treatment group, the responses were general and passive. In fact, of the 10 other potentially helpful response offered by pre-semester treatment group, five fell within the “collaboration/get help” subcategory. After the semester, three other potentially helpful responses were offered by the treatment group, and zero fit within “collaboration/get help.” The sharp decrease in the number of times the treatment group offered that they would seek outside help indicates that these participants became more autonomous and certain in their vignette responses.
They also became more certain and precise. Many students offered exact words that came from the modules. One candidate wrote, “Be direct. Use short instructional phrases,” which aligns with the TBRI IDEAL (i.e., immediate, direct, efficient, action-based, and leveled at behaviors) response. Another candidate wrote, “A further behavior plan will be discussed with parents, teachers, administration, and with Nancy,” an indication that this candidate envisioned the process of implementing the BIP component of SWPBS Tier III). Another candidate stated, “Once calmed down, it would be important to begin therapeutic rapport, showing Nancy your concern for her and her behavior,” suggestions that come nearly directly from the NCI module. Specific comments like these—that issued directly from the wordings of the three CIEBS classroom-based modules—are found throughout the treatment’s post-intervention vignette responses.

**Focus group.** The focus group responses partially answer RQ2 (In what ways were the participants’ knowledge of SEL techniques impacted through the course?), RQ3 (Which elements of the CIEBS course impacted PSTs’ knowledge and sense of preparedness to handle student stress?), and RQ4 (To what experiences do individual course participants attribute their changes in teacher efficacy for managing the classroom and sense of preparedness for handling student stress?). In the class session before the final examination, participants were invited to discuss the impact of the course on their teaching. In two groups (of four and five class participants each), the class members were given a two-page summary of the course (Appendix B) and the course schedule (Appendix C), and were then asked four questions (Appendix D).
The focus group interview responses provided a window into the reasons why participants’ preparedness for dealing with student stress and efficacy for classroom management increased over the course of the fall 2016 semester. The questions solicited the participants’ opinions regarding the course’s usefulness for a broader audience of PSTs (beyond special education PSTs), their opinions about the course’s concepts, methods, and teaching strategies, the class elements that appeared to be most useful, and those elements that were most impactful on the participants’ confidence in managing classrooms and dealing with student stress. Two grounded theory coding methods—initial and secondary coding (Saldaña, 2013)—were used to analyze, organize, and synthesize the themes found in the focus group responses. Themes that arose from the focus group responses are described below. The aggregated themes that arose from the focus group interviews are described in the concluding “Focus Group Conclusion” section. An examination of the focus group themes in light of RQ2, RQ3, and RQ4 is provided in the upcoming “discussion” section.

**Focus Group Question 1.** Which of the following best describes your assessment of the importance of the (CIEBS) course for our candidates? (a) Not important; (b) Vital for Special Education majors and potentially helpful for General Education majors who want additional training in this area to take as an elective; (c) Vital for all Education majors: We should mandate that all Teacher Education majors take this course. Please expound upon your answer.

Of the nine focus group participants, four candidates selected “B,” two chose “C,” two shared that they were “torn between B and C,” and one did not elect to respond. The discussions that followed these selections centered around three themes: the importance
of preparing all teachers for students’ emotional and behavioral needs, the mention of specific course content that would be useful to all teachers, and addressing the challenges of adding a course to general education PSTs’ course requirements.

The foremost theme came from statements about the universal applicability of the CIEBS course for all teachers. Six PSTs’ responses supported a “universal design for learning” (UDL) approach that would provide the class to general education and special education majors alike. The most common rationale for suggesting the course be required or strongly suggested for general education majors came from respondents’ reflections about a general education teacher’s responsibility to care for all students, particularly within the inclusion/co-teaching service delivery model, and that neither presence nor absence of disability categorization predicts whether and how students’ emotional/behavioral needs will arise. One commenter stated,

I'm torn between [B] and [C], because I think that as we move to inclusive classrooms and more students with emotional and behavioral needs are in gen ed. settings, I think there are many general education teachers who don't understand what those needs are, so I'm torn between saying it should be mandated. I think it should be highly encouraged.

Another commenter shared, “Regardless of whether or not you have students with BIPs or IEPs, every student needs to be understood, and that can have a dramatic effect over the classroom.”

The respondent who selected “B,” opined that the course was better suited for special education majors, reasoning that the course was more intense than what general education teachers require. In this respondent’s words,
I think it is really important that there is a separate behavior management class for special ed. and gen ed. just because it doesn't look the same and the population is very different. And while a lot of times, certain behaviors can overlap, I feel like our cases and our children are very different in that sense. So I feel for me, it was very important that I did take a different class than an elementary ed. major just 'cause it looks very different.

A second theme that arose was the mention of specific course content that all general education as well as special education teachers should learn. The respondent who shared that there should be a “separate behavior management class for special ed. and general ed.” later qualified her answer, explaining that the TBRI module should be for all education majors. This view was not shared by all participants. At other points in the discussions following Question 1, respondents voiced opinions that all three classroom-based modules would be beneficial for general education PSTs.

The final theme that came from Question 1 was the complicated nature of adding an additional class to general education pre-service teachers’ required course load. One respondent recognized the balance between desiring that more teachers take the course and recognizing the difficulty of adding additional coursework.

I think it's hard to mandate that class for an Education major, 'cause they're taking other classes too that we don't have to take . . . and so it's hard to say, “You have to take this, you have to put this in your schedule.” But to say . . . “This could you really help you in the classroom in your future. If you have an extra spot for a class, you have to take an elective, this is a pretty good idea because this could dramatically help your teaching in the future [sic].”
**Focus Group Question 2a.** Now that you have completed the CIEBS course, what is your opinion on the course's concepts, methods, and teaching strategies?

All stated opinions were positive. The rationale for the positive opinions varied, but two themes emerged. First, the PSTs shared that the TBRI and NCI modules built upon one another in a way that was helpful for understanding the content and methods of each. In the words of one candidate,

I couldn't really think of anything that was as big and important as what we learned in TBRI, and how TBRI then impacted how we understood NCI. Because non-[^violent] crisis intervention, if you just look at that you're like, “Oh, it's just physical restraints.” But learning about how the brain works that then made sense, “Okay, we need to try to de-escalate in this way,” and how we could use both of those together [sic].

Second, the participants appreciated the emphasis on building relationships: the “connecting” principle of TBRI. Among the other reasons cited for the positive opinions of the course were the appreciation of assignments and activities that used non-traditional teaching modalities (i.e., the emphasis of learning by doing), the chance to learn new and beneficial techniques that would help the participants in their future career, and the power of embedded field experience to reinforce the principles learned through the three classroom-based modules.

**Focus Group Question 2b.** Do you have any suggestions for additions, deletions, or modifications to the course?

The focus group respondents made five suggestions, which did not coalesce around a theme. The first suggestion was that the TBRI module, which uses videos for in-
class instruction, utilize videos portraying older students. Another respondent suggested rearranging the course schedule (Appendix C) so that future candidates will learn more content knowledge from the classroom-based modules before completing their clinical placement hours. A third candidate offered that SWPBS was less impactful than TBRI and NCI, stating that it was a program that was already familiar and in place in area schools. Another suggestion was that the course increase the amount of time spent on NCI, using the full rather than abridged NCI training. A final suggestion was to incorporate social stories and picture exchange systems for providing SEL support to non-verbal students.

**Focus Group Question 3.** *Which elements of the course do you anticipate using as a classroom teacher?*

Three themes emerged as elements that the candidates anticipated using most: the CIEBS course as a whole, TBRI, and NCI. Two respondents laughingly agreed that all of the components were “most useful.” One respondent concurred, “Throughout, I think that we learned a lot of just very simple and maybe obvious ways to help kids, but it's things that I think we totally need to be told, and I will definitely use in my classroom.” An additional respondent shared that they would be comfortable suggesting techniques learned in CIEBS to the schools they enter as novice teachers, “After this course, I feel comfortable enough that I'd be like, ‘Hey, I've seen this used. I've seen a research done. I think this will be really beneficial.’”

Two candidates singled out two of TBRI’s “Connecting” tools—getting on the students’ level, and creating sharing fun experiences—as particularly useful. One candidate named a TBRI corrective strategy: the IDEAL (i.e., immediate, direct,
efficient, action-based, and leveled at behaviors) as a useful alternative to lecturing for misbehavior. Another candidate mentioned understanding the neuroscience of complex trauma as particularly useful. The components of the NCI module discussed as most useful were techniques for de-escalation, the impact of paraverbal communication (i.e., the ways that one’s voice tone, volume, and cadence impacts a communicated message), and the limit-setting approaches (e.g., the “if-then pattern”) taught within the Verbal Communication Unit.

**Question 4.** *Which elements of the course do you perceive impact your own perception of your ability to manage a classroom, or your own perception of your ability to deal with student stress?*

In response to this question, two trends arose, and connected together around one theme. The first trend was the importance of role-playing that occurred in the NCI module. One respondent explained,

One thing that was big for me was just NCI, because one of my biggest fears is just a kid just blowin' up on me and not having any idea what to do. [chuckle] So of us acting it . . . and creating a pretty bad situation for each other helped me a lot because I feel like even if I go my first day and somebody does that, at least I have a background knowledge of . . . how I'm gonna attack it and how I'm gonna perceive it, so that's big for me [sic].

Another respondent made a distinction between desk learning and action-based learning. Considering a student with escalating behavior, the respondent said, “You can learn these things and write down notes, but now here you are and you have to act it out. And that definitely showed me the things that I need to work on.”
The second trend was the importance of the full-day clinical placement modules. One respondent shared,

I said from the get-go that managing a classroom is my biggest fear, especially in a special education setting where you've got so many different needs in one space. That has been my biggest fear. And I feel so much more confident now, having not only the field experiences and being in a classroom setting and having those [full school] days.

This trend is corroborated by one of the suggestions made from Focus Group Question 2b, which recommended that the clinical placement module be moved to later in the semester so that future candidates will learn more content knowledge (about TBRI and NCI) before completing their clinical placement hours.

The theme that connects the acting-out and clinical placement trends is “learning by doing.” Collectively, the candidates revealed their perception that the elements of the course that most impacted their ability to manage a classroom and deal with student stress were activities in the “real world” of K-12 classrooms or in college classroom simulations. In addition to this theme, three other comments were offered regarding the course aspects that most impacted preparedness for student stress and classroom management. One respondent commented that making a class-wide behavior intervention plan (a requirement for the final examination) was most impactful. Another commenter stated that their perceptions of their efficacy for classroom management and preparedness for student stress did not change, but their intervention skills did. Another respondent shared that the overall course was most important, commenting about its “real” nature: “I
feel like this course was so real. Perhaps it didn't sugarcoat anything. It was scary, but also at the same time, I feel so prepared.”

**Focus Group Conclusion.** Overall, candidates reported that the CIEBS course would be useful for both general and special education teachers, because emotional and behavioral needs do not correlate exactly with disability categorization, and because widespread use of inclusion/co-teaching as a service delivery model means that most students receive services in general education settings. At different points in the discussion, the candidates mentioned each of the three of the modules as helpful for general education teacher candidates. However, the focus group participants were also sensitive to the complications involved with adding a course onto the general education candidates’ program course load.

**Individual Case Studies**

A case study for each course participant is here provided in order to examine RQ2 (*In what ways were the participants’ knowledge of SEL techniques impacted through the course?*), RQ3 (*Which elements of the CIEBS course impacted PSTs’ knowledge and sense of preparedness to handle student stress?*), and RQ4 (*To what experiences do individual course participants attribute their changes in teacher efficacy for managing the classroom and sense of preparedness for handling student stress?*). The primary source for the individual case studies was the individual interview data collected at the end of the semester. Immediately following the focus group interviews, a research assistant conducted one-on-one interviews with each of the nine participants, enquiring the story of changes in participants’ efficacy for classroom management and preparedness for dealing with student stress (Appendix E). The quantitative measures
(TSSE and TPDSS data) and vignettes were again analyzed, this time individually rather than collectively. In addition to these data sources, demographic data, interview responses with the participants’ cooperating teachers, and mid-course module quizzes were analyzed in order to provide a more complete picture of the experience of each course participant.

For the purpose of the case studies, pseudonyms have been created for each course participant, with gender-typical pseudonyms being randomized across the group of participants. Steps were taken to obscure participant identity, where possible. For example, demographic and module quiz data are only provided for each candidate generally. That is, rather than providing candidates’ precise scores, number of credit hours completed, GPA, years of experience are described as “above median” or “below median,” while module quiz scores are described as “above mean” or “below mean.” Also, all cooperating teachers are referred to with the pronoun “she,” even though some CT were males. Also, all cooperating teachers are referred to with the pronoun “she,” even though some CT were males.

Table 5.5 provides pre-and post-intervention data for each participant from the quantitative measures. Because TPDSS and TSSE-CM are the focus of the research questions, each of these will be discussed within the narrative of each case study. The aggregate TSSE, TSSE-IS, TSSE-ES are only discussed in select cases. It is important to note that the participating candidates answered the individual interview questions regarding preparedness for student stress and efficacy for classroom management without knowing their TPDSS and TSS-CM scores.
Table 5.5
*TPDSS and TSSE Individual Pre-and Post-Intervention Scores*

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<td>6.88</td>
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<tr>
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<tr>
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</tr>
<tr>
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<td>8.50 (+3)</td>
<td>7.75 (+1.62)</td>
<td>7.88 (+2.63)</td>
<td>8.04 (+2.41)</td>
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*Note:* Change in scores reported in parentheses; TPDSS = Teachers’ Preparedness in Dealing with their Students’ Stress; TSSE = Teacher Sense of Self-efficacy; CM = Classroom Management; SE = Student Engagement; IS = Instructional Strategies

**Allison**

Allison completed her clinical placement with an elementary special education CT, with whom she would complete her student teaching semester the following spring. As such, the fall 2016 semester was the beginning of a year-long relationship between Allison and the CT, rather than an eight-day placement that was completed by the other CIEBS participants. Allison was at or above the median for all demographic measures: GPA, credit hours completed, number of years working with children/youth in a professional setting, and number of years working with students from high-risk
environments. Allison’s end-of-module quiz scores were above average for the TBRI module, and below average for the SWBS and NCI modules.

Allison’s TSSE-CM score was 6.63 at the beginning of the semester, and increased to 7.00 (+.37) by the end of the semester. In her interview, Allison shared that the CIEBS course allowed her to take a step beyond observing other teachers’ classroom management, and begin to conceive how she would manage classrooms. She stated that the course helped her to feel more effective, with a clearer understanding of what would and wouldn’t work in classroom management. She appreciated the varying intensities of tools provided through the modules, commenting, “I think all the different modules that we went through . . . vary from the least intensive behaviors to . . . with NCI, the most intensive. So I feel no matter what setting I end up in, I have the tools.” She also shared that the resources and notes used in the class (particularly the *Connected Child* book) are helpful tools to fall back on in the future.

Allison shared that her efficacy increased as she worked in the classroom and applied new techniques discussed in CIEBS course throughout the semester. In Allison’s estimation, her equipment with knowledge and tools led to greater efficacy for classroom management, even in the face of unfamiliar situations, including her first year of teaching. She stated,

I just feel overall like I can do it because I feel I have the knowledge; I have the foundation. Even if there's . . . a situation where it's new or something we didn't talk about. So I feel for me it will always be a shock . . . for a first year teacher having that classroom management in place. But I feel I'm not as scared of it as I was going in.
Allison began the semester with a TPDSS score of 5.25, and ended the semester with a score of 7.75 (+2.5). She found the perspective she learned throughout the course on a teacher’s limited yet important role with students from difficult home circumstances to increase her preparedness. She said,

There's a certain period where I can make a difference but I can't make a difference for every aspect of a kid's life. . . . I can't be a parent and there are certain things I can't be, but I think there's certain things I can be [sic].

Allison also explained that answering the reflection questions assigned as homework during the TBRI unit helped her come to peace with her own emotions, which in turn allowed her to feel more prepared for her students’. Allison stated,

'Cause I feel like handling student stress, that's a subjective topic; that's a big topic. So I think being really reflective, and having the opportunity to share answers that weren't like, ‘Okay this isn't out of the book; this is about how I feel.’ I think that was really impactful. And I feel like [guiding the candidates toward] reflectiveness was just a really good method.

At the beginning of the semester, Allison provided two SEL responses to the vignette, both of which fell within the other potentially helpful responses category. One fit the “Ensure safety of others” subcategory, and the fit the “Collaboration/Get help” subcategory. After the course, Allison produced nine positive SEL strategies that she would apply to the vignette, each of which stemmed from TBRI or NCI. The NCI module’s content was referenced by three of the comments, including references to the “Crisis Developmental Model, the “CPI Supportive Stance,” the “Verbal Escalation
Continuum.” The TBRI module was referenced by six of Allison’s SEL statements. Five on the statements fit the “Connecting” TBRI principle, one fit the “Correcting” principle.

The CTs’ TPDSS score was 7.00 and TSSE-CM score was 8.25. The CT observed that Allison was responsive to class-wide needs, and was reflective about her practice. In the CT’s view, these strengths were more related to the entirety of Allison’s coursework than the CIEBS course in particular. During Allison’s student teaching semester (spring, 2017), she was offered the chance to present TBRI content to her grade level team. The story of how this presentation came about pertains closely to this case study. The story is summarized below. A full transcript of the conversation in which Allison explained the story behind the presentation to the researcher/professor can be found in Appendix G.

In discussing the life history of one troubled elementary school student with the student’s mother, special education teacher, and social worker, Allison learned that the student had been a victim of neglect and had received frequent treatment in a psychiatric hospital from a young age. Allison heard the student’s story, and recognized patterns of repeated stressors and complex trauma that are emphasized as causes for emotional dysregulation through TBRI.

Allison shared that five different teachers on the grade level team were frustrated with the continual behavioral problems caused by this student. In the grade level team meeting, the general education teachers shared that there was no reason for the student’s misbehavior. Allison’s special education CT disagreed, and was of the opinion that there is always a reason for behavior. The CT asked Allison if she had any recommendations. The following recounts the conclusion of the story in Allison’s words,
I was like, “You know what? This makes me think so much of my class that I took this past semester, because it's all about how those kind of traumatic experiences shape the brain.” And I was like, “I feel like with this kid, he's out of touch of his emotions, and he's kind of disconnected” . . . He sent an email to all the [same] grade students like, “Why won't you be my friend?” . . . He's very over the top and kind of loud and in your face, 'cause he wants kids to like him; he wants that attention.”

And so, just watching him and thinking about that, this kind of research, this theory about neuroscience and the TBRI stuff started to come up, and I was like, “I think that's why there's some of these things that don't make sense.” And the teachers expect him . . . to know what's appropriate, what's inappropriate, and I'm thinking that he doesn't. I'm thinking that he just doesn't have . . . that ability to be rational and self-regulate. That's not there. He doesn't know how to be logical, he kinda gets in this heightened state, and that's just not there.

So I was like, “You know what?” I went home, and I just started flipping through the TBRI notes, the study guides, and I just started pulling different things that seemed applicable to this particular situation. I wrote up a Google Docs and I just put in a little brief summary like, “Here's what TBRI is, here's the basis behind it, here's the book if you wanna read it, and here is a variety of strategies that you could try in this case.” So I showed it to [my cooperating teacher]

The cooperating teacher so appreciated Allison’s synopsis of the TBRI content (see Appendix H for a copy of the “Google Doc”) that she requested that Allison make a presentation of the content to the rest of the team. Allison was nervous about presenting
the content to the grade level team. However, several team members shared with Allison that they found the information helpful. The team was open and receptive to her contribution.

**Bianca**

Bianca was also above the median on each of the four demographic measures. Her end-of-module quiz scores were above average for the SWPBS and TBRI modules, and below average for the NCI module. For the clinical field placement module, Bianca observed in a junior high school setting.

Bianca’s TSSE-CM score was 6.88 at the beginning of the semester, and increased modestly to 7.38 (+5) by the end of the semester. Increases were greater in Bianca’s efficacy for student engagement (+.87) and for instructional strategies (+2.38). The one-on-one interview provided a space for Bianca to tell the story of the CIEBS course’s impact. The overall theme of Bianca’s responses was one of increased preparation and efficacy for classroom management, coming from a deeper understanding of working with students from high-risk environments. In her words,

> I have not felt very prepared for classroom management, and I think now I was closer to the higher end of the scale. So I feel more prepared, but I also see that classroom management is much more than I originally thought it was.

Bianca offered that she still has more to learn, but that the class has equipped her with more problem-solving tools. “So I still don't feel completely prepared, but I feel like now, at least, I have the tools to figure out where to go and how to find out what works.” Bianca also appreciated the field experience module, and highlighted specific strategies that were beneficial to observe, such as “bell ringers” and managing student requests to
use the bathroom. Over the course of the semester, Bianca observed in more than one classroom, and shared that her observations among multiple teachers helped her to see good and bad examples of student management. Related to the field experience, she also shared that it was valuable to hear the good ideas of her classmates who were observing in other settings during the clinical field placement module. In addition, Bianca shared that she learned the importance of setting routines in the early weeks of a school year.

Bianca began the semester with a TPDSS score of 7.50, and ended the semester with a score of 8.00 (+.5.). Despite this modest TPDSS gain, Bianca mentioned several aspects of the course that were beneficial to her sense of preparedness for dealing with student stress. She appreciated learning the theories of behavior and motivation, and found that these affirmed the ways she had managed children and adolescents previously. She said,

I've done things a certain way and I didn't really change [why] I did things, but now I understand why . . . you get down to their level, why you don't stand when you're talking to a student who's upset, why you sit in the chair next to them.

Bianca especially appreciated the TBRI module, and mentioned the value of watching videos of adults responding to students who are in a “meltdown,” its insights into neuroscience, and the potential neurological impact of bonding with students. She said,

So this really helped me see how, as a teacher, I'm gonna have the same kids all year long, and how I interact with them can help them, even though I'm not their parent. But the way that I respond to their sadness or to them being upset can change their brain. That was crazy to me, that it literally changes their brain. That was, for me, the biggest takeaway. So it really increased my understanding of
what the human brain is capable of, and how impactful how I respond to them will be, and handling their stress [sic].

In both her pre-and post-intervention vignette responses, Bianca tended to analyze Nancy rather than provide SEL responses. In responding the vignette at the beginning of the semester, Bianca provided two helpful SEL responses. Neither of the responses fit within the CIEBS course modules (SWPBS, TBRI, or NCI) and were categorized as other potentially helpful responses. After the semester, Bianca shared just one SEL response, which aligned with TBRI’s “Connecting” principle, writing, “I would be sure to praise Nancy as much as possible and be brief with reprimanding her.”

Bianca’s CT’s TPDSS score was 7.50 and TSSE-CM score was 8.00. The CT shared that in her estimation, Bianca’s experience learning about SWPBS impacted her in the classroom. The CT commented,

[Bianca] was clearly able to implement the [SWPBS] in the classroom. Before working with the students, she studied their behavior plans and utilized that information to develop meaningful lessons. She uses positive statements when working one-on-one with them, small groups, and as whole groups. She also assisted in tracking the student behavior on the point sheets and rewarding them.

Carter

Carter was at or below the median on each of the four demographic measures. His end-of-module quiz scores were above average for the SWPBS and NCI modules, and below average for the TBRI module. For the clinical field placement module, Carter observed in a high school setting. His CT’s TPDSS score was 6.25 and TSSE-CM score was 7.13. The CT shared that she could see the impact of Carter learning from the TBRI
module. She based this claim on the observation that Carter appeared to be working to build relationships with the students in her classroom.

Carter began the semester with a TSSE-CM score of 6.75, and ended the semester at 7.75 (+1). Carter shared that he began the semester nervous about classroom management and dealing with student stress, but is leaving the semester prepared. He mentioned that each of the four modules was helpful, and expounded on the importance of relating with students that he learned through the TBRI module, and the benefit of observing his CT manage students well. Carter’s TPDSS score increased marginally, from 6.25 to 6.50 (+.25). He described the concepts and strategies discussed through CIEBS as making him feel “more prepared in general, because I have these in my back pocket, and I'm gonna continue to learn through next semester and the semester after that.”

In responding to the vignette at the beginning of the semester, Carter provided two helpful SEL responses, one fitting within the *other potentially helpful responses* category, and the one that aligned with the “approved physical restraint” subcategory of the NCI module. After the semester, Carter shared just one SEL response, again fitting within the “approved physical restraint” subcategory of NCI module. Despite the apparent decrease in numbers of SEL strategies, the post-intervention response was more detailed regarding the nature of proper restraints. Before the semester, Carter offered that he would “properly restrain her so she would stop harming herself.” After the semester, Carter seemed to have a clearer vision of what this restraint would entail: “If she did not calm down I would call another staff member to help me put her in a safe hold. Once in a
hold, we would wait her out. Once Nancy [the self-abusive student] had worn herself out
I would tell her to stay in the back of the room and do an activity she likes.”

Diego

Diego was above the median for GPA, credit hours completed, and number of years working with children/youth in a professional setting, but below the mean number of years working with students from high-risk environments. Diego’s end-of-module quiz scores were above average for the TBRI and NCI modules, and below average for the SWPBS module. Diego participated in a junior high school setting for his field placement. Diego observed with a CT whose TPDSS score was 7.75 and TSSE-CM score was 7.25. The CT shared that Diego did well in managing the behavior of individual students, but struggled to manage a whole class when he was given the opportunity. The CT did not notice the impact of any of the CIEBS modules impacting Diego’s work in the classroom.

His TSSE-CM score was 5.38 at the beginning of the semester, and increased to 7.38 (+2) by the end of the semester. Sizeable gains were also found Diego’s TSSE-SE (+1.62), TSSE-IS (+2.38), and TSSE aggregate (+2). Diego shared that his previous work regarding classroom management had been was what he had found to work, “by trial and error.” He felt his classroom management efficacy increased by learning about the neurology of complex trauma. He also found the field placement helpful for classroom management, particularly his observations of what did not work.

[The placement] really gave me an idea of what I could do in the future to set up my classroom for management and the way that I could . . . respond to my students in a way that would encourage them to be engaged in our class.
Diego shared that his efficacy for classroom management decreased during the field placement module, but then increased again once he was able to discuss the classroom management he observed in the classroom, and engage with other classroom-based modules.

Diego began the semester with a TPDSS score of 5.50, and ended the semester with a score of 7.75 (+2.25). He stated that, initially, he did not respond appropriately to student stress before this class. Diego highlighted NCI as most beneficial for his preparedness for dealing with student stress, because the module helped him to conceptualize the different levels of response to escalating behaviors. He also appreciated the role playing. He shared,

I think a lot of the practice that we did in class and acting out the different responses and situations we could be in, really helped me feel like I had a plan and I knew how to respond to different situations. I know sometimes it was kind of silly, but it was a good way to feel prepared. And it was fun, so we were engaged in the learning. So I think that . . . probably, will stick with me the most.

In responding to the vignette at the beginning of the semester, Diego provided one helpful SEL response, which fell within the “Collaboration/Get Help” subcategory of other potentially helpful responses. After the semester, Diego offered another potentially helpful response, under the “ensure safety of other students” subcategory. In addition, Diego provided an NCI response by explaining that he would call for help before attempting physical restraint.

Eric
Eric was below the median for credit hours completed and GPA, but above the median for number of years working with children/youth in a professional setting, and number of years working with students from high-risk environments. Eric’s end-of-module quiz scores were above average for the SWPBS module, and below average for the TBRI and NCI modules. For the clinical field placement module, Eric observed in a high school setting.

Eric’s pre-semester TPDSS (8.25) was the highest among both treatment and control participants, and his TSSE-CM was above the mean (6.25) for the treatment group. Despite this high baseline, both of these measures increased by the end of the semester. TPDSS rose to 9.0 (+.75), and TSSE-CM rose to 8.75 (+2.5). The one-on-one interview provided a space for Eric to describe his experience in the CIEBS course, and his perception of the changes in efficacy for classroom management and his preparedness for dealing with student stress. Eric shared that his efficacy for classroom management increased gradually over the course of the semester, and was enhanced with mastery experiences:

It was a result of learning the content and then applying it in the classroom, or seeing it in the classroom, or seeing where it could be used in the classroom. So it increased by actually doing it, or seeing where it could be done.

Eric stated that before the semester began, his ideas for classroom management were scattered, but that the semester provided both research-backing structure to these ideas.

Regarding dealing with student stress, Eric realized that he was confident coming into the semester. Even though his interview was conducted without realizing that his TPDSS score was higher than the scores of his peers, he shared, “my preparedness from
the beginning was pretty high.” In Eric’s view, his own experience of dealing with stress helped him to understand students and gave him an advantage. Still, his preparedness for dealing with student stress increased over the semester. He attributed this increase to deeper understanding of students. “We learned about the neurological side of things. . . . In that way, my preparedness has increased because now I know why, not just what.” Eric pointed to the TBRI module as most influential in this growth, providing an in-depth analysis of students and the impact of chronic stress:

But I guess the biggest thing was the TBRI videos that we watched. . . . It taught us as if it was like an adopted child, which gave us an even more in-depth view as like having a microscope that zoomed in even further than you needed to see it, and so that when we look at a student, we can have a more in-depth view of how to help them.

Eric later qualified that content, which was originally written for adoptive families, was applicable to students as well: “Again, it was for adopted children, but the concepts in it and the study guides he had us do . . . were significant in really thinking about how I can apply this in a student, into students versus an adopted child.”

In responding to the vignette at the beginning of the semester, Eric did not provide any helpful SEL responses. Instead, he used the vignette response as a space to hypothesize about what may have happened to Nancy (the case study student) that would compel her to self-abuse. After the semester, Eric again hypothesized about Nancy’s behavior, but did so in a way that aligns with functional behavior assessment, hypothesizing that she “is trying to maintain power,” rather than making guesses about
her history. In addition, Eric provided a second helpful SEL response that fell within the “remove harmful objects” subcategory of other potentially helpful responses.

Eric’s CT’s TPDSS score was 8.50 and TSSE-CM score was 7.75. The CT shared that she observed Eric as more comfortable and confident with her students than with previous PSTs she has supervised. Eric engaged with the students right away, even handling students who were misbehaving. However, the CT’s response seemed to indicate that this positive engagement was more a result of Eric’s ability and confidence than learning from the CIEBS course content.
Francine

Francine was at or above the median for credit hours completed, number of years working with students from high-risk environments, and number of years working with children/youth in a professional setting, but below the mean for GPA. Francine’s end-of-module quiz scores were above average for the SWPBS and NCI modules, and below average for the TBRI module. For the clinical field placement module, Francine observed in an elementary school setting. The CT with whom Francine participated had TPDSS score of 6.75 and a TSSE-CM score of 6.14. The CT shared that Francine was unafraid to work with children with “behavioral difficulties.” She hypothesized that the course may have been helping Francine recognize antecedents and de-escalate students before problem behaviors arose.

Francine’s pre-semester TPDSS (4.75) and TSSE-CM (4.13) were lowest among all treatment and control participants. However, her overall growth on each of the quantitative measures was highest among all participants. The post-intervention TPDSS score was 6.75 (+2), and TSSE-CM was 8.13 (+4). Substantial growth was also observed in the TSSE-SE (+4), the TSSE-IS (+4), and the TSSE aggregate (+4). The individual interview provided insight into the reasons for the drastic gains across the quantitative measures.

At different points in the interview, Francine mentioned each of the four modules as beneficial. For her efficacy for classroom management, she mentioned SWPBS, field experience, and the assignment of creating a classroom management plan (for the final examination) as beneficial. For her preparedness for dealing with student stress, she again
mentioned field experience, TBRI, and NCI as beneficial. In discussing this
preparedness, Francine stated,

    Well, before the class started, I feel like I didn't know too much . . . like I didn't
    have proper knowledge on how to do these things, but once the class started, I
    would say, once I got into my field experience, I really got to see student stress . .
    . So I got to see a lot different incidents happen which, at first, was
    overwhelming, but by the end of my experience, I was like, ‘Okay, I understand
    why you're doing this,’ and it all made sense.

    One statement indicated that Francine had a different experience in this class than
she had in other education classes.

    I feel like everything was very focused . . . to help us out. I know every class
    should be like that, but I don't know, sometimes not always. And just the role-play
    and really hands-on things, I feel like it helped us . . . helps me feel prepared
    because it's things that will actually happen, so practicing it was perfect [sic].

    In responding the vignette at the beginning of the semester, Francine did not
provide any helpful SEL responses. At the end of the semester, she provided two. One
response fell within the “empowering” subcategory of TBRI, and one fell within the
“Crisis Developmental Model” of NCI.

Grace

    Grace was at or above the median for all demographic measures. Her end-of-
module quiz scores were above average for the TBRI and NCI modules, but below
average for the SWPBS module. Grace completed her field experience in an elementary
setting, but her CT did not respond to requests to participate in the evaluation study.
Grace’s TSSE-CM score was 5.13 at the beginning of the semester, and increased to 7.38 (+2.25) by the end of the semester. Grace’s other efficacy scores also rose sharply over the course of the semester (TSSE-SE = +1.62; TSSE-IS = +1.62), but less so than her efficacy for classroom management. In explaining her own changes in efficacy for classroom management, Grace explained that when she began the field experience, her efficacy was low. She attributed this low efficacy to not having learned much of the course content at that point, “I had one student that acted out . . . in October when I had to do the field experience. . . . I had no idea how to manage him and I was like ‘what am I gonna do when I become a special ed. teacher?’” Grace explained that her efficacy grew as she learned more about students. Continuing the conversation about the students, Grace said, “I started learning more about how the brain works and how he might not be acting out just to spite [classmates]. . . . It could be so many other things going wrong [sic].” This increased knowledge of the neurology of trauma (which was a focus of the TBRI module) helped Grace to, “slow down and realize, okay, there are practical things that I can do. But I just need to practice, and eventually I'll be able to implement them in my classroom. . . . I became more aware of management that was possible.” Grace explained that her interaction with students in field experience—even in completing assignments for a class she took concurrently with CIEBS—helped her to recognize her own patterns of reaction to students.

Grace began the semester with a TPDSS score of 5.75, and ended the semester with a score of 6.75 (+1). Grace shared that the TBRI module helped her preparedness for student stress. She particularly appreciated learning about the impact of chronic stress and the importance of trying to get a sense of the nature of students’ home lives. She also
mentioned the practical tools learned throughout the course, such as getting down on the students’ level (and emphasis of the TBRI “Connecting” principle), and providing students with adequate interpersonal space (an emphasis of the NCI “Nonverbal Communication” unit) as helpful for her preparedness for student stress.

At the beginning of the semester, Grace provided seven SEL responses to the vignette. Four responses fell within the *other potentially helpful responses* category, two responses matched the NCI module, and one matched the TBRI module. After the semester, Grace’s number of positive SEL responses decreased to six, but the distribution shifted toward CIEBS module content. Three responses fit the NCI module, two fit the TBRI module, and one fit within the *Other Potentially Helpful Responses*. Though the overall number of responses decreased, the specificity and clarity of responses increased. In the pre-intervention vignette response, Grace gave general responses. After the semester, Grace used specific calming techniques and exact phrases she would use for the self-abusive student.
Henry

Henry was below the mean for all demographic measures. He was above the mean on the TBRI module quiz, but below the mean on the SWPBS and NCI module quizzes. Henry had the lowest growth in quantitative measures among the course participants. His clinical field placement took place under a special educator in an elementary setting with a CT whose TPDSS and TSSE-CM scores were 6.00 and 7.13, respectively.

Henry’s TSSE-CM score was 7.13 at the beginning of the semester, and increased to 7.63 (+.5) by the end of the semester. His other TSSE scores each decreased slightly (TSSE-SE = -.25; TSSE-IS = -.12). Henry explained that he began the semester fearful of classroom management. Observing his cooperating teacher successfully manage his classroom helped assuage this fear. Henry also mentioned that practicing role-playing at first gave him anxiety, but that practicing role playing helped his confidence. Growth in preparedness for dealing with student stress was also modest. Henry began the semester with a TPDSS score of 5.50, and ended the semester with a score of 5.75 (+.25). Henry stated that class discussions and reading research articles helped his sense of preparedness “a little.” He also mentioned that he still lacks confidence in dealing with student stress, but that the course did help with this low confidence.

At the beginning of the semester, Henry provided two positive SEL responses to the vignette, both of which fit the SWPBS content. After the semester, Henry made produced five positive SEL responses. Four responses related to the TBRI module, and one related to the NCI module. Henry’s CT said that she thought Henry’s participation in CIEBS was helping him to become more directive with students, and to offer positive reward to students, both of which are components of SWPBS.
Ingrid

Ingrid was below the mean for both experience measures, and credit hours completed, and at the mean for GPA. She was above the mean on the TBRI module quiz, but below the mean on the SWPBS and NCI module quizzes. Each of Ingrid’s quantitative indicators grew drastically over the course of the semester. Her clinical field placement took place with a junior high school special education CT.

Her TSSE-CM score was 5.50 at the beginning of the semester, and increased to 8.50. (+3). Ingrid shared that she began the semester uncertain how she would manage a classroom. At the semester’s end, she said she felt a lot more prepared because of the examples and strategies discussed in class, and the encouragement to think about how she would run her own classroom. She also said that her placement helped to bring confidence with the classroom-taught principles. Ingrid said, “learning all these things in the class was huge but I think the placements that we had and being able to apply the things that we are learning definitely made me feel more confident.”

Ingrid’s TPDSS score increased from 5.00 to 8.50, the largest increase in preparedness for student stress of any of the course participants. According to Ingrid, the reason for this increase was a deeper understanding of why students respond to stressors. She said, “I think that I feel now that we learned about a lot of different types of stresses that may be going on and kind of how to help them. So I definitely feel more prepared now.” She also mentioned that the course helped her to prepare for a wider range of students, which helped to increase her sense of preparedness for dealing with students’ stress.
Her CT’s TPDSS (9.00) and TSSE-CM (8.13) scores were among the highest among all participating CTs. In discussing how the CIEBS course impacted Ingrid’s involvement in her class, the CT commented that she noticed Ingrid working to develop relationships with students, and using positive reinforcement and proximity as a means to manage student behavior. Despite her increase in TPDSS and TSSE-CM, Ingrid’s positive SEL vignette responses decreased from the beginning to the end of the semester. At the beginning of the semester, Ingrid produced four positive SEL responses: three relating to TBRI, and one relating to SWPBS. After the semester, Ingrid produced only two: one relating to NCI, and the other the SWPBS.

Social Validity Data

The social validity of the CIEBS course was evaluated before the fall 2016 semester. Chapter IV explains the process undergone to ascertain the perceptions of three Central School District (CSD) administrators, three CSD novice teachers (who had graduated from the CPCU School of Education), three CPCU student teachers (who had recently completed a semester-long student teaching with CPCU) and three CPCU School of Education faculty members. During the fall 2016 semester, a final round of social validity questions were posed to the cooperating teachers (CTs) who supervised the CIEBS course participants. Having already established through coding interview responses that CPCU stakeholders found the course acceptable, effective, and feasible, it was also important to hear the opinions of the cooperating special educators who supervised the course’s participants. The face-to-face CT interviews consisted of four interview questions (Appendix F), the first three of which pertained to the course’s social validity. The responses to the final question regarded the specific course participant with
whom the cooperating teacher interacted, and were discussed case-by-case, in the
previous “case studies” portion of this chapter. As with the social validity study described
in Chapter IV and with the focus group interviews, two grounded theory coding
methods—initial and secondary coding—were again employed to analyze, organize, and
synthesize the themes found in the CTs’ interview responses.

Cooperating Teacher Interview Question 1

Which of the following best describes your assessment of the importance of the
above-described course for our candidates? (a) Not important; (b) Vital for Special
Education majors and potentially helpful for General Education majors who want
additional training in this area to take as an elective; (c) Vital for all Education majors.

We should mandate that all Teacher Education majors take this course. Please expound
upon your answer.

Each of the eight responding CTs remarked that the course would be useful for
teacher candidates. Seven CTs chose “C,” and one chose “B.” The rationale behind these
responses were that all school staff has contact with all students, that such training can
help pre-service teacher gain confidence, that the movements toward inclusion make
management of all students a priority for all teachers, and that emotional and behavioral
problems are present in all classrooms.

Cooperating Teacher Interview Questions 2 and 3

Question 2: What is your opinion of the concepts, methods, and teaching strategies? Do
you have any recommendations for additions, deletions, or modifications to the course?
Question 3: Please comment on the practicality of using the three different course modules within your teaching practice? Which elements of the course seem most/least practical?

The responses to questions two and three addressed the four course modules, and similar themes arose from each question. For this reason, the questions were combined for coding purposes. The CTs responded positively regarding the CIEBS course’s structure and pacing. One respondent’s comment was characteristic of the others’:

I like the idea of how it's set up, like three weeks with this, and then four weeks with this, because the more that you can have in that toolbox that you can pull out of, I think, the better equipped you are when you step into a classroom.

Cooperating teachers were most familiar with SWPBS, and all respondents who commented shared that this module was valuable for PSTs. The reasons cited for this opinion were that the course could help to clear up commonly held misconceptions about the differences between the three SWPBS tiers, that it is a widely-used program in schools, that behavior intervention should be conceived from a school-wide standpoint, and that positive reinforcement “works.” Along with these positive responses, one CT discussed the challenges that come with finding positive incentives that are motivating to junior high students.

NCI was familiar to some of the CTs, and regarded positively by most. The reasons cited for positive regard for NCI were the usefulness of knowing how to de-escalate students who are potentially violent, the protection provided for the educator who knows how de-escalate and use proper physical restraints, and the emphasis from NCI that behavior is a form of communication. One CT who receives NCI training every
year through Central School District shared that the district has provided NCI training each year, but that he never needed to use the physical restraint techniques. For this reason, this CT opined that the NCI was the least useful of the three classroom-based modules.

TBRI was the least familiar module. Three of the eight CTs either stated that the module was unfamiliar or asked for clarification about TBRI during the interview. After reading or hearing the TBRI description, CT reactions were mixed. One CT shared that building relationships and trust with students is critical, and leads to better student cooperation. Another shared that they would like to learn more about TBRI. Two CTs misunderstood that the program was designed to increase parent involvement, and offered that involving parents in emotional and behavioral support is impractical.

**Fidelity Data**

In order to “rule in” the possibility that the CIEBS course was the change agent, it was important to measure fidelity of course implementation. For the present evaluation, fidelity is conceptualized as the extent to which five implementation fidelity indicators achieve *high fidelity* implementation; that is, the extent to which “drift” from the planned intervention procedure is avoided. The five indicators found in the process data collection matrix (Table 4.3) are the same five “participation” outputs from the logic model (Figure 431). Table 5.6 demonstrates the fidelity of implementation for each of the nine course participants for four of the five process fidelity indicators, along with the pre-determined criteria for *high, low,* or *unacceptable fidelity* standard. The fifth process fidelity indicator (percentage of class sessions implemented as intended) does not fit within Table 5.6, because this is a whole-group rather than between-participant indicator.
Class Attendance

An attendance sheet (which also contains readings/assignments data) was gathered and confirmed by all course participants at the course’s culmination. Eight of the nine participants missed zero class sessions, while one participant missed one. Thus, *high fidelity* was achieved for all participants for this indicator.

Accurate Completion of Skeleton Notes

The researcher/professor collected and evaluated skeleton notes after the culmination of the TBRI and NCI modules. *High fidelity* was achieved for eight of the nine participants, all of whom completed skeleton notes above 80% accuracy. The candidate who completed 32% of skeleton notes had been diagnosed with dyslexia. This candidate requested permission to be excused from completing the TBRI skeleton notes, explaining that the challenge of keeping up with the video content while quickly writing notes was a distraction from focusing on the content of the lessons. Permission not to record notes was granted so that this candidate could participate fully in the TBRI class sessions, discussions, and activities.

Homework Readings/Assignments Completed

Completion of homework readings and assignments was calculated by giving equal weight to students’ self-reported “completion of homework reading” sheets, the percentage of the assigned “Connected Child” study guides the students completed within the TBRI module, and the average scores on three homework assignments completed throughout the semester. *High fidelity* was achieved for each of the participants, all of whom completed at least 80% of their out-of-class assignments.

Successful Completion of Field Placement Hours
During the field placement module, participants shadowed a special education CT, observing and engaging in hands-on participation. Each of the candidates completed 20 or more field placement hours (as indicated by their field placement timesheet), and met this process fidelity indicator with high fidelity.

Table 5.6
Inter-participant Process Fidelity Indicators

<table>
<thead>
<tr>
<th>Name</th>
<th>Number of Absences</th>
<th>Completion of Skeleton Notes (% accuracy)</th>
<th>Completion of Homework readings/assignments (% completion)</th>
<th>Number of Field Placement Hours Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allison</td>
<td>0</td>
<td>95</td>
<td>99</td>
<td>20</td>
</tr>
<tr>
<td>Bianca</td>
<td>1</td>
<td>91</td>
<td>85</td>
<td>20</td>
</tr>
<tr>
<td>Carter</td>
<td>0</td>
<td>95</td>
<td>97</td>
<td>20</td>
</tr>
<tr>
<td>Diego</td>
<td>0</td>
<td>95</td>
<td>97</td>
<td>20</td>
</tr>
<tr>
<td>Eric</td>
<td>1</td>
<td>32*</td>
<td>81</td>
<td>20</td>
</tr>
<tr>
<td>Francine</td>
<td>0</td>
<td>95</td>
<td>93</td>
<td>20</td>
</tr>
<tr>
<td>Grace</td>
<td>1</td>
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<tr>
<td>Ingrid</td>
<td>0</td>
<td>95</td>
<td>97</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: All names are pseudonyms; High fidelity determination made for candidates with 0, 1, or 2 absences, >80% skeleton note completion accuracy; >80% of homework readings/assignments completed; 20+ field placement hours completed; * = Unacceptable fidelity; student was granted permission to not participate with skeleton notes.

Class Sessions Implemented as Intended

To evaluate this indicator, the researcher/professor answered yes/no to the following question at the end of each class session: “Did 90% of the class’s planned instruction occur?” This data was recorded in the course binder, next to the class session’s description. One or zero “no” responses per module signified high fidelity, two-
to-three “no” answers signified low fidelity, and greater than three “no” answers signified unacceptable fidelity. Only one of the course sessions was not implemented as intended; therefore high fidelity was once again achieved.

Discussion, Implications, and Limitations

Discussion

RQ1: What were the differences between changes in efficacy for classroom management and preparedness for dealing with students’ stress between the treatment and control groups?

Independent-samples t-tests conducted with an α level of .05 revealed that teacher efficacy for classroom management rose by a statistically significant (p<.001) margin. At 1.7, the TSSE-CM effect size for the CIEBS intervention was large. TPDSS also saw a statistically significant increase among the treatment group (p<.05), with effect size of 1.19. Though efficacy for Instructional Strategies and for Student Engagement were not focuses of the present evaluation, TSSE-IS and TSSE-SE also increased over the course of the semester. One likely reason for this growth is that other education courses taken alongside CIEBS helped PSTs to gain confidence with student engagement or instructional strategies. Indeed, each of the course participants was engaged in at least one additional instructional methods course during the fall 2016 semester. This idea is supported by the fact that the control group, of which many students were likewise enrolled in instructional methods course during fall 2016, also demonstrated statistically significant growth in instructional strategies (p<.01) during the fall 2016 semester. It also
follows logically that higher efficacy for classroom management and preparedness for dealing with student stress would lead naturally to higher general teaching efficacy.

With a power of .8 ($\beta = .2$), making the likelihood of Type II error four times that of Type I error (Lipsey, 1998), 15 treatment participants would have been needed for a two-tailed test to detect a meaningful difference from pre- and post-intervention. However, only nine control participants were available to enroll in the course. Therefore, the effect size, while large, does not have a power needed to be extrapolated to other contexts. That is, the statistical portion of the study has low external validity. With limits to external validity understood, the statistical analyses conducted are useful in establishing the testing procedure that may produce statistically significant findings if this study is to be replicated with larger sample sizes. However, a larger study was not feasible during fall 2016 given the limitations in place at CPCU.

*RQ2*: In what ways were the participants’ knowledge of SEL techniques impacted through the course?

Pre- and post-intervention vignette responses provide the window into the response to this research question. The participants’ knowledge of SEL techniques was impacted as the course modules infiltrated their thinking about crisis situations. The changes in vignette responses indicate that the CIEBS course was effective in increasing the number of SEL strategies—from two SEL responses per participant to 3.33—that came to course participants’ minds when thinking of a scenario of a student in crisis. The ideas that came to the participants’ minds after the course were aligned with the instruction provided within the CIEBS course in general, increasing from 44% of SEL responses reflecting CIEBS modules to 90%. SEL responses and strategies that stemmed
from TBRI and NCI entered into the problem-solving process of the course participants most frequently. Over the course of the semester, the treatment group also became more autonomous in the responses they provided to vignettes. The SEL recommendations became more specific, and participants’ responses shifted from analytical to action-oriented.

*RQ3: Which elements of the CIEBS course impacted PSTs’ knowledge and sense of preparedness to handle student stress?*

The opinions expressed about CIEBS were universally positive. In particular, the candidates appreciated the information provided by TBRI, and the way that it informed the skills taught through NCI. The candidates also appreciated the strong emphasis placed on building relational connectedness between teachers and students. Regarding the most useful course elements, some candidates mentioned the course in its entirety. The candidates also pointed to the neuroscience, and the connecting and correcting principles of TBRI, as well as the de-escalation, paraverbal communication, and limit-setting approaches of NCI as particularly useful. Finally, the active engagement provided through the field placement module and the NCI modules were singled out as the course elements that candidates perceived to impact their efficacy for classroom management and ability to deal with student stress the most.

A numerical view of the focus group and individual interviews summaries helps to rank the specific course elements that candidates valued as most useful. The transcripts of both focus groups and all nine individual interviews were reviewed, and statements that supported a particular module as helping students with their knowledge and preparedness of SEL techniques were tallied, module by module. Because some SEL
approaches could potentially be aligned with multiple course modules, only statements that named the modules were included in the tally. That is, if participant said, “I appreciated role playing in the NCI module” a tally was provided for NCI, but if a participant said, “I appreciated role playing” a tally was not provided for NCI. (A comparison of the relative impact of specific experiences such as “role playing” are the subject of RQ4). Results of the tallies are found in Table 5.7. TBRI was the module most often mentioned as impacting PSTs’ knowledge and sense of preparedness to handle student stress, followed by NCI, the Field Placement Module, and SWPBS.

Table 5.7
Statements indicating course elements that impacted candidates’ knowledge and sense of preparedness to handle student stress

<table>
<thead>
<tr>
<th></th>
<th>SWPBS</th>
<th>TBRI</th>
<th>NCI</th>
<th>Field Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Group Interviews</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Individual Interviews</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>18</strong></td>
<td><strong>12</strong></td>
<td><strong>10</strong></td>
</tr>
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</table>

*Note: SWPBS=Schoolwide Positive Behavior Supports; TBRI = Trust Based Relational Intervention; NCI = Non-violent Crisis Intervention*

RQ4: *To what experiences do individual course participants attribute their changes in teacher efficacy for managing the classroom and sense of preparedness for handling student stress?*

The fourth focus group question asked candidates this question directly. Collectively, the group’s responses fit two trends that combined into one theme. The experiences to which the candidates most often attributed their growth in TPDSSS and TSSE-C were role playing within NCI and full-day clinical placements. The theme that connected these trends was “learning by doing.”
The individual interviews likewise asked this research question directly, but this time divided the responses into two parts. The first asked about the experiences that changed efficacy for classroom management. The most often cited experience that respondents reported impacting their efficacy for classroom management was completing the field experience module, with 11 statements about the importance of this module provided by participants. Within field experience responses, some respondents shared generally that completing the module was helpful, while others specified that it was important to practice the practical strategies discussed within the classroom-based modules. Other respondents shared that observing both good as well as bad examples of classroom management was helpful. In addition to field placement, four comments supported learning TBRI content as an experience that supported efficacy for classroom management, specifying that the neurology of complex trauma and tools discussed for working with students from high-risk environments was helpful. NCI was mentioned by two respondents, and SWPBS by one. Several other general statements were made regarding experiences that enhanced efficacy for classroom management, including creating a classroom management plan for the final examination, listening to classmates discuss their field placement experiences, learning the varying intensities of SEL support, taking notes for study guides, and learning the research backing for the SEL supports.

The second part of the individual interview asked about experiences that changed preparedness for dealing with student stress. The experience most often cited was that of learning TBRI, with nine total statements relating to TBRI. Within TBRI, learning the neurological impact of chronic stress was pinpointed most often as an experience that impacted preparedness for stress. The next most commonly reported experiences were
connected to the role-playing and practical tools involved with the NCI module. One respondent shared that seeing student stress in action through the field placement module most impacted their preparedness. Three additional commenters responded generally, that learning the course content as assigned was helpful preparation for dealing with student stress.

The results are clear. CIEBS was effective for increasing its participants’ efficacy for classroom management, as well as their preparedness for dealing with student stress (RQ3). This reality was shown statistically through the TSSE-CM and TPDSS measures, as well as practically, through participants’ vignette responses. The vignette responses, focus groups, and individual interviews showed three components of the class that were most powerful in increasing the participants’ preparedness and efficacy. The first was the TBRI module, which focused on the neuroscience of complex trauma, and provided concrete steps for empowering, connecting, and correcting. The next was the NCI module, which combined conceptual frameworks for understanding escalating student behaviors with hands-on practicing with de-escalation. The final component was the experience of working in classrooms with experienced special educators, applying course content to real-life student situations.

Implications

Contributions to SEL for PST literature. Experts’ calls for increased SEL preparation for in-service and pre-service teachers (e.g., (Bridgeland et al., 2013; Collaborative for Academic, Social, and Emotional Learning (CASEL), 2013; Schonert-Reichl et al., 2014, 2015) are clear and strong. Yet the nature of this preparation has not been the subject of rigorous research. As of the publication of the present evaluation, a
handful of studies have researched the impact of specific SEL training programs for educators (see Chapter II), with only two of those studies exploring SEL training for PSTs. Both of these predecessors examined the impact of embedding SEL content into pre-existing teacher training courses. One infused mindfulness training (Soloway, 2011) into a pre-existing college course on teacher stress and burnout. The other embedded two elements—the assignment of an SEL literature review, and instruction on SEL conceptual frameworks—into a curriculum development course (Waajid et al., 2013). The present evaluation diverges from these studies in several ways.

First, the course itself is different. CIEBS provides SEL training for PSTs in a stand-alone, semester-long course rather than embedding SEL content into a pre-existing course. The two-pronged emphasis on theory and practice was a theme throughout the course, and was unique to CIEBS (compared with its predecessors). To varying degrees, SWPBS, TBRI, and NCI each emphasized theoretical, neurological, and/or conceptual frameworks. Introducing the neuroscience to pre-service teachers has not previously been researched. The present evaluation lends credence to the notion that the neuroscience of complex trauma is an important “ingredient” of SEL training for PSTs. The study also contributes that the notion that the introduction of de-escalating techniques and appropriate physical restraints is another important “ingredient” for SEL training. As these two “ingredients” are new to the literature on SEL for PSTs, it is obvious that their combination with one another, and with the other modules (SWPBS and field placement) also constitute new subjects of inquiry.

In addition to evaluating the effectiveness of the course’s content, the qualitative nature of the study also allowed for the emergence of themes relating to the course’s
pedagogy. While the present evaluation found that introducing content on the neuroscience of complex trauma was helpful for candidates, it also found that doing so within an eight-session TBRI module was helpful. The module consisted of video instruction with skeleton notes during its class sessions, and homework assignments of readings (with study guides) and videos that corresponded with the class lessons.

Similarly, while finding that introducing de-escalation and proper physical restraints was helpful, it simultaneously found that doing so in a particular way was effective. NCI addressed de-escalation and restraints by directing candidates to explore its conceptual frameworks through note-taking and practice its physical principles through role-playing, and it was offered only after the candidates had already acquired a knowledge base of universal behavioral supports, secure attachment, the neuroscience of complex trauma, and skills for empowering, connecting, and correcting.

Teasing apart the impact of the course’s content from its pedagogy was beyond the scope of this evaluation, but it is important to note that candidates often mentioned the manner in which they were taught along with the content. Across the evaluation, candidates shared that the active components of the course (i.e., the role playing and field work with K-12 students) provided the pathways by which content taught through lectures, video lessons, note-taking was most fully understood. For this reason, an important implication of the study is that active pedagogies are important to use when teaching SEL content specifically to PSTs.

The evaluation procedures employed by the present study are also different from those of its predecessors. Whereas Soloway (2011) and Waajid et al. (2013) each used purely qualitative methodologies to analyze the impact of SEL training on its
participants, the present study used a combination of between-group, mixed methods analysis along with case study analysis. The mixed methods allowed for quantitative measures to triangulate behaviors (through vignette responses) and statements made (through focus group and individual interviews). It also allowed for a comparison with a control group, which helped to reduce the “history” threat to internal validity. The case studies allowed for the analysis of trends that were observed across participants as well as exceptions to those trends.

Impact. The study’s implications reverberate in concentric circles, with the strongest waves felt close to home. It will be benefit the CPCU School of Education leadership and faculty to give serious consideration to making CIEBS either required or highly recommended to all education majors. As Chapter II delineates, cumulative risk and complex trauma are not small-scale problems that affect a few unfortunate children on the margins of society. Home environments that yield chronic stress are as ubiquitous as they are pernicious. If CPCU is to prepare teacher candidates to understand their students, then CIEBS is a necessary addition to its list of graduation requirements.

The next ring of influence for this study is the teacher preparation community. The evaluation of CIEBS comes at an opportune time, as interest in SEL training for teachers and pre-service teachers in on the rise. In May 2015, the Brookings Institute published Social and Emotional Development: The Next School Reform Frontier (Price, 2015). The fact that an economic think-tank conducted such an analysis highlights the fact that SEL is “gaining steam” beyond educational circles. There exists a gap between teachers’ desire to learn and implement SEL strategies and their training to do so. Most teachers report a desire to receive additional SEL delivery training, and most report that
they do not receive such training before their professional service begins (Bridgeland et al., 2013). Schonert-Reichl et al. (2015) found that SEL competencies are not a focus within teacher preparation state standards, and that few states promote students’ SEL competencies in a comprehensive way. While Illinois is one of the few states in the country to prescribe social and emotional learning standards for K-12 students (Bridgeland et al., 2013), the extent of SEL education and training pre-service teachers is largely left to the institutions of higher education (IHEs) where their preparation takes place. Though larger studies should be conducted before any formal “scaling up” may be recommended, IHEs may look to the CIEBS evaluation for clues. In short, the course shows promise.

A final ring of influence concerns policy makers. Evans and Schamberg (2009) found that the number of years a child is poor predicts lower working memory in young adulthood. However, when chronic stress is controlled for, lower socio-economic status does not, in fact, predict lower working memory. The fact that working memory has a clear connection with academic functioning implies that if a student’s parents, relatives, teachers, and mentors can help students to manage the stress of poverty, the well-documented and long-standing achievement gaps may be lessened. At least on a small scale, the present evaluation has shown that SEL training for PSTs works. Expansion SEL training for PSTs may help to reduce educational inequalities.

Even if inequalities are not reduced, another argument can be made: providing a course like CIEBS to a broader audience will be a greater service to society. If our society is truly built upon egalitarian ideals, it follows that we want our schools to do the most good for our children. While the course has been shown be beneficial among its
participants, offering the course to a select group of pre-service teachers is set to continue the trend of empowering certain teachers with SEL delivery skills. Ultimately, the CIEBS evaluation contributes to a nascent body of literature that may prove important for our nation’s population of neediest students, whose success is a priority for all.

**Future research.** SEL preparation for PSTs is a relatively unexplored area. While the present study, Soloway (2011), and Waajid et al. (2013) together show that various forms of SEL preparation are beneficial for PSTs, the long-term impact of this training has not been researched. A longitudinal study, evaluating the impact of CIEBS on its participants into their student teaching semester, and into their in-service teaching years would be a valuable contribution to the research communities concerned with teacher preparation, teacher efficacy, and social and emotional learning.

A study with a greater number of participants would also be useful. Such a study might use the same between-group, mixed methods design as the present study, but with a higher pool of participants would contributed quantitative data, and potentially higher external validity. Such a study could place a greater emphasis on quantitative analysis, and use a QUAN/qual rather than QUAL/quan design. Such an evaluation would be necessary in order for the CIEBS course to merit recommendations for “scaling up” the course to other IHEs.

Studies that compared CIEBS with other SEL for PST interventions would also be beneficial. Such comparisons would provide insights about the relative benefit of varying programs, (e.g., CIEBS versus the Mindfulness-Based Wellness Education (MBWE) program conducted by Soloway (2011)). Future researchers may also consider studying
the impact of altering the CIEBS modules, by adding, deleting, modifying, or exchanging
them.

Limitations

Interpretations of this study should be made with care. By its nature, an evaluation
with a sample size of nine participants has low external validity. Threats to the study’s
internal validity should also be recognized. “Selection” was one threat that could not be
ameliorated in the context of the CPCU School of Education. Only special education
majors participated in the study, and only non-special education majors participated as
control participants. A study that matched the treatment and control group on this
variable would have had stronger internal validity.

Two forms of bias also threaten the internal validity of this study. First, the
researcher evaluating a course in which he is also professor is an imperfect model. The
researcher/professor’s enthusiasm for the topic may have persuaded the participants about
the usefulness of the course content. Steps were taken to lessen this threat. First, a
research assistant conducted the focus group and individual interviews, which allowed
the PSTs to speak freely, with assurance that their responses did not affect their course
grades or the researcher/professor’s opinion of them. Second, participants used code
numbers for all pre- and post-intervention quantitative measures, and vignette responses.
The pairings between the code numbers and the course participant names were unknown
to the researcher/professor throughout the between-group evaluation. After the between-
group evaluation was completed, the individual interview data transcripts were read, and
the code reference sheet was opened so that quantitative and vignette responses could be
paired with individual interviewees. While these steps to reduce bias were taken, a study
with stronger internal validity would separate the roles of researcher and professor entirely.

**Conclusion**

CIEBS was designed to be different from other education courses. The course was conceived in the search for a way to help teachers understand what happens in the brains and bodies of students from difficult home circumstances. It was written by a researcher/professor who had in recent years come to understand the limitations in his own work while working as a special educator in a low income, multilingual neighborhood school in a major city in the Midwestern United States. These limitations were not related to students’ academic deficits. Those were fixable. The limitations occurred among students who came to school burdened by the chronic stress they endured in their homes. Often, however, the impact and response to this stress goes unmentioned in teacher preparation programs.

The researcher/professor’s experience prompted his inclusion of *Classroom and Individual Emotional/Behavioral Supports* (CIEBS) as a required course for a new special education program offered by CPCU. Without knowledge of TBRI or NCI, the course’s title was written, and the literature was scoured for the right combination of modules that would provide course participants with classroom and behavior management tools that work for most students, and an understanding of the impact of complex trauma and practical skills for helping students who bear the weight of cumulative environmental risk.

The evaluation was conducted in fall 2016 and sought to measure whether the course “worked” on its participants. Did it increase their efficacy for managing
classrooms? Did it improve their preparedness for student stress? There were multiple ways CIEBS could have failed. The importance of SEL training might have been lost on the PSTs. The neuroscience content might have been too dense, or the role-playing activities too silly.

Yet, the data have shown that the course accomplished its goal. The students were better prepared and more confident in their abilities. The participants pointed to the four modules—SWPBS, TBRI, NCI, and field placement—as important components. The participants pointed to the neuroscience of complex trauma as a critical link to understanding students. They acquired mental frameworks for understanding students, and SEL tools for their school bags. This education course has given them new perspectives. In the words of one participant,

I think what I liked about it is it's so different than a normal Education course, 'cause you're not learning curriculum, like how to teach these things; you're literally learning how to pour into kids. And I think that's a huge part of education that people don't realize, that you have to build these relationships, and without correct behavior, you can't go forth and teach in your classroom. And so it was cool to have a course focused on that, and realize that this a big part of education also.

Education has always been bigger than academic growth. It is a primary place where historical trends, societal values, and social norms come together. The priorities of a people filter into and radiate out from its schools. A single semester-long class cannot begin to unpack the influences that families and communities have on their children. However, in the fall 2016 semester at CPCU it has been proven that a course can teach its
pre-service teacher candidates that education is more than reading and writing; that understanding students’ brains and behaviors and building relationships is, “a big part of education also.”
REFERENCES

https://doi.org/10.1080/13632750903512365


178


Appendices

Appendix A

Needs Assessment Questionnaire

Instructions

The first four questions gather demographic data. The next ten questions are adapted from a questionnaire that was used to measure the cumulative environmental risk of seventh grade students. These questions will ask you to think back to your own home environment during your seventh grade year. The following ten questions will ask about your Priority, knowledge, and skills regarding the effects of cumulative risk on students and classrooms.

You will notice that each question or set of questions includes the option to not answer. While answers to all of the questions will provide the most meaningful data, it is your right to stop participation at any point.

Do not spend a lot of time on one question. Your visceral, or "gut" feeling will provide the most useful data.

Demographic Questions

1. What is your current level in the Teacher Education Program?
   • Level I (Not yet admitted to the program)
   • Level II (Admitted to the program, not yet student teaching)
   • Level III (Currently Student teaching)
   • I am not an Education Major – Use SL to end survey
   • I prefer not to answer this question. – Use SL to end survey

3. Which age category do you fit within?
   • 17-23
   • 24-40
   • 40 and above
   • I prefer not to answer this question.
   • Other (please specify)_____________________

4. Are you male or female?
   • Female
   • Male
   • I prefer not to answer this question.
5. Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific islander, from multiple races, or from some other race?

- White
- Black or African-American
- American Indian or Alaskan Native
- Asian
- Native Hawaiian or other Pacific Islander
- From multiple Races
- From some other Race

- I prefer not to answer this question.

**Cumulative Risk Questions**

Cumulative risk is a measure of the number of risk factors present in an individual's home. The questions on the next page were adapted from a study by Gutman, Sameroff, and Eccles (2002) that measured cumulative risk among seventh grade students. The questions in the following section will ask about your home environment when you were a seventh grade student.

* 6. In order for this portion of the questionnaire to provide meaningful data, each of the ten questions in the following section will need to be answered.

- Proceed to answer the ten cumulative risk questions
- Skip to the subsequent series of questions (Skip to the next page)
- Stop taking the survey now (End Survey)

**PAGE BREAK**

Please answer the following questions about your seventh grade year. (Seventh grade will be defined as the beginning of seventh grade through the summer before eighth grade).

The investigator understands that you may not recall or have access to all of the information sought by these questions. Please answer questions 7-16 as accurately as you can.

* 7. What was your mother's highest grade level completed?

- High school degree or less
- Some college
- College degree
- Advanced degree

* 8. To the best of your memory, was your mother depressed during your seventh grade year?
9. What was your mother's marital status when you were in seventh grade?
   • Married/ lived with a partner
   • Not married

10. What is the number of children under 18 who were living in your household on a full-time basis?
   • 1 or 2
   • 3 or more

11. To the best of your memory, which of the following "family stressful events" occurred in your household during your seventh grade year?
   • Your parent became the victim of a violent crime.
   • Someone close to your family became the victim of a violent crime.
   • Your mother changed jobs for a worse one.
   • Your mother got demoted, had trouble at work, or trouble with her boss.
   • Your mother took a cut in wage or salary.
   • Your mother got laid off or fired.
   • Someone close to your mother was seriously ill or injured.
   • Someone close to your mother died.
   • Your mother's close friend or relative had a child die.
   • You or a sibling had a serious injury or accident.
   • You or a sibling got seriously ill.

12. Using your best estimate, how did your family's income compare to other families in your county?
   • Top 80%
   • 61-80%
   • 41-60%
   • 21-40%
   • Bottom 20%

13. Unskilled workers generally have no specific education level or experience, and low income. Was the highest wage earner in your family an unskilled worker?
   • Yes
   • No
14. Which best describes the neighborhood you lived in for the majority of your seventh grade year?
   • Fewer than 10% of families in my neighborhood lived in poverty.
   • More than 10% of families in my neighborhood lived in poverty.

15. Which best describes the neighborhood you lived in for the majority of your seventh grade year?
   • Females headed fewer than 40% of homes in my neighborhood.
   • Females headed more than 40% of homes in my neighborhood.

16. Which best describes the neighborhood you lived in for the majority of your seventh grade year?
   • Fewer than 8% of families in my neighborhood were welfare recipients.
   • More than 8% of families in my neighborhood were welfare recipients.

Priority Questions

17. How important is it...

Knowledge Questions

18. How would you rank the following?
Skill Questions

* 19. Rate your level of skill familiarity with...

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<th>not familiar</th>
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Focus Group Participation

Focus group interviews will take place during the week of April 13-17. They will last 30-45 minutes. Participants will be compensated with $10 Visa Gift Cards. And DCPCUs.

20. Assuming a time slot is chosen that fits your schedule, are you willing to participate in a focus group interview?
   - Yes
   - No – SL ends survey
Appendix B

E-mail invitation to participate

Dear Education Majors,

In an effort to improve our programming with the School of Education, I am seeking to understand how our current CPCU School of Education candidates understand the impact of the home environment on students. To this end, I have created a 5 minute survey which I am asking all current education majors (including current student teachers) to complete.

When you click the link to the survey, the first page you will see is a “Letter of Informed Consent.” This letter explains what the survey entails, and explains that you have the option to not answer any question you choose.

The survey will close Wednesday, 4/22, at 11:00 pm. Please complete it at your soonest convenience.

-Prof. Stipp
Appendix C

Questionnaire Letter of Informed Consent

Johns Hopkins University
Homewood Institutional Review Board

Purpose of Research Study:

The purpose of this research study is to gauge the Priority, training, and skill level of [Central Prairie Christian] University's Teacher Education Candidates regarding the effects of cumulative environmental risk on students' neurophysiology, academic performance, and behavior.

I anticipate that approximately 200 teacher candidates will participate in this study.

Procedures:

1. Questionnaire – All participants
   A. You will be asked a series of four demographic questions.
   B. You will be asked a series of ten questions regarding the risk factors that were present in your own adolescence.
   C. You will be asked a series of ten questions about your perceived Priority, and your self-assessment of your own knowledge and skills regarding working with students from high-risk environments.
   D. You will be asked whether you are willing to participate in a follow-up focus group interview. Those who are willing to participate in the follow-up focus group interview will be asked to provide their student identification number.
2. **Focus Group – 10 participants**
   
   A. Two groups of five teacher candidates will be chosen randomly to participate in a video-recorded 30-45 minute focus group interview.
   
   B. Focus group questions will provide candidates the space to discuss their priority, and preparedness regarding working with students with high levels of environmental risk.

   **Time required:** The questionnaire will take approximately ten minutes to complete. If selected, the focus group will take approximately 30-45 minutes.

   **Risks/ Discomforts:**
   
   There are no anticipated risks to participants.

   **Benefits:**
   
   It is believed that with adequate preparation, pre-service teachers may graduate from [Central Prairie Christian] University with a firm understanding of the impact of environmental risk on children. The questionnaire and focus group discussion will help our teacher education program establish a baseline for our candidates’ current competencies in this area. Ultimately, your cooperation with this study will help to strengthen our program, helping you and the teacher candidates who follow you become “Professionals Influencing Lives.”

   **Voluntary Participation and Right to Withdraw:**
   
   Your participation in this study is voluntary. By your indication below, you will choose whether you will take part in the questionnaire and the focus group portion of the study. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled. You can stop participation in the study at any time, without any penalty or loss of benefits. If you wish to withdraw from the study, please contact Professor Brian Stipp via phone or email: [contact information]

   **Confidentiality:**
   
   Only group data will be included in publication; no individual responses will ever be published. Your questionnaire and (potential) focus group participation will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the [Central Prairie Christian] Institutional Review Board and officials from government agencies such as the Office for Human Research Protections. (All of these people are required to keep your identity confidential).

   All video recordings of focus group interviews will be examined by the Principal Investigator, Co-Investigator, and research affiliates only (including those entities described above). No identifiable information will be included in any reports of the research published or provided to school administration.
Survey data completed electronically will be collected via a password protected Survey Monkey account that belongs to [Central Prairie Christian University’s] Library. If the student is unable to complete the surveys electronically, paper copies will be provided. Student identification numbers will be requested only for those participants who are willing to be part of the focus group.

All research data including paper surveys and videotapes will be kept in a locked office. Electronic data will be stored on the co-investigator's computer, which is password protected. Any original electronic files will be erased and paper documents shredded, ten years after collection.

Compensation:
You will not receive compensation for participating in this study.

If you have questions or concerns:
You can ask questions about this research study at any time during the study by contacting Professor Brian Stipp via phone or email: bstipp@olivet.edu.

2. Do you consent to participate in the questionnaire portion of this study?
   • Yes – Skip Logic (SL) continues to next page
   • No – SL ends survey
Appendix D

Interview Letter of Informed Consent

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

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<tr>
<td><strong>Title:</strong> Impact of Social and Emotional Learning Training in Pre-Service Teacher Education</td>
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<tr>
<td><strong>Principal Investigator:</strong> Mary Ellen Lewis, Ed.D.; Johns Hopkins University Affiliate Faculty Member</td>
</tr>
<tr>
<td><strong>Date:</strong> March 24, 2016</td>
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**PURPOSE OF RESEARCH STUDY:**

The purpose of this research study is to determine the impact of a college course for pre-service teachers titled *Classroom and Individual Emotional/Behavioral Supports (CIEBS)*. The study will evaluate changes in participants’ knowledge of social and emotional learning techniques and preparedness for managing classrooms, behaviors, and student stress. It will also evaluate the impact of the various course modules, activities, and assignments. The study is valuable in determining whether such a course is effective for enhancing pre-service teachers’ preparedness, whether and how the course should be revised in future semesters, and whether the course merits further evaluation for its long-term impact on pre-service teacher preparedness. We anticipate that approximately 9 people will participate in this study.

**PROCEDURES:**

Course participants are required to receive a “C” or better for the course to count toward their education degree requirement. While it is not required that course participants participate in the study, those students receiving lower than a “C” will be excluded. Data will be collected from written pre-tests on the first day of class, post-module quizzes (given at three points over the course of the semester) and post-tests given at the end of the semester. In addition, study participants may also elect to participate in a focus group session.

All study participants must attend 24 of the 30 class sessions, and complete at least 40% of the course readings and assignments. Each session will last 75 minutes.

**RISKS/DISCOMFORTS:**

Some of the course content deals with childhood trauma. It is possible that course participants may have undergone trauma, or know someone who has. As such, it is possible that the course content may cause emotional discomfort or “triggers”
to participants. Participation in this study may also involve risks that cannot be foreseen at this time. The risks associated with participation in this study are no greater than those encountered in daily life [or during the performance of routine physical or psychological examinations or tests].

**BENEFITS:**

It may be beneficial to participants to think about the CIEBS course content in a critical way. This may help participants to find strengths and gaps in knowledge, and greater self-awareness as they prepare to enter the teaching profession.

This study may benefit society if the results lead to a better understanding of how college coursework may impact pre-service teacher skills in providing social and emotional learning support. This study will have a direct impact on the students who take the CIEBS course in future semesters.

**VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:**

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please notify the teacher assistant to remove your studies pre-tests, quizzes, post-tests, from the evaluation study materials.

If we learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

**CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:**

Under certain circumstances we may decide to end your participation before you have completed the study. Specifically, we may stop your participation if you miss more than six class sessions, if you complete fewer than 40% of assigned readings and out-of-class work, or if you receive a final grade in the CIEBS lower than “C” or lower.

There may also be other circumstances that would lead us to end your participation.

**CONFIDENTIALITY:**

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for
other people to see the records.

A teacher assistant will help to ensure anonymity of participants on the written and verbal responses which will be included in the study. The assistant will assign each participant a random three-digit number that will serve as an identifier for each student’s written and verbal responses. The researcher/professor will not have access to any document which links student names with student numbers. All written data collected for the study will be typed by participants, ensuring that handwriting does not become an identifier. All recorded focus group responses will be answered anonymously, and transcribed by an independent party, ensuring that the researcher does not link student voices with student names. The only person who will have access to the document that connects names and identifying numbers will be the teacher assistant.

COMPENSATION:

If you satisfactorily complete the focus group portion of the study, you will receive a $10.00 gift card to compensate you for your participation.

IF YOU HAVE QUESTIONS OR CONCERNS:

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by calling Principal Investigator Mary Ellen Lewis at 443-923-7822.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study. By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

___
Participant's Signature 
Date

___
Signature of Person Obtaining Consent
(Investigator or HIRB Approved Designee) 
Date
Course Description

This course provides a platform for teacher candidates to explore the educator’s role in supporting students’ emotional wellbeing and growth in social skills. Competencies acquired will include assessing learning environments, conducting functional behavior analyses, writing and monitoring behavior goals and plans, and intervening with students in crisis. Teacher candidates will also acquire knowledge in basic classroom management methods, conflict resolution strategies and fostering positive learning environments. Adapting learning environments and routines to meet students’ needs and legal/ethical considerations will also be addressed. Special focus will be paid to the emotional development and behavioral needs of students with disabilities.

Course details

CIEBS is comprised of four modules.

1. Three weeks will cover School-Wide Positive Behavior Intervention and Supports (SWPBIS), an evidence-based approach that is utilized by many of our nation’s schools (Benner et al., 2012), and by many schools in Kankakee County.
   - The sessions will address Tier I approaches (using positive statements, the whole-school framework, a token economy system, etc.), Tier II approaches (focusing on use of a daily report card), and Tier III approaches (focusing on Functional Behavior Analysis/ Behavior Intervention Plans).
   - The participants’ homework assignments include watching a video introduction on SWPBS, reading three peer-reviewed journal articles on SWPBIS along with a textbook chapter on conducting Functional-Behavior Assessment (FBA), and completing an FBA/ BIP based on a case study.
   - At the end of the session, there will be a quiz on the theoretical frameworks and central components of SWPBIS.

2. Four weeks will cover Trust-Based Relational Intervention (TBRI), a therapeutic approach designed to give parents, teachers, and other caretakers conceptual frameworks and tools to help students who have come from high-risk environments (Call et al., 2014).
   - The sessions will focus on the content from two DVDs created by Texas Christian University’s TBRI program: Children from Hard Places and the Brain, and Trust-based Parenting. (The content from Trust-based Parenting is widely applicable to all caregivers, including teachers). Students will complete skeleton notes for each session, and discuss their notes and reactions to the DVD content each day. There will also be time allotted to discuss reactions, comments, and questions stemming from the homework assignments.
• The participants’ homework assignments include reading and answering pre-made questions from several chapters of TBRI’s introductory manual *The Connected Child*. In addition, participants will read four peer-reviewed journal articles, listen to one radio show, and watch one video.
• At the end of the session, there will be a quiz on the theoretical frameworks and central components of TBRI.

3. Four weeks will teach the *Abridged Nonviolent Crisis Intervention (NCI)* system, which provides a conceptual framework for the stages in the escalation of student behavior, and steps to deescalate problem behavior (Calabro et al., 2002).
• The sessions will follow scripted lessons from Crisis Prevention Institute’s NCI program. The training will be abridged from the 12-14 hour training. The focuses of the selected lessons include preventive, verbal, and nonverbal de-escalation techniques, while de-emphasizing the physical components of NCI.
• The participants’ homework assignments include reading one peer-reviewed journal article, preparing an in-class presentation of a group calming technique, and conducting a case study analysis for a self-abusive or self-stimulating child.
• At the end of the session, there will be a quiz on the tools and techniques presented in NCI.

4. Four weeks (20 hours) of **clinical field placement**, 
• Students will shadow a special education teacher (inclusion, resource, or self-contained), observing, and engaging in hands-on participation in a special education classroom. In most cases, participants will be completing more the 20 hours of clinical placement in the assigned classroom, as they will be taking more than one course requiring fieldwork during the spring, 2016 semester.
• Homework assignments during this module include conducting a Functional Behavior Assessment of one student within the school setting, and conducting an analysis of group behavioral change over the course of the school day. 3 textbook chapters on managing student behavior will also be assigned during the field placement weeks.

**Additional notes**
• The course participants will include the university’s junior and senior level special education majors, who are required to take the course, and other education majors who may take the course as an elective.
• Students will be graded on their self-reported percentages of homework assignment read for each session.
• The comprehensive final exam will involve students making a “cross-walk” between the classroom-based modules, discussing similarities and differences in theories, conceptual frameworks, and practical skills discussed in each.
• The professor has procured written permission to use the TBRI training materials with pre-service teachers for the spring, 2016 semester, and is certified to instruct the Non-violent Crisis Intervention program.
• The majority of field placements will occur in Central School District.
Appendix F

SWPBS Module Quiz

1. What is the definition of “tertiary?” (7 points)

2. What are two critical components of Tier I PBIS? (7 points)
   a.
   b.

3. Within the PBIS system, how would you remind a student to (6 points)
   a. Stop running in the hallway
   b. Never disrespect the lunch lady

4. What is one way research studies evaluate the effectiveness of PBIS? (7 points)

5. Name two differences between Tier II and Tier III PBIS intervention. (7 points)
   a.
   b.

6. What are the eight functions of behavior that may be used as hypotheses within a
   Functional Behavior Assessment? (16 points)
   a.
   b.
   c.
   d.
   e.
   f.
   g.
   h.
Appendix G

TBRI Permission Letter

January 21, 2016

Dear Brian Stipp,

After review of the submitted materials, you have our tentative approval to teach the 8-week TBRI modules to pre-service teachers at Olivet Nazarene University during the Fall 2016 semester. Final approval is dependent upon you completing a 2-day Trauma-Informed Classroom training hosted by the ICD in August 2016.

As stated in previous communication, you will utilize the following materials:
- The Connected Child book (with a study guide)
- Children from Hard Places and the Brain DVD (with discussion questions)
- Trust-based Parenting DVD (with discussion questions)
- TBRI Content Test (open-ended questions based upon materials)

If there are any changes or modifications to materials or modules, please submit updates to the ICD for approval before use.

Approval is limited to the Fall 2016 semester. If this is something you would like to pursue doing again, please contact us to discuss.

If you have any questions, please contact me at 817-257-4283 or c.d.call@tcu.edu.

Sincerely,

Casey Call
Casey Call, Ph.D., LPC-S
Assistant Director
Appendix H

TBRI Module Quiz

TBRI content knowledge test for teachers

Impact –
Responses may be coded as follows:
0 = no response, off-base response
1 = partially correct response
2 = accurate response

1. What is complex trauma?

2. How does complex trauma impact students?

3. How does attachment security form?

4. What is the impact of the following insecure attachment styles?
   
   Avoidant
   Ambivalent
   Disorganized

5. Name three ways complex trauma may impact students neurologically?

6. How might complex trauma and insecure attachment styles impact students behaviorally?
7. How might complex trauma and insecure attachment styles impact students academically?

Response

Responses may be coded as follows:

0 = no response, off-base response
1 = correct response with incomplete descriptions
2 = correct response with complete descriptions

1. Name and describe five things you can do to connect with students from hard places.

2. Name and describe five approaches to empowering students from hard places.

3. Name and describe five approaches correct students from hard places in a way that engenders rather than endangers trust. (Proactive; Responsive)
Appendix I

NCI Certificate

Brian Stipp has completed the requirements for the Nonviolent Crisis Intervention* Instructor Certification Program and is certified to teach the staff of Olivet Nazarene University.

November 6, 2015

Judith Schubert, President

Certification Hours: 28
Certification Level: Associate
Instructor ID #: 1093240

cpi educate. empower. enrich.
Appendix J

NCI Module Quiz

The following quiz is a replication of the material published by Crisis Prevention Institute. It is provided here for clarity of explanation, but not as a sharable resource. This quiz may not be used or replicated without training and consent from its publisher.

1. Complete the *Crisis Development Model*

<table>
<thead>
<tr>
<th>Crisis Development/Behavior Levels</th>
<th>Staff Attitudes/Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
<td>4.</td>
</tr>
</tbody>
</table>

2. What is the value of learning the four levels and corresponding staff attitudes?

3. Complete the *Verbal Escalation Continuum*. *(Drawing of pentagon provided)*

4. Describe three reasons you should use the *Supportive Stance*.

5. List two ways the Decision-Making Matrix model is used to consider risk.

6. What are the values that underpin this course?

7. Postvention is used for:
   a. Staff only.
   b. Service user only.
   c. Staff and service user.
Appendix K

Letter of Informed Consent for Course Participants

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

Informed Consent Form

Title: Impact of Social and Emotional Learning Training in Pre-Service Teacher Education

Principal Investigator: Mary Ellen Lewis, Ed.D.; Johns Hopkins University Affiliate Faculty Member

Date: June 28, 2016

PURPOSE OF RESEARCH STUDY:
The purpose of this research study is to determine the impact of a college course for pre-service teachers titled Classroom and Individual Emotional/Behavioral Supports (CIEBS). The study will evaluate changes in participants’ knowledge of social and emotional learning techniques and preparedness for managing classrooms, behaviors, and student stress. It will also evaluate the impact of the various course modules, activities, and assignments. The study is valuable in determining whether such a course is effective for enhancing pre-service teachers’ preparedness, whether and how the course should be revised in future semesters, and whether the course merits further evaluation for its long-term impact on pre-service teacher preparedness. We anticipate that approximately 18 students (9 course participants, and 9 control participants) will participate in this study.

PROCEDURES:
Data will be collected from written pre-tests on the first day of class, and post-tests given at the end of the semester. In addition, study participants may also elect to participate in a focus group session. In addition, cooperating teachers will be invited to participate in a written test as well as in a verbal, four-question interview.

All study participants must attend 24 of the 30 class sessions, and complete at least 40% of the course readings and assignments. Each session will last 75 minutes.

RISKS/DISCOMFORTS:
There are no anticipated risks and discomforts associated with this study.

BENEFITS:
It may be beneficial to participants to think about the CIEBS course content in a
critical way. This may help participants to find strengths and gaps in knowledge, and greater self-awareness as they prepare to enter the teaching profession.

This study may benefit society if the results lead to a better understanding of how college coursework may impact pre-service teacher skills in providing social and emotional learning support. This study will have a direct impact on the students who take the CIEBS course in future semesters.

**VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:**

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you wish to withdraw from the study, please notify the student investigator to remove your pre-tests, quizzes, and post-tests, from the evaluation study materials.

If we learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

**CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:**

We will stop the participation in the study if you are no longer a student in the course.

There may also be other circumstances that would lead us to end your participation.

**CONFIDENTIALITY:**

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

The only people who will have access to the document that connects names and identifying numbers will be the principal investigator and the student researcher.

**COMPENSATION:**

There will be no compensation offered for participation in the study.

**IF YOU HAVE QUESTIONS OR CONCERNS:**

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by calling Principal...
Investigator Mary Ellen Lewis at 443-923-7822.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study. By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

___

Participant's Signature                        Date

___

Signature of Person Obtaining Consent
(Investigator or HIRB Approved Designee)     Date
Appendix L

Script for first day of class

*Script was read aloud 9-1-16*

While you all are taking this course, I will be involved in an evaluation of the course. As part of my doctoral research, I am looking to see how the course impacts you.

Your participation in the course is not mandatory, but it would benefit our CPCU School of Education. It would help lead us to better understanding of how college coursework may impact pre-service teacher skills in providing social and emotional learning support. This study will have a direct impact on the students who take the CIEBS course in future semesters.

*(While the researcher/professor passed out letters of informed consent)* If you elect to not participate in the evaluation, your grade or my opinions of you as a student will not be affected in any way. As you will see from the letter informed consent, your participation in entirely voluntary. If you want to withdraw from the study at any point, you are welcome to do so. In addition, your contribution to the evaluation study will be confidential. Anything published from your participation will not include your name.

Because I am student at Johns Hopkins University, I am not the principal investigator for this study. You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by calling Principal Investigator Mary Ellen Lewis at 443-923-7822.
Appendix M
Recruitment E-mail for Control Participants

Good afternoon,

As you may know, I am currently enrolled in the Doctor of Education program at Johns Hopkins University.

For my dissertation, I am evaluating the impact of a course in which some of our CPCU Teacher Education Candidates are enrolled. For the study, I am giving a brief assessment to the course participants at the beginning and the end of the semester. I will also give the same assessment (in the beginning and the end of the semester) to a group of candidates that is not enrolled in the course.

I am writing this e-mail to ask if you would be willing to be part of the group of teacher candidates that is not enrolled in the course. It would involve taking a brief (15-20 minute) assessment within the next week, and the same assessment at the end of this semester. If you are willing, please respond to this this e-mail, and I will work with you to set up a time for the first of the two assessments.

Thanks for considering,

-Prof. Stipp
Appendix N

Control Participant Letter of Informed Consent

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

Informed Consent Form

Title: Impact of Social and Emotional Learning Training in Pre-Service Teacher Education

Principal Investigator: Mary Ellen Lewis, Ed.D.; Johns Hopkins University Affiliate Faculty Member

Date: June 28, 2016

PURPOSE OF RESEARCH STUDY:

The purpose of this research study is to determine the impact of a college course for pre-service teachers titled Classroom and Individual Emotional/Behavioral Supports (CIEBS). The study will evaluate changes in participants’ knowledge of social and emotional learning techniques and preparedness for managing classrooms, behaviors, and student stress. It will also evaluate the impact of the various course modules, activities, and assignments. The study is valuable in determining whether such a course is effective for enhancing pre-service teachers’ preparedness, whether and how the course should be revised in future semesters, and whether the course merits further evaluation for its long-term impact on pre-service teacher preparedness. We anticipate that approximately 18 students (9 course participants, and 9 control participants) will participate in this study.

PROCEDURES:

Those Central Plains Christian University School of Education students who are already admitted to the program (level 2 students) will be invited to participate as control group participants for the study. Of those who agree to participate, 9 to 12 students will be selected as the control group for this study.

Data from control will be collected from a 5-10 minute written pre-tests at the beginning of the semester, and another 5-10 minute post-test given at the end of the semester.

RISKS/DISCOMFORTS:

There are no anticipated risks and discomforts associated with this study.
BENEFITS:

This study may benefit society if the results lead to a better understanding of how college coursework may impact pre-service teacher skills in providing social and emotional learning support. This study will have a direct impact on the students who take the CIEBS course in future semesters.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:

Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please notify the student investigator to remove you from the study.

If we learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:

We will stop the participation in the study if you are no longer a student the CPCU School of Education.

CONFIDENTIALITY:

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. The only people who will have access to the document that connects names and identifying numbers will be the principal investigator and the student researcher.

COMPENSATION:

There will be no compensation offered for participation in the study.

IF YOU HAVE QUESTIONS OR CONCERNS:

You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by calling Principal Investigator Mary Ellen Lewis at 443-923-7822.
If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

**SIGNATURES**

**WHAT YOUR SIGNATURE MEANS:**
Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study. By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.

___

Participant's Signature

Date

___

Signature of Person Obtaining Consent

(Date

(Investigator or HIRB Approved Designee)
Appendix O

Recruitment E-mail for Cooperating Teachers

Hi [Name],

I am writing to seek your help with a research study. I am currently in my final year of the Doctor of Education program at Johns Hopkins University.

For my doctoral dissertation, I am studying the impact of a new course that Emily is taking this semester, titled "Classroom and Individual Emotional Behavioral Supports." Currently, only special education majors are required to take the course, while all other education majors may take the course as an elective. My study’s objective is to determine whether the course will become required for more teacher education students in future semesters.

As part of the dissertation project, I am inviting our course participants’ cooperating teachers to contribute to the study. If you are willing, your participation will come in two parts, each of which will take about 15 minutes of your time.

1. The first is answering a series of questions in a written questionnaire about your own teacher efficacy and sense of preparedness for handling stress.
2. The second is reading a 2-page description of the course’s content, methods, and teaching strategies and providing your opinion of the course in a face-to-face interview.

Are you willing to help us learn more about the potential impact of this course?

If so, we will proceed in three steps.

1. I will e-mail you two questionnaires along with a letter of informed consent, and ask that you return them within one week.
2. I will e-mail you a two-page course description and the written questionnaire of interview questions.
3. I will come to your school (at a time that is convenient for you) to interview you and record your interview responses in person.

Thank you for considering!

Brian Stipp
Appendix P

Fall, 2016 Letter of Informed Consent

Johns Hopkins University
Homewood Institutional Review Board (HIRB)

Informed Consent Form

Title: Impact of Social and Emotional Learning Training in Pre-Service Teacher Education

Principal Investigator: Mary Ellen Lewis, Ed.D.; Johns Hopkins University Affiliate Faculty Member

Date: June 28, 2016

PURPOSE OF RESEARCH STUDY:
The purpose of this research study is to determine the impact of a college course for pre-service teachers titled Classroom and Individual Emotional/Behavioral Supports (CIEBS). The study will evaluate changes in participants’ knowledge of social and emotional learning techniques and preparedness for managing classrooms, behaviors, and student stress. It will also evaluate the impact of the various course modules, activities, and assignments. The study is valuable in determining whether such a course is effective for enhancing pre-service teachers’ preparedness, whether and how the course should be revised in future semesters, and whether the course merits further evaluation for its long-term impact on pre-service teacher preparedness. We anticipate that approximately 18 students (9 course participants, and 9 control participants) will participate in this study. In addition, approximately 9 cooperating teachers will provide opinions on the course’s content, methods, and teaching strategies.

PROCEDURES:
Those cooperating teachers who are supervising CIEBS course participants for the fall, 2016 semester will be invited to participate in the study in two ways. The first is answering a series of questions in a written questionnaire about the cooperating teachers’ own teacher efficacy and sense of preparedness for handling stress. The second is reading a description of the course’s content, methods, and teaching strategies providing opinions of the course in a face-to-face interview.

RISKS/DISCOMFORTS:
There are no anticipated risks and discomforts associated with this study.
BENEFITS:
This study may benefit society if the results lead to a better understanding of how college coursework may impact pre-service teacher skills in providing social and emotional learning support. This study will have a direct impact on the students who take the CIEBS course in future semesters.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW:
Your participation in this study is entirely voluntary: You choose whether to participate. If you decide not to participate, there are no penalties, and you will not lose any benefits to which you would otherwise be entitled.

If you choose to participate in the study, you can stop your participation at any time, without any penalty or loss of benefits. If you want to withdraw from the study, please notify the student investigator to remove you from the study.

If we learn any new information during the study that could affect whether you want to continue participating, we will discuss this information with you.

CIRCUMSTANCES THAT COULD LEAD US TO END YOUR PARTICIPATION:
We will stop the participation in the study if you are no longer serving as a cooperating teacher for a CIEBS course participant.

CONFIDENTIALITY:
Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board and officials from government agencies such as the National Institutes of Health and the Office for Human Research Protections. (All of these people are required to keep your identity confidential.) Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. The only people who will have access to the document that connects names and identifying numbers will be the principal investigator and the student researcher.

COMPENSATION:
There will be no compensation offered for participation in the study.

IF YOU HAVE QUESTIONS OR CONCERNS:
You can ask questions about this research study now or at any time during the study, by talking to the researcher(s) working with you or by calling Principal
Investigator Mary Ellen Lewis at 443-923-7822.

If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580.

SIGNATURES

WHAT YOUR SIGNATURE MEANS:

Your signature below means that you understand the information in this consent form. Your signature also means that you agree to participate in the study. By signing this consent form, you have not waived any legal rights you otherwise would have as a participant in a research study.


Participant's Signature

Date

Signature of Person Obtaining Consent

(Investigator or HIRB Approved Designee)

Date
Appendix Q

Cooperating Teacher Interview Questions

Questions for Cooperating Teachers

After reading a description of the Classroom and Individual Emotional and Behavioral Supports (CIEBS) course, consider the following…

1. Which of the following best describes your assessment of the importance the above-described course for our candidates?
   a. Not important
   b. Vital for special education majors, and potentially helpful for general education majors who want additional training in this area to take as an elective
   c. Vital for all education majors: we should mandate that all teacher education majors take this course.

   Please expound upon your answer.

2. After reading the details regarding the concepts, methods, and teaching strategies planned for the CIEBS course, please provide:

   (a) your opinion on the course’s concepts, methods, and teaching strategies.

   (b) any suggestions for additions, deletions, or modifications to the course.

3. Please comment on the practicality of using the three different course modules within your teaching practice? Which elements of the course seem most/ least practical?

4. How have you noticed your assigned student’s participation in the CIEBS course impacting his/ her work in your classroom?
Appendix R

Teacher Sense of Self-Efficacy Scale

<table>
<thead>
<tr>
<th>Teacher Beliefs</th>
<th>How much can you do?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at All</td>
</tr>
<tr>
<td>1. How much can you do to get through to the most difficult students?</td>
<td>(1)</td>
</tr>
<tr>
<td>2. How much can you do to help your students think critically?</td>
<td>(1)</td>
</tr>
<tr>
<td>3. How much can you do to control disruptive behavior in the classroom?</td>
<td>(1)</td>
</tr>
<tr>
<td>4. How much can you do to motivate students who show low interest in school work?</td>
<td>(1)</td>
</tr>
<tr>
<td>5. To what extent can you make your expectations clear about student behavior?</td>
<td>(1)</td>
</tr>
<tr>
<td>6. How much can you do to get students to believe they can do well in school work?</td>
<td>(1)</td>
</tr>
<tr>
<td>7. How well can you respond to difficult questions from your students?</td>
<td>(1)</td>
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<tr>
<td>8. How well can you establish routines to keep activities running smoothly?</td>
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<tr>
<td>9. How much can you do to help your students value learning?</td>
<td>(1)</td>
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<tr>
<td>10. How much can you gauge student comprehension of what you have taught?</td>
<td>(1)</td>
</tr>
<tr>
<td>11. To what extent can you craft good questions for your students?</td>
<td>(1)</td>
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<tr>
<td>12. How much can you do to foster student creativity?</td>
<td>(1)</td>
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<tr>
<td>13. How much can you do to get children to follow classroom rules?</td>
<td>(1)</td>
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<tr>
<td>14. How much can you do to improve the understanding of a student who is failing?</td>
<td>(1)</td>
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<tr>
<td>15. How much can you do to calm a student who is disruptive or noisy?</td>
<td>(1)</td>
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<tr>
<td>16. How well can you establish a classroom management system with each group of students?</td>
<td>(1)</td>
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<tr>
<td>17. How much can you do to adjust your lessons to the proper level for individual students?</td>
<td>(1)</td>
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<tr>
<td>18. How much can you use a variety of assessment strategies?</td>
<td>(1)</td>
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<tr>
<td>19. How well can you keep a few problem students from ruining an entire lesson?</td>
<td>(1)</td>
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<tr>
<td>20. To what extent can you provide an alternative explanation or example when students are confused?</td>
<td>(1)</td>
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<tr>
<td>21. How well can you respond to defiant students?</td>
<td>(1)</td>
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<tr>
<td>22. How much can you assist families in helping their children do well in school?</td>
<td>(1)</td>
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<tr>
<td>23. How well can you implement alternative strategies in your classroom?</td>
<td>(1)</td>
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<tr>
<td>24. How well can you provide appropriate challenges for very capable students?</td>
<td>(1)</td>
</tr>
</tbody>
</table>

Tschannen-Moran & Hoy (2001)
Teacher Preparedness in Dealing with their Students’ Stress: Original Version

PREPAREDNESS FOR DEALING WITH STUDENTS’ STRESS

Instructions: Please use the scale below to rate your degree of preparedness in helping children that are affected by each stressor in the categories on the chart. Preparedness here refers to having the knowledge to deal with, or knowing which resources to use to enable children to better cope with stress. Place an X in the box that most accurately represents your level of preparation, ranging from very high (very well prepared) to very low (not at all prepared).

<table>
<thead>
<tr>
<th>FAMILY RELATED STRESSORS</th>
<th>Very well prepared</th>
<th>Well prepared</th>
<th>Moderately prepared</th>
<th>Poorly prepared</th>
<th>Very poorly prepared</th>
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</thead>
<tbody>
<tr>
<td>9. Mother becomes pregnant</td>
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<td>10. Birth of a sibling</td>
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<td>11. Adoption of a sibling</td>
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<td>12. Death of a sibling</td>
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<td>13. Death of a parent</td>
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<td>14. Divorce of parents</td>
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<td>15. Separation of parents</td>
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<td>16. Mental illness of a parent</td>
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<td>17. Disabled parent</td>
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<td>18. Unrealistic and imaginary fears</td>
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<td>19. Receiving a new pet</td>
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<td>20. Loss of a pet</td>
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<tr>
<td>21. Hospitalization of sibling</td>
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<td>22. Hospitalization of parent</td>
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<td>23. Verbal abuse by parent</td>
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<td>24. Physical abuse by parent</td>
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<td>25. Neglect</td>
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<thead>
<tr>
<th>SCHOOL RELATED</th>
<th>Very well prepared</th>
<th>Well prepared</th>
<th>Moderately prepared</th>
<th>Poorly prepared</th>
<th>Very poorly prepared</th>
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<tbody>
<tr>
<td>26. Changes in peer acceptance</td>
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<tr>
<td>27. Poor performance in school</td>
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<td>28. Changes in extracurricular activities</td>
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<td>29. Outstanding performance</td>
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<td>30. Being laughed at in front of the class</td>
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<td>31. Repeating a grade</td>
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<td>32. Beginning a new school (preschool or kindergarten)</td>
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<tr>
<td>33. Changing to a different school</td>
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<td>34. Being bullied</td>
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<td>35. Theft of personal property</td>
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<td>36. Outstanding performance in academics</td>
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<td>37. Outstanding performance in sports and other extra-curricular activities (e.g., music, dance)</td>
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<td>38. Injury or illness of close friend</td>
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<td>39. School violence</td>
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<td>40. New teacher</td>
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<td>41. Taking a bus to school</td>
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<td>42. Peer pressure</td>
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<tr>
<td><strong>SOCIETY RELATED STRESSORS</strong></td>
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<td>43. Moving to another town</td>
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<td>44. Chronic illness of student him/herself</td>
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<td>45. Loss of job by parent</td>
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<td>46. Parent or guardian in the armed services</td>
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<td>47. Change of parents’ or parent’s job</td>
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<tr>
<td>48. Changes in daycare or with babysitter</td>
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<td>49. Changes in socio-economic status</td>
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<td>50. Jail sentence of parent</td>
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<td>51. Living in poverty</td>
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<td>52. Nuclear and war threat</td>
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<td>53. War</td>
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<td>54. Terrorism</td>
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<td>55. Homelessness</td>
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</tbody>
</table>

Onchwari (2010)
Appendix T

Teacher Preparedness in Dealing with their Students’ Stress: Adapted Version

Instructions: Rate your degree of preparedness in helping children that are affected by each category of stressors on the chart.

Very well – I have more than one idea I am completely confident will work for how approach a student in this scenario.

Well prepared – I have one idea I am fairly confident will work for a student in this scenario.

Moderately prepared – I have one idea, but I am uncertain about trying it.

Poorly prepared - I have no ideas what to do; I will use my best instinct and hope for the best.

Very poorly prepared – I have no idea what to do; I will ask someone else to handle this situation for me.

<table>
<thead>
<tr>
<th></th>
<th>Very well prepared</th>
<th>Well prepared</th>
<th>Moderately prepared</th>
<th>Poorly prepared</th>
<th>Very poorly prepared</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FAMILY-STRUCTURE RELATED STRESSORS, such as mother becoming pregnant, birth or adoption of a sibling</td>
<td></td>
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<tr>
<td>2. FAMILY-LOSS RELATED STRESSORS, such as death of a sibling or parent, divorce or separation of parents, incarceration of parent</td>
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<tr>
<td>3. FAMILY-</td>
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<tr>
<td>ILLNESS RELATED STRESSORS, such as hospitalization of parent mental illness or disability of parent or sibling</td>
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<tr>
<td>4. FAMILY-RELATED TRAUMA, such as verbal, physical abuse and neglect</td>
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<tr>
<td>5. SCHOOL – RELATED SOCIAL STRESSORS, such as changes in peer acceptance, being laughed at, theft of property, or being bullied</td>
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<tr>
<td>6. SCHOOL-RELATED ACADEMIC STRESSORS, such as poor performance, outstanding performance, or repeating a grade</td>
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<tr>
<td>7. SOCIETY-RELATED STRESSORS, such as changes in parent’s job, changes in socio-economic status</td>
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<tr>
<td>8. POVERTY-RELATED STRESSORS, such as homelessness, hunger, lack of resources</td>
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</table>
Appendix U

Vignette

Nancy, a sixth grader, was homeschooled from kindergarten through third grade. She tested above the 80th percentile in Reading, and at the 65th percentile in Math. She enjoyed shooting rifles with her dad and brothers, and playing in the woods. Nancy’s parents said they wanted help from the school specialists with Nancy’s emotional/behavioral problems. Their concerns began when Nancy attacked her older brother and sister when she was in second grade. Since this attack, her parents had observed a physical altercation with a sibling at least once per month. When she was in fourth grade, Nancy began using objects such as butter knives and sticks in her attacks. When she began using objects, Nancy’s parents enrolled her in school. Her other five siblings remained at home.

Beginning a few weeks into school, Nancy began to hit other kids and steal their things. Nancy loved weapons. When she was in fifth grade, she threatened her teacher with a pencil that she brandished like a knife. Now, during sixth grade, Nancy has begun with self-mutilation, scraping her arms with pens and rulers until they were raw and picking at her scabs.

Nancy seemed to be responding well to her behavior plan, which was built around the hypothesis that Nancy’s harmful behaviors were cries for attention. Nancy was rewarded for her good behavior: for every hour of harm-free behavior, she received a “School Buck” which she could exchange for various prizes. Also, moving Nancy to an isolated desk near her teacher allowed her to function well and get her urges for self-harm under control. After two months of close proximity with her teacher, and receiving “school bucks” for every hour of school, Nancy was able to move back with a table group. Unfortunately, two weeks into being welcomed back to her group, Nancy’s self-injurious behavior started again, even more frequently than before. After one week of problems, Nancy was moved back to her desk near the teacher.

On April 19, 2016, Nancy came into school looking despondent. She was unresponsive when her teacher asked what was wrong. After several minutes of questioning, her teachers
decided to give her space to sit alone at her desk. In the middle of the morning read-aloud, Nancy began banging her head on her desk. She didn't use any words. She cried loudly and banged her head hard against the desk.
# Appendix V

## CIEBS Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings/ Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday 9/1</td>
<td>Course Overview and PBIS Introduction</td>
<td></td>
</tr>
<tr>
<td>Tuesday 9/6</td>
<td>Positive Behavior Intervention and Support (PBIS)</td>
<td>Watch PBIS overview video Skim Horner, Sugai, and Lewis (2015)</td>
</tr>
<tr>
<td>Thursday 9/8</td>
<td>PBIS</td>
<td>Farkas, et al. (2012)</td>
</tr>
<tr>
<td>Tuesday 9/13</td>
<td>PBIS</td>
<td>Ross and Horner (2014)</td>
</tr>
<tr>
<td>Thursday 9/15</td>
<td>PBIS</td>
<td>Lane et al. (2010) Chapter 7 PBIS Exam</td>
</tr>
<tr>
<td>Tuesday 9/20</td>
<td>Field Placement Days</td>
<td>Listen to “Back to School” Radio Show</td>
</tr>
<tr>
<td>Tuesday 9/27</td>
<td>TBRI DVD</td>
<td>FBA/ BIP Case study discussion Call, Purvis, Parris, and Cross (2015)</td>
</tr>
<tr>
<td>Thursday 9/29</td>
<td>Trust-Based Relational Intervention (TBRI) DVD Children from Hard Places and the Brain, Chapters 1, 2, and 3</td>
<td>Purvis, Cross, and Sunshine (2007), Chapter 1 + Study guide</td>
</tr>
<tr>
<td>Tuesday 10/4</td>
<td>Field Placement Day</td>
<td></td>
</tr>
<tr>
<td>Thursday 10/6</td>
<td>Field Placement Day</td>
<td></td>
</tr>
<tr>
<td>Tuesday 10/11</td>
<td>NO CLASS</td>
<td>FALL BREAK</td>
</tr>
<tr>
<td>Thursday 10/13</td>
<td>Field Placement Day</td>
<td>Lane et al. (2010) Chapter 2</td>
</tr>
<tr>
<td>Tuesday 10/18</td>
<td>Field Placement Day</td>
<td>Lane et al. (2010) Chapters 5 &amp; 6</td>
</tr>
<tr>
<td>Thursday 10/20</td>
<td>Field Placement Day</td>
<td>Assignment 3: FBA/ BIP of FE student</td>
</tr>
<tr>
<td>Tuesday 10/25</td>
<td>Field Placement Day</td>
<td>Assignment 4: Tracking Behavioral Changes</td>
</tr>
<tr>
<td>Thursday 10/27</td>
<td>TBRI</td>
<td>Purvis, Cross, and Sunshine (2007), Chapter 3, pp. 45 &amp; 46;</td>
</tr>
<tr>
<td>Date</td>
<td>Subject</td>
<td>Readings/Assignments</td>
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<tr>
<td>Thursday 11/1</td>
<td>TBRI</td>
<td>Schore, 2002, Chapter 4 + Study guide</td>
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<tr>
<td>Tuesday 11/3</td>
<td>TBRI</td>
<td>Purvis, Cross, and Sunshine (2007), Chapter 5 + Study guide</td>
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<tr>
<td>Tuesday 11/8</td>
<td>TBRI</td>
<td>Purvis, Cross, and Sunshine (2007), Chapter 6 + Study guide; Chapter 7</td>
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<tr>
<td>Tuesday 11/15</td>
<td>TBRI</td>
<td>Purvis, Cross, and Sunshine (2007), Chapter 8 + Study guide</td>
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<tr>
<td>Thursday 11/10</td>
<td>TBRI</td>
<td>Purvis, Cross, and Sunshine (2007), Chapter 10 (pp. 197-198; 204-209)</td>
</tr>
<tr>
<td>Tuesday 11/15</td>
<td>TBRI</td>
<td>Watch, “The Heart - Brain Connection”</td>
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<td>Thursday 11/17</td>
<td>NCI</td>
<td>Calabro, Mackey, and Williams (2002)</td>
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<tr>
<td>Tuesday 11/22</td>
<td>NCI</td>
<td>Assignment 5 - Demonstration of group calming technique</td>
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<tr>
<td>Thursday 11/24</td>
<td>NO CLASS</td>
<td>THANKSGIVING BREAK</td>
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<tr>
<td>Tuesday 11/29</td>
<td>NCI</td>
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<tr>
<td>Thursday 12/1</td>
<td>NCI</td>
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<tr>
<td>Tuesday 12/6</td>
<td>NCI</td>
<td>NCI Appendix Reading</td>
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<tr>
<td>Thursday 12/8</td>
<td>NCI</td>
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<tr>
<td>Tuesday 12/13</td>
<td>NCI</td>
<td>ASSIGNMENT 6: Case Study for self-abusive or self-stimulating students</td>
</tr>
<tr>
<td>Thursday 12/15</td>
<td>Final Exam</td>
<td>1:00 – 2:50 pm</td>
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</tbody>
</table>
Appendix W

Post-Course Focus Group Evaluation Questions

1. Which of the following best describes your assessment of the importance the above-described course for our candidates?
   a. Not important
   b. Vital for special education majors, and potentially helpful for general education majors who want additional training in this area to take as an elective
   c. Vital for all education majors: we should mandate that all teacher education majors take this course.

   Please expound upon your answer.

2. After reading the details regarding the concepts, methods, and teaching strategies planned for the CIEBS course, please provide:

   (a) your opinion on the course’s concepts, methods, and teaching strategies.

   (b) any suggestions for additions, deletions, or modifications to the course.

3. Which elements of the course do you anticipate using as a classroom teacher?

4. Which elements of the course do you perceive impact your own perception of your ability to manage a classroom, or your own perception of your ability to deal with student stress?
Appendix X

Post-Course Individual Interview Questions

1. Tell me the story of the changes in your sense of efficacy for classroom management from the beginning of class to the end of class.

How did your efficacy increase or decrease over the course of the semester? (You may include experiences that were not related to this class if applicable).

2. Tell me the story of your preparedness for handling student stress from the beginning of class to the end of class.

How did your preparedness for handling student stress increase or decrease over the course of the semester? (You may include experiences that were not related to this class if applicable).
Appendix Y

Participant Demographic Data

Evaluation ID Number ______________________

Number of years working with children and youth in a professional setting _______________________

Number of years working with students from high risk environments _______________________

Major __________________________

Number of credit hours completed _______________________

Grade Point Average _________________________________
Appendix Z

Demographic Clarifications

“Number of years working with children and youth in a professional setting”
Professional setting: a setting where the individual is paid for working, including summer jobs and babysitting.

“Number of years working with students from high risk environment”
Children and youth from risk environments experience two or more of the following: low income, high numbers of family stressful events, high percentage of neighborhood poverty, high percentage of neighborhood welfare receipt, high percentage of female heads of household, low maternal education, maternal depression, mothers who are not married, high numbers of family stressful events.
Appendix AA

Transcript of Allison’s Story

Researcher/Professor: So, Allison, you were telling me how you presented about TBRI to your [grade level] team during your student teaching semester. So back up a little bit and tell me about the student who prompted all this.

Allison: So we have a student that our team of Gen Ed teachers and the special education teacher has been working with and trying to figure out what the best situation for him is to be successful, since the start of the year. The problem for him is definitely behaviors and social emotional learning. He has no academic deficits or anything like that that holds him back from being in the Gen Ed classroom and having that curriculum. It's just those behaviors that are disruptive. It's either disruptive behaviors, not safe behaviors and just it becomes a huge distraction for the whole class. So they've had a lot of adults pushing into his classes to get him started and try to give him that one on one attention 'cause he really wants that attention. And so it's been an all hands on deck approach where everyone's trying to invest in this kid because it came out multiple times that he was in need of positive relationships. And after hearing a lot about his back story...

Researcher/Professor: Can I stop just a minute?

Allison: Yeah.

Researcher/Professor: How did it come out that he was in need of positive relationships?

Allison: Just through his back story and family history.

Researcher/Professor: Okay.

Allison: And then...

Researcher/Professor: Do you know who made that determination?

Allison: Just talking between the special education teacher and the social worker 'cause the social worker had been working with him also. And so I had only been in and out during the fall and then once I started regularly in the spring I saw the magnitude of like, "Okay. This kid... It's on a day to day basis that things are coming up." So just hearing about his family and back story and...

Researcher/Professor: So, tell me about the family and back story that helped the social worker and special ed. teacher determine that he was in need of positive relationships?

Allison: So, multiple things. We had an IEP meeting for him in which we had to talk with his mom, his real mom, and then his stepdad. And his mom was very transparent, just
about everything she had been through and about his life, and it came out that she had spent some time in jail and that he, from a very young age, she said that he was kind of left alone a lot, 'cause he wasn't taken care of by her. She definitely alluded to some abuse situations going on, but it sounded like a lot of negligence. And she said that he was kind of sick when he was younger and he was really skinny, and now, in middle school, he kinda does have a weight issue. She said that he has an eating disorder, the mom used that language. The mom also talked about how... She didn't give a lot of the details about this, but that he had spent some time living on the psychiatric ward at kind of a young age. I don't remember exactly what age, but it sounds like from early on, there's been repeated stressors, complex trauma. There was multiple things going on. I'm not sure. I know that real dad lives... I think in Florida. Sometimes, the student, he'll kind of make up stories about seeing real dad, and then we found out from the mom that they didn't happen.

Allison: So, the social worker also has been talking about there's a little bit of a warped sense of reality 'cause the kid, he almost sometimes believes his own stories and it doesn't seem always like, "Oh, I'm just trying to get attention." It's like, "Oh, this happened." He seems invested in his own story.

Researcher/Professor: Okay, so let me jump you ahead, so how did it come about that you talked about TBRI with the [grade level] team?

Allison: So, the [grade level] team, they were kind of at their wits' end. They were frustrated, they were like, "I don't know how to help him. I feel like I tried everything."

Researcher/Professor: Does he have class with multiple teachers on the [grade level] team?

Allison: Yeah, he has language arts, then he has math.

Researcher/Professor: How many different teachers does he work with?

Allison: One for language arts and reading, one for math, science, social studies, and then... He doesn't have minutes with the special education teacher, but he's spent quality time with her, 'cause she's kinda been the go to person for...

Researcher/Professor: So I'm counting at least five different teachers that work with him. Okay.

Allison: Yeah, on his team. So, they were kind of getting frustrated and they didn't really know what to do, and the special education teacher, since I had been in those team meetings and had kinda been listening in on all the issues that were arising and once I heard all of this stuff from his family and back story history, she was like, "If you have anything, anything at all, that would make sense... " Then I started to tell her a little about... I was like, "Well, I took this class... 'cause the general teachers were caught up on saying there's no reason for these behaviors, there's just no reason, and as a special
education teacher, she said there's always a reason. And I was like, "You know what? This makes me think so much of my class that I took this past semester, because it's all about how those kind of traumatic experiences shape the brain." And I was like, "I feel like with this kid, he's out of touch of his emotions, and he's kind of disconnected, and he's seeking out... " He wants to be friends... He sent an email to all the teachers like, "Why won't you be my friend?" He's seeking out. He's very over the top and kind of loud and in your face, 'cause he wants kids to like him, he wants that attention.

Allison: And so, just watching him and thinking about that, this kind of research, this theory about neuroscience and the TBRI stuff started to come up, and I was like, "I think that's why there's some of these things that don't make sense." And the teachers expect him to be like, "He should know better and he should do this." They expect him to know what's appropriate, what's inappropriate, and I'm thinking that he doesn't. I'm thinking that he just doesn't have that sense of, "Oh, this is okay. This isn't." That ability to be rational and self-regulate, that's not there. He doesn't know how to be logical, he kinda gets in this heightened state, and that's just not there. So I was like, "You know what?" I went home, and I just started flipping through the TBRI notes, the study guides, and I just started pulling different things that seemed applicable to this particular situation. I wrote up a Google Docs and I just put in a little brief summary like, "Here's what TBRI is, here's the basis behind it, here's the book if you wanna read it, and here is a variety of strategies that you could try in this case." So I showed it to her...

Researcher/Professor: Could you send that to Google Doc to me?

Allison: Yeah.

Researcher/Professor: Okay, great.

Allison: I shared it with her, and then she's like, "I think you should tell this to the team." Some of this stuff, these basic strategies may seem obvious, but I feel like sometimes it's a good way. Praising and all that stuff that TBRI puts a huge emphasis on, sometimes you don't realize that you're not doing it until you think about it, but having the lens of his brain and his development and all that stuff, is huge if you start thinking of things through that kind of... It just changes things.

Researcher/Professor: Let me ask you a couple of questions. When did you make this presentation?

Allison: I actually made it last Friday.

Researcher/Professor: Last Friday was the 13th and then you started your student teaching on the...

Allison: 3rd.
Researcher/Professor: The 3rd. Okay.

Allison: She had had that Google Doc for about a week, but we just hadn't found the time yet for me to talk about it with them. Originally, I was just sharing it with her, 'cause I thought she would wanna know about it, 'cause I knew that TBRI wasn't as common. And then she was like, "I think you should tell this to the rest of the team." So that's what I did on Friday, and they were pretty receptive to it. It was definitely kind of new, so I just talked about it, went over all the strategies, and I'll send you that, but... Yeah.

Researcher/Professor: How did you determine that they were receptive to it?

Allison: Well, they started asking questions about some of the strategies. The history teacher, the thing about honoring their emotions, he's like, "I think that's a really good one. I've tried to do that." Then the language arts teacher jumped in, she was like, "Yeah, that's good to do." Some of the ones they asked questions about, and they were like, "I can see how that would be helpful." That was only one or two of the teachers. The social worker was very like, "Yeah, that totally makes sense." 'Cause obviously, he was like, "Yeah, I totally know about that stuff." They just seemed like in general, like, "Okay." And I felt a little bit scared too, 'cause I'm just a little... What do I know? But yeah, they seemed open to it, and I think at that point they were like, "You know what? Anything that might work at this point, we're gonna try." Because it's been difficult. 'Cause I get it.

Researcher/Professor: So within a week of being there, you shared this document with your Cooperating Teacher, and then a week later or so, at her suggestion, you presented this...

Allison: Yeah. Plus, it should be known that fall, I was there at least once a week and I had heard a lot about this, so it wasn't like I had...

Researcher/Professor: About the situation with the kid?

Allison: Yeah.

Researcher/Professor: It wasn't that you just heard about it...

Allison: And then jumped... Yeah. It was kinda connecting dots along the way, getting more information. Yeah.

Researcher/Professor: Okay.

Appendix AB

Allison's TBRI "Google Doc"
Note: The following has not been approved by Texas Christian University’s Institute for Child Development as an accurate representation of Trust-based Relational Intervention (TBRI) principles. The document was created by a CIEBS course participant to share informally with a local school grade level team.

**Trust-Based Relationship Intervention**

**TBRI Program: “Empower, Connect, Correct”**

Theoretical Basis for TBRI: When students experience repeated stressors/trauma throughout life, their brain becomes in a constant state of fight, flight, or freeze. When in this state, children struggle to activate the part of their brain that acts as the child’s rational and logical center. Thus, children become unable to self-regulate their behavior and are out of touch with their emotions. They cannot always distinguish between what is acceptable and unacceptable behavior. When children are able to feel safe in their environment and engage in trust-based, healthy relationships, the brain becomes more open and the child can begin to gain control over their emotions/behavior and flourish.

Read more about TBRI: *The Connected Child* By Purvis, Cross, and Sunshine.

TBRI was originally designed for parents who have adopted children who come from what TBRI calls “hard places.” The majority of TBRI strategies transfer to the classroom :

**Various TBRI Strategies**

- Make the student’s day predictable- alert them to what is coming next and make them aware of what the day’s tasks will look like.
- Give appropriate choices (big or small) to share appropriate control.
- Honor the student’s emotions: always validate how they are feeling and relate to them when they express themselves.
- Use the IDEAL approach for behaviors: I- Respond Immediately, D- Respond Directly, E- Be Efficient (Use as few words as possible and respond with the level of firmness needed for the specific behavior). A- Action Based (Always redirect to a better behavior) L- Level (respond at the behavior, not the child.)
- Teach expectations: Some skills must be directly taught, even if the student is at an age where certain behaviors are expected. Use role playing situations and modeling to guide students to participate in what behaviors are positive versus negative.
- Always allow for a re-do. When a behavior occurs, ask if the child would like a re-do and then praise them for their efforts. Always give opportunities for success (big or small)
• Praise, Praise, Praise: students must always know that they are valued by you. Take the time to recognize what they are doing well. Catch them being good and give them positive attention.

• Keep them close when they need time to reflect. Get down on their level, talk with them about the behavior and help them become self-aware of their own actions. After they reflect, guide them to take positive action to fix their choice and allow a re-do if possible. After a behavior, always reconnect with the student and make sure the student knows they are valued. The behavior is what is not acceptable, not the student.

• Communicate to the child that you are there for them and that you want to see them be the best version of themselves. Be their coach, not their warden.

• Check in with them emotionally: “How is your engine running?”

• Calming techniques (universal design approach for all students): Guided imagery, breathing and mindfulness activities can help set students up for success.

• Share joyful experiences together. Laugh and have fun together. The brain is positively impacted by joyful memories. Find common ground with a student and connect.
Curriculum Vitae

Brian Stipp was born in Independence, Missouri. He became interested in the social and emotional learning needs of students while serving a special education teacher on the Southwest side of Chicago from 2002 through 2013. The present dissertation was completed through the Johns Hopkins University Doctor of Education program, and represents Mr. Stipp’s first scholarly contribution to the field of education.

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EDUCATION

Doctor of Education
Johns Hopkins University, Baltimore, Maryland
2017
Specialty: Special Education, 4.0 GPA
Expected Conferral: Dissertation: Before the panic sets In: The impact of a social and emotional learning (SEL) teacher training course on its participants

Mater of Arts
Roosevelt University, Chicago, Illinois
2005
Special Education, 3.93/4.0 GPA
Thesis: Individualism and Collectivism among 6th Grade Students with Disabilities

BA
Olivet Nazarene University, Bourbonnais, Illinois
2002
Majors: International Business; Spanish
Minor: Economics
Study Abroad: Latin American Studies Program, Fall, 2000
Award: Outstanding Graduating Student, International Business

RESEARCH INTERESTS
Social and Emotional Learning; Multicultural Education; Disproportionality; Complex Trauma; Secure Attachment; Teacher Education; Qualitative research methods

HIGHER EDUCATION TEACHING
OLIVET NAZARENE UNIVERSITY
2013 – 2017
EDUC 150: History and Philosophy of Education
EDUC 249: Educational and Developmental Psychology
EDUC 333: Multicultural Classroom
EDUC 376: Teaching Diverse Populations in the Regular Education Classroom
SPED 301: Characteristics of Students with Disabilities
SPED 312: Literacy/Language Intervention Methods
SPED 321: Classroom/Individual Emotional & Behavioral Supports
HONR 150, 151, 250: Freshman and Sophomore Honors

K-12 TEACHING EXPERIENCE
Chicago Public Schools Special Education Teacher
2010 – 2013 Francisco Madero Middle School
2005-2010 Rosario Castellanos School
2004-2005 Francisco Madero Middle School
2003-2004 Nathaniel Pope Elementary School

Illinois State Board of Education Certification
Teaching Endorsements:
• National Board Certified Teacher
  o Focus Area: Exceptional Needs Specialist
• Learning Behavior Specialist
• Middle Grades Social Science
• Middle Grades Language Arts

ACADEMIC SERVICE
OLIVET NAZARENE UNIVERSITY
2015 – 2017 Member of Honors Council
2015 – 2017 Faculty Sponsor for Student Education Association
2014 – 2017 Co-director of Special Education Teacher Training Program
2013, 2015 Taught “Freshman Connections” college transition course
2013 – 2014 Led Olivet Nazarene University in launching a new Special Education Teacher Training Program

CHICAGO PUBLIC SCHOOLS
School Leadership
2011-13 Chaired Schoolwide RTI team
2012-13 Team leader for the Special Education Department
Member of the Instructional Leadership Team
2007-2010 Supervised and coached four undergraduate students in teacher preparation programs, one year each
2006-10 Team leader for the Special Education Department
2006-08 Member of the Focused Instruction Leadership Team
Student Support
2008-11 Taught after-school guitar class
2005 Initiated and directed after-school basketball program for children with behavioral difficulties

COMMUNITY SERVICE
2017 Parent advocate for bilingual student requiring special education services
2009 Presented to Neighborhood Betterment Organization’s volunteers regarding the inclusion of children and adults with disabilities in their non-academic programs
2000 - 05 Coordinated and directed activities for inner city youth, New Life Community Church, Chicago