The Impact of Birth Order on a Child’s Educational Experience/Meeting the Social-Emotional Needs of Students Through Implementation of Responsive Classroom Frame-working

Shana Stiel
shana.stiel@isd2165.org

Follow this and additional works at: https://repository.stcloudstate.edu/cfs_etds

Recommended Citation
The Impact of Birth Order on a Child’s Educational Experience

Meeting the Social-Emotional Needs of Students Through Implementation of Responsive Classroom Frame-working

by

Shana Stiel

A Starred Paper
Submitted to the Graduate Faculty of St. Cloud State University in Partial Fulfillment of the Requirements for the Degree of Master of Science in Early Childhood Special Education

August, 2019

Starred Paper Committee:
JoAnn Johnson, Chairperson
Bradley Kaffar
Ming-Chi Own
The Impact of Birth Order on a Child’s Educational Experience

by

Shana Stiel

A Starred Paper
Submitted to the Graduate Faculty of
St. Cloud State University
in Partial Fulfillment of the Requirements
for the Degree of
Master of Science
in Early Childhood Special Education

August, 2019

Starred Paper Committee:
JoAnn Johnson, Chairperson
Bradley Kaffar
Ming-Chi Own
# Table of Contents

<table>
<thead>
<tr>
<th>List of Figures</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Importance and Purpose of Study</td>
<td>7</td>
</tr>
<tr>
<td>Research Questions</td>
<td>7</td>
</tr>
<tr>
<td>Literature Search Description</td>
<td>8</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>8</td>
</tr>
<tr>
<td>2. Literature Review</td>
<td>10</td>
</tr>
<tr>
<td>Birth Order and Personality Traits</td>
<td>10</td>
</tr>
<tr>
<td>Birth Order and Intelligence</td>
<td>20</td>
</tr>
<tr>
<td>Etiology of “Birth Order”</td>
<td>22</td>
</tr>
<tr>
<td>3. Summary</td>
<td>24</td>
</tr>
<tr>
<td>4. Position Statement</td>
<td>36</td>
</tr>
<tr>
<td>References</td>
<td>37</td>
</tr>
</tbody>
</table>
### List of Figures

<table>
<thead>
<tr>
<th>Figures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effects of birth order position and sibship size on personality and intelligence using between-family data</td>
<td>18</td>
</tr>
<tr>
<td>2. Effects of birth order position and sibship size on personality and intelligence using within-family data</td>
<td>19</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

It is a well-known fact that no two children are the same. They have unique interests, different personalities, and learn at different speeds. However, while each child is unique, I have noticed through my years of teaching there are also similarities between the children in my classroom. Children coming from the same families may have similar problem-solving abilities. Children of the same gender may choose similar stories to read when given the opportunity. I have also noticed that children sharing the same birth order may appear to present similar characteristics at times.

Birth order is a topic that has held my interest since I first began teaching over 15 years ago. I often heard comments about “typical first child behavior” or “middle child syndrome”, but once I had my own classroom and began working with a variety of families, I began to understand more about those side comments. The longer I worked in the educational setting, the deeper my interest became in learning more about the subject. Were these comments and observations based on myths, or would one be able to find research that demonstrates certain characteristics are more common with a first-born child versus a last-born?

Once I had my own children, I became even more interested as my own children seemed to fall into some of the general birth order categories (or my understanding of them at that point). If a line not to be crossed were literally drawn on the ground for my children when they were little, my first child (male-Griffin) would have steered clear of that line and found plenty of other ways to entertain himself. He wanted things to be done well and would pay attention to detail. He typically did not need to be reminded more than once or twice about his behavior. When necessary, he would be given a reminder and, most often, quickly make a change. He wanted to do things the “right” way.
My second child (also male-Nolan) liked to mix it up a little. He would run right up to the line, without actually crossing it, and question the reason behind the line, how long the line would be there, what we used to draw the line, etc. He wore his heart on his sleeve and had strong emotions (good, bad, or otherwise). I often joked that anyone in a 3-block radius was probably aware of how he was feeling at any given time. While Griffin (first child) preferred to be on the go and in the middle of the action, Nolan (second child) seemed content to go his own way at times. He would enjoy the company of others, but when he had enough, he would drift to a quieter area and find a new, independent activity. His interests were often different than those of his older brother.

My third child (female-Brittyn) would just blow right past the line without a look back. She was too busy trying to impress/entertain/please anyone around her. She didn’t worry so much about her actual behavior, she was more interested in how people responded to her. If they laughed, it was almost a guarantee the behavior would be repeated, even when she knew it was wrong. If she were scolded, she would question if she were still liked or loved. She would make friends anywhere she went—from the grocery store, to the dump, or while driving down the road. She was the child who would want to make someone smile if they were having a bad day. She was also the child who struggled the most with personal responsibility. Currently, as a second grader, she still needs constant reminders to clean up her room, wash her hands after playing with the animals, close the door when coming inside, etc. These are typical tasks that her older brothers have done out of habit since they were younger than she is now.

Based on my knowledge before I began research for this paper, I believed my children fell pretty easily into the roles of the stereotypical first-born, middle-child, and youngest in the
family. I was intrigued to see how my understanding of birth order would compare to the available research.

As I began my research, Alfred Adler was a name that was discussed frequently in birth order publishing. Criaghead and Nemeroff described Adler as “the first theorist in modern psychology to note the significance of psychological birth order position in the dynamics of personality development (Craighead & Nemeroff, 2004). Adler (1870-1937) was an Austrian psychiatrist whose study of birth order began in the early 20th century. In his book, “What Life Should Mean to You”, Adler described what he saw as likely characteristics of each birth order position. According to Adler, a first-born child may feel “dethroned” or experience loss of perceived privilege when the second child is born. Due to the loss of the parents’ undivided attention, a first-born child may become a perfectionist or an over-achiever in an attempt to gain that attention back. Adler described the second-born child as having a “pacemaker”. As there is always a child ahead of them in age and development, their goal is to meet or exceed the accomplishments demonstrated by their older siblings (Adler & Porter, 1931). If they are a middle child, they may also be more even-tempered as they are sandwiched between the typically more outgoing personalities of their siblings. The youngest child not only has their parents, but also one or more siblings to cater to their wants and needs. As a result, they may become more selfish and dependant on others. Youngest children may also be more confident than their siblings and show an interest in being playful and entertaining others (Greenberg, Guerino, Lashen, Mayer & Piskowski, 1963). Other family constellations presented throughout my research included only-children, twins, a girl who has only brothers, or a boy who has only sisters. The focus of this paper will be on the first child, middle child, youngest child, and only child.
Importance and Purpose of Study

Theorists like Alfred Adler and authors such as Kevin Leman (*The Birth Order Book*) each spent significant time investigating and documenting birth order and how it can potentially affect personalities, future careers, academic success, sexual orientation, drug use, etc. As I began my own review of work like theirs, I was curious to see how prevalent specific behaviors might be when it comes to birth order within families. When looking at a family of children being raised in the same house by the same parents, what are some factors that may lead to the stereotypical personality traits that seem to fit some children? If parents kept the same set of values and traditions for each child, what might be causing these children to be so different from one another? More importantly, if birth order does affect a child’s character as much as some believe, how can I use that information to build stronger connections with my students, as well as my own children? Are there ways this information might influence my teaching style or my response to an individual child when issues arise? How would my knowledge of birth order be most useful to my teaching and individualizing of instruction? I have learned (and continue to learn) how to respond differently to each of my children. As I further my research about the birth order theory, will I find more effective ways to interact and respond to each of my students as well? I am hopeful this research will help me learn more about a child’s personality, what factors may contribute to specific characteristics, and how to best help each individual child grow.

Research Questions

In this paper I review research that has been conducted on the birth order theory. Through my review of these research articles, I will be examining and responding to the following questions:
1. What are the most common stereotypical birth order characteristics of a first-, middle-, last-born, or only child?

2. What are some potential etiologies of birth order characteristics?

3. Does birth order affect a child’s behavior and performance in the educational setting?

4. What are the most effective ways to respond to a child demonstrating the stereotypical characteristics of their birth order?

**Literature Search Description**

In order to gather articles to be reviewed and used in this paper, I used the database from St. Cloud State University and the University of Minnesota, including articles from ERIC, and MNCAT. I used search engine terms such as “Birth order theory”, “Alfred Adler”, “Etiology of Birth Order”, and “The Big Five Personality Traits”.

**Definition of Terms**

**Actual Birth Order.** Numerical rank order in which siblings were born into or entered the family of origin. Also referred to as “actual position”, “ordinal position”, or simply “birth order” (Stewart, 2012).

**Between-family model.** Birth order research that compares data about children from different families.

**Big-Five personality traits.** Also known as “OCEAN”. The factors within this system have been defined in this study as openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism.

**Birth Order.** An individual’s rank by age among siblings
**De-identification.** The tendency for siblings consciously or unconsciously to define themselves as different from one another in order to produce their own identities within the family and garner their share of love and attention. (Monfardini & See, 2016)

**Psychological Birth Order.** The perceived family or sibling role that a person occupies in their family of origin (Stewart, 2012).

**Within-family model.** Birth order research that compares data about children across various families.
Chapter 2: Literature Review

Birth Order and Personality

When examining the topic of birth order theory, an expansive selection of articles, journals, books, and reviews of books is available. Studies have been done examining potential connections between birth order and topics such as food allergies, the use of gender identity services, Asperger’s Syndrome, child protective services, Post Traumatic Stress Disorder, and injury related infant mortality. The list of topics was quite exhaustive. While these readings were intriguing, for the purpose of this paper, the focus will remain on the impact birth order may have on personalities and academic growth.

As Adler was one of the pioneers of birth order studies, it was useful to begin by learning more about his practices and findings. According to the Adler University website, Adler began his medical career as an ophthalmologist in 1895. He soon transferred to general practice in an area outside of Vienna, which happened to be located near an amusement park. Through his work there, he encountered many patients employed as circus performers and workers. It is believed by some that Adler’s time spent with individuals in this unique line of work first piqued his interest in individual personality traits (Adler University History, 2019). Later, Adler established several clinics in Austria focusing on child guidance. He also began lecturing in the United States and throughout Europe. Because of Adler’s Jewish heritage, his Austrian clinics were ultimately closed, prompting his relocation to the United States. In 1937, Adler was on a lecture tour in Scotland with a student of his, Rudolf Dreikers, when he had a heart attack and suddenly passed away. Dreikers eventually immigrated to the United States and founded Adler University. Through his extensive work with a variety of individuals across diverse settings, Adler had developed a theory regarding how the order of birth may have an impact on an
individual’s personality traits. In 2012, Alan E. Stewart reviewed the work of Adler, specifically in regards to his birth order theory. According to Stewart, Adler developed four categories to describe the perceived birth order characteristics.

In Adlerian theory, a first-born child tends to gravitate toward leadership roles, both within their family and, later, in their professional lives. They are prone to perfectionism and a need for affirmation. They prefer order and rules and are driven by goals and achievement. The child may fear losing their position of privilege when a sibling is born. The first-born child may become authoritarian and feel that he/she has the right to have the power in situations. With encouragement, they may learn to become very helpful. As the child ages, they tend to become more dominant in social settings. Adler proposed that this was due to the fact that, upon the birth of a second child, the first-born child has lost their parents’ undivided attention, and therefore attempts to regain that attention in settings outside of the home and family (Stewart, 2012). Green and Griffiths added that more responsibility is oftentimes given to older siblings as well (Green & Griffiths, 2014).

According to Adler’s theory, a middle child could be any child who is not the first-born or the youngest, therefore one family may have several children falling into this category. This child may feel discouraged and less loved as they work to find their role between the over-achieving first child and the attention-seeking last child. They may struggle to feel special as compared to their siblings. Earlier, it was noted that Adler described these children as the “pacemakers”, attempting to meet or exceed the accomplishments of the older child. Because the middle child always has a sibling who was there before them and is likely to accomplish new skills first, a middle child may become more competitive as they seek to outperform the siblings before them. Like the first child, a middle child may be eager for the attention of a parent and
tend to become gifted in academics or the arts in order to gain this attention (often times excelling in an area differing from that of their older siblings). Due to the fact that they have one or more siblings on either side of them, often with differing personalities, the middle child may become the most flexible member of the family or may find their niche as the peacemaker in the family. A middle child may feel that the older child is more loved as they are able to accomplish more tasks independently and are more likely to be given extra privileges, while also feeling like the younger child is coddled or spoiled as there are more people to do things for them.

Adler also described his perceived characteristics of the youngest child. Because this child has older, more experienced siblings, they may become spoiled and catered-to as their skill set does not compare to those of their siblings. Due to the frustrations of not being able to keep up with the older siblings, the baby of the family may quickly learn how to charm others into doing things for them as this may be easier than learning how to do it for themselves. They may become dependant on the assistance of others. This child may also have the positive traits of confidence and take on the role as the family entertainer. Because they do not have the same sense of responsibility as the oldest, and they have multiple people meeting their needs, they are able to relax more and see the humor in situations more so than their older siblings. They may think the rules do not apply to them. The youngest child is likely to be the most creative, as their parents typically spend less time entertaining them than than their older siblings.

The last category, as described by Adler, was that of the only child. Based on the material reviewed for this project regarding an only child, their experiences may differ. An only child might have a closer-than-normal relationship with his parents, due to the fact that he does not have to share his time and attention with another sibling or siblings. However, he may also feel smothered and over-protected for those same reasons. An only child may be self-centered
and demanding, again because they have not had to share the attention or resources of their parents. They may be very private in nature as they do not have siblings with whom to share physical space and experiences with, or they may enjoy being the center of attention as they typically play that role within their family. Only children may be more sensitive than those with siblings. While sibling teasing can be frustrating to deal with, it can also help children build resiliency. Without siblings to experience this with, an only child may have a hard time dealing with jokes directed at them.

Through further research, I learned when Adler was discussing what he considered to be the typical characteristics of children based on their birth order, he was actually most often referring to their psychological birth order (PBO) versus their actual birth order (ABO). The difference is that PBO is the perceived role that a family member takes on within their family structure versus the numerical rank of their birth. For example, Adler stated that “if the eldest child is feeble-minded or suppressed, the second child may acquire a style of life similar to that of an eldest child” (Stewart, 2012). Also, if there is a large span of time between two children (five years or more), the next child may feel like a first-born again.

Adler suggested psychological birth order does, in fact, influence an individual’s personality. In his book “What Life Should Mean to You”, Adler stated, “Always where two children grow up close together and separated from the others they will show the characteristics of an oldest child and a second child.” (Adler & Porter, 1931). However, there have been numerous, more recently reported research to prove or disprove Adler’s birth order theory. Many of these studies have produced information in contrast to Adler’s ideas. In 2015, Rohrer, Egloff, and Schmukle published a report to re-examine the long-standing theory regarding the possible connection between birth order and one’s personality (Rohrer, Egloff, & Schmukle,
This team pointed out while previous reports had produced data showing a strong indicator between birth order and IQ scores, a theory I will discuss later in this paper, data addressing the relationship between birth order and personality traits were found to be very conflicting. Their thought was conflicting data could be addressed by examining the designs of the studies themselves.

The first concern they addressed was the collection of data. In some studies, data were collected using a “between-family” design, meaning those studies were comparing data from multiple families. One potential concern with this design was that the data would not be able to detect the effects of variables such as socioeconomic status, genetics, parental education level, the family’s access to resources, and the family’s belief system. When examining the data from these studies, it would be difficult to determine if any discrepancies in personalities were, in fact, due to the child’s birth order, or a result of other factors. In order to address this concern, the effects of birth order in Rohrer’s study were tested using both the between-family model and the “within-family” model, which compares siblings from the same family.

The second concern with data from previous studies was again regarding the manner in which data were collected. Each of the within-family studies the team reviewed had assessed sibling personalities by using the ratings from only one sibling per family. The selected sibling gave a rating regarding his/her own personality as well as the personalities of his/her siblings. Clearly this was concerning as a child could likely rate their siblings differently than those siblings might rate themselves. In order to effectively determine the impact a child’s birth order may have on their personality, only independent assessments of each child’s personality were used in Rohrer’s study.
A third concern in the design of previous studies was sample size. The only study Rohrer’s team found that had used independent personality ratings had a sample size of 69 sibling pairs. In order to address this concern, the team gathered data from three large national panels including over 5,000 participants from the United States, over 4,000 from Great Britain, and over 10,000 from Germany. Each of the panels included self-reported personality inventories and measures of intelligence.

It is important to understand how personalities were measured during a study such as this. When looking at personality traits in their study, Rohrer and her team examined the Big Five personality traits of each participant. In the field of psychology, the “Big Five” is the standard classification used to describe an individual’s characteristics. This classification system is also referred to as “OCEAN”. The factors within this system have been defined in this study as openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism. Each of these factors is summarized from an article on Psychology Today (“Big 5 Personality Traits”, 2019).

Openness to experience is regarding the willingness of a person to try new things or allow themselves to be vulnerable. It also examines their ability to think outside the box. A person who is high in this category is likely to be imaginative, perceptive, daring, and creative. They often have a wide variety of interests, enjoy learning and meeting new people, and are likely to have a creative career or hobby. A person with a low score in this category tends to be practical, conventional, and a concrete thinker. They tend to avoid the unknown and follow traditional ways. For the purpose of Rohrer’s study, this category was broken into two subdivisions, intellect and imagination.
Conscientiousness can be described as the ability to control impulses and exhibit socially acceptable behavior. Other traits within this category include persistence, consistency, reliability, ambition, predictability, and a strong work ethic. An individual high in conscientiousness is likely to be successful in school and career and will likely obtain a position of leadership. A low score in this category might be reflective of a person who is impulsive and easily sidetracked.

The category of extroversion includes attributes for both extroversion and introversion. The focus of this measurement is to determine how an individual interacts with others. Extroverts thrive on interactions with others while those same interactions can be emotionally exhausting for an introvert. An extrovert tends to be outgoing, social, energetic, talkative, and socially-confident. People low in extroversion tend to be reserved and thoughtful. A high scorer in this category (extrovert) may likely be driven to obtain a promotion, find a new romance, or earn an award. In contrast, a low scorer (introvert) does not experience as much of a “high” from social achievements. They tend to be more content with simple, quiet lives, and rarely seek attention from others.

The agreeableness factor is in regards to how people get along with others. Examples of traits in this category include being considerate, patient, humble, loyal, kind, unselfish, and helpful. Individuals high in agreeableness tend to be well-liked and respected by others, have few enemies, and are sympathetic. They are more likely to cooperate than compete with others. Those who are low in agreeableness are thought to be cruel or abrasive.

Neuroticism scores are evaluated differently than those of the other four traits. This is the only Big Five category where a high score is actually seen as less desirable. Neuroticism is also referred to as emotional instability. A high score in this category can be demonstrated through
awkwardness, pessimism, jealousy, fear, anxiety, and low self-confidence. High neuroticism scorers are more likely to react to a situation with fear, anger, or sadness. Low neuroticism scorers are more likely to be able to brush off their misfortune quickly.

The design of this study was comprehensive. The researchers accomplished their task of re-examining previous studies regarding birth order and its impact on personality traits in a thorough manner that left little room for questioning the results. There were large sample sizes from three different countries. Data were gathered using both the between-family method and the within-family method, and only independent assessments of each child’s personality were used. In regards to the Big Five Personality Traits, birth-order position was found to have “no significant effect on extraversion, emotional stability, agreeableness, or conscientiousness in the between-family analyses or in the within-analyses.” In regards to openness to experience, which was subdivided into intellect and imagination, there were no birth order effects on imagination, however the study found “significant effects on intellect in both the between-family and within-family analyses”. Overall, this study indicated the researchers would agree birth order can, in fact, have an impact on a person’s IQ score. However, the authors also stated “with regard to the high power and the consistent pattern of results, we must conclude that birth order does not have a meaningful and lasting effect on four of five of the broad personality domains and only partly on the fifth.” Figures 1 and 2 below show the data comparison in each of the Big Five domains across the between-family samples and the within-family samples (Rohrer et al., 2015). These findings are supported by the findings of Ashta Kaul and Anupama Srivastava in 2018 (Kaul & Srivastava, 2018).
Figure 1. Effects of birth order position and sibship size on personality and intelligence using between-family data. Mean scores and 95% confidence intervals are displayed for intelligence (A) and personality (B–H), depending on sibship size and birth-order position in the combined between-family sample that included the NCDS, NLSY, and SOEP participants. Personality variables were standardized as T-scores with a mean of 50 and SD of 10; intelligence was standardized as an IQ score with a mean of 100 and SD of 15. Birth-order effects were significant for intelligence, openness to experience, and intellect (Table 1). (B–H) Personality traits were as follows: extraversion (B), emotional stability (C), agreeableness (D), conscientiousness (E), openness to experience (F), imagination (G), and intellect (H).
Figure 2. Effects of birth-order position and sibship size on personality and intelligence using within-family data. Predicted mean scores from fixed-effects regressions and 95% confidence intervals are displayed for intelligence (A) and personality (B–H) depending on sibship size and birth-order position in the combined within-family sample that included the NLSY and SOEP participants. Birth-order effects were significant for intelligence and intellect (Table 1). (B–H) Personality traits were as follows: extraversion (B), emotional stability (C), agreeableness (D), conscientiousness (E), openness to experience (F), imagination (G), and intellect (H).

Another source was Dr. Kevin Leman’s book titled “The Birth Order Book. Why You Are the Way You Are”. Leman echoes Adler’s thoughts regarding the flexibility of an individual’s birth order, emphasizing the concept of psychological birth order versus actual birth order. For example, in his book a firstborn child could be defined as the ordinal first child, the first child of that gender born into the family, or a child whose next closest same-sex sibling is five or more years older than him or her. While I can appreciate the thought behind this classification, I also felt perhaps the parameters of his sibling categories became too large to offer much in support of the birth order theory.
While the theories presented by Leman were not identical to those of Adler and earlier researchers, the discussed characteristics shared common ground. A first born was likely to seek achievement, the middle child may act as the mediator in the family, and the youngest child is often social and outgoing.

Leman also discussed potential careers for each group. Statistically, firstborn children often fill positions of power and high authority. Pastors and presidents are often firstborns. According to Leman at the time of publishing, 64 percent of the presidents had fallen under his definition of a first born. Of those that were not the actual first born, all of them were the first male born into the family (Leman, 1992).

Between Leman and other sources, there are differing opinions on how a middle-child may develop professionally. Leman specifically referred to the middle child as a “mystery” as their personality can differ depending on the characteristics of the siblings before them. However, some sources hinted at careers in education, while others claimed that a middle-child was more likely to become CEO than children in different birth order roles.

Likely career preferences for the last-born child were more consistent across sources. I have previously discussed a last-born is likely to enjoy entertaining others and may have a more active sense of humor. They often carry those traits into their professional career. Many well-known comedians are last-born children, including Ellen DeGeneres, Steve Martin, Jim Carrey, Drew Carey, and Danny DeVito.

**Birth Order and Intelligence**

After review of research regarding the relationship between birth order and individual personalities, it has become clear there is still widespread debate regarding the question of
whether or not a child’s actual birth order or psychological birth order does in fact have a direct impact on one’s personality traits. As discussed previously in this paper, theorist Alfred Adler and author Kevin Leman would argue birth order does have an impact on our personalities while Julia Rohrer (and others) would argue the opposite.

The research regarding the relationship between birth order and intelligence seemed to indicate more consistent results. In 2006, Professor David Ferguson, along with John Horwood and Joseph M. Boden published a report examining potential concerns in previous studies of birth order and intelligence (Fergusson, Horwood, & Boden, 2006). They designed and implemented a 25-year longitudinal study, including over 1,000 participants from New Zealand, with the goal of examining the possible link between birth order and educational achievement, while controlling for potentially confounding factors such as family size and socioeconomic status. Ferguson and his team chose to collect data using actual birth order by questioning parents on the number of live births prior to the child in question. The birth order of the child at the time of their birth was the birth order assigned to them for the duration of the study. Data were collected annually until the age of sixteen, then again at ages eighteen, twenty-one, and twenty-five. Information was collected through interviews with parents, teacher’s reports, medical records, self-reports and other sources. The researchers in this study examined assessment scores at various academic levels, along with the highest level of participation in a structured, academic setting. Each level in the academic progression was given an ordinal value, from zero, indicating no high school qualifications, to six, indicating the obtainment of a university degree. Upon completion of the study, and after adjusting for factors such as family size and socioeconomic status, it was found that the overall achievement score dropped as an
individual’s birth order ranking increased. Using the scale of zero to six, a first-born child had an average score of 4.5, while a fourth-born or later had an average score of 3.6.

Other studies have found similar results, such as the study published by Rohrer et al. in 2015, which was discussed earlier in this paper. After designing a study addressing concerns Rohrer and her team felt could impact the validity of the results, their research indicated as a child’s birth order number increases, their IQ is likely to decrease. Reviewing Figures 1 and 2 on page 16 and 17 of this paper provides a visual representation of these results. Regarding IQ scores, Rohrer reported that there was an average decline of 1.5 points between the first-born child and each successive sibling. Upon conclusion of this study, “analyses revealed the expected decline in IQ scores from first- to later-borns” in both the between-family and within-family analysis (Rohrer et al., 2015). In fact, when looking at sibling pairs, the older sibling had a higher IQ 6 out of 10 times. While the discrepancies in IQ scores between siblings are not significant, the results are consistent with those of other, similar studies.

**Etiology of “Birth Order”**

In 2009, Dunkel, Harbke, and Papini published a report reviewing a previous theory indicating differences in personalities may occur due to unequal distribution of parental resources as opposed to the numerical birth order of a child. According to the article, resources could be material, such as food, toys, games, money, etc. Those resources could also be time spent directly educating a child, time spent interacting with a child, or time spent showing love and affection (Dunkel, Harbke, & Papini, 2009). The inequality of resource distribution is unlikely to be intentional, but changes in financial situations and parenting styles can occur upon the birth of additional children. These changes were hypothesized to have an impact on a child’s early experiences. The article suggested that birth order personality traits may be a result of each
child finding their “niche” in an attempt to capitalize on their parent’s resources. Essentially, each child is finding their own way to capture their parent’s attention.

While some studies have shown results supporting this theory, the overall research findings are still mixed as to the etiology of the birth order theory. Other studies indicate that parents’ age may have an impact on a child’s personality. As each child is born, the parental age increases, which could have an effect of physical and emotional interactions with their children. Challenges that may impact the results of birth order studies include the ever-changing family structure. Many families now include divorced parents, step-parents and siblings, foster children or adoptive children.
Chapter 3: Summary

I began this research process with the intention of answering key questions regarding the birth order theory. My goal was to increase my understanding of birth order and determine if or how that information could enhance my teaching. Through review of articles and books authored by, or written about key researchers such as Alfred Adler, Frank Sulloway, and Julia Roher, I feel capable of answering the questions originally proposed.

1. What are the most common stereotypical characteristics of a first-born, middle, or last-born child?

As described by theorist Alfred Adler, and supported by many researchers since, first-born children are more likely to become leaders, both socially and professionally. First-borns are strongly represented in leadership career paths such as presidents or religious leaders. Within their families, a first-born will often strive for attention by adopting similar characteristics as those of their parents. A first-born child is likely to be driven by achievement and is oftentimes a “rule follower”. Multiple studies revealed that a first-born child is likely to have a higher intelligence level than that of their later-born siblings. A first-born may also harbor feelings of jealousy as other siblings enter the family and take attention and other resources away from them. Middle-born children characteristics can vary from child to child, partly due to the fact that a middle-born child will often explore opposite avenues than those of their older siblings. For example, if the first-born is interested in athletics, the second-born is more likely to show an interest in academics or the arts. The middle-child may feel more neglected as they are competing for parental attention with the over-achieving first-born and the often-spoiled baby of the family. They are not the first child to demonstrate certain skills, neither are they the last.
child to experience milestones in their family. Due to the fact that the middle-child may be sandwiched between the differing personalities of the first and last-born, they may become more flexible and work to keep the peace in the family. The last-born child in the family is often given fewer responsibilities and more assistance with daily living skills which can lead to them becoming spoiled. They often like to entertain and obtain the approval of those around them and may find ways to charm others into doing things for them rather than taking the time to learn how to successfully accomplish those tasks for themselves.

Upon review of this information, I find myself thinking back to my own children and how they fit with what I have read regarding birth order and personalities. I began this paper by discussing how I felt each of my kids fell into the birth order categories as I knew them. After reflection, I do see traits in each of them that match up with some researchers’ ideas of birth order. Griffin (first-born) definitely takes on a leadership role within our family, and oftentimes within his group of friends. He enjoys being the center of attention (and typically obtains that attention with his sense of humor). While he is typically quite easy-going, he can also quickly become an authoritarian with his siblings and act as though he feels he has the right to control a situation. However, I can understand how this happens as he is also given much more responsibility than his siblings. A close friend of mine (first-born) once told me she remembers being asked as a child to help care for her younger siblings while growing up, but would also be scolded for being overly controlling of them. She recalls the challenge of balancing her parent’s expectations. That conversation has stuck with me and I try to be clear with Griffin about our expectations of him, especially as he gets older and those expectations change. There are times that we need him to be in charge and care for his siblings, but when we are together as a family
we want him to have the freedom to experience his own childhood without worrying about addressing issues regarding his siblings. Over the years, he has shown us he can be extremely helpful to us and his younger siblings, but still needs guidance of his own. Adler also described a first-born as having a desire for order and rules. This is one example of Griffin not fitting the first-child mold, or at least not anymore. While he typically obeys rules, he does not thrive on order, nor does he feel the need to follow rules to the letter the way he did when he was a child.

Nolan (middle-child) does have some characteristics of his birth order placement, but not as many as his siblings. He is our child that is the most content to go off and do his own thing, and has been since a young age. Typically, he is not upset when he is alone, but seems to find enjoyment in different activities than those of his siblings, which does fit with middle-child characteristics. For example, Griffin and Brittyn both love sports. Griffin thrives on whatever sport is in season and is constantly finding a way to play it, practice it, watch it, talk about it, etc. Brittyn has a love of gymnastics that never seems to diminish. She practices in the gym at least six hours per week and is still constantly “performing” anywhere we go. While Nolan will participate in those activities with friends and his siblings, most of the time he would prefer to be building with legos or other materials, exploring in the woods, learning about animals, reading, or playing technology. While he enjoys playing baseball, he passed up an opportunity to participate on a team this year as he wanted to have time to explore the woods and use his grappling hook, which is most definitely not a team activity. He rarely seems to feel left out or upset when he is engaging in different activities than those around him. He actually seems to find a sense of peace and calmness during his quiet time. One of my favorite memories of him is from a playoff football game. He was given a choice of attending the game with us or staying
home with other family members, but he wanted to go. About 5 minutes after we got there, I saw him sitting in the stands near us, but not with us, reading a book. He was perfectly content to be in the nearby vicinity of us, but not actively engaged in watching the game with us. Nolan has most definitely found his niche as the scholar in our family. He has a love of learning unmatched by his brother and sister. While they all do well in school, Nolan is well aware academics are his strength. However, he is never boastful of his achievements at school to his siblings. Unlike Adler’s description of the middle-child, he has no desire to be competitive or show up his siblings (unless we are playing a board game!) He appears to be pretty confident in his own skills, while still recognizing others for their strengths. Also unlike Adler’s theory, Nolan is neither the pacemaker nor the peacemaker in our family. Griffin tends to be the peacemaker, and I don’t think we have a pacemaker as they all have their own interests and are typically not concerned with how they compare to their siblings in regards to those interests.

And then there is Brittyn. Interestingly, she often comments on being “an only child” as she enjoys being right with us for most of the day while her brothers are more independant and often engaged in their own activities. While she is obviously not an only child, she does display some of those characteristics. She thrives on being the center of attention and struggles to share her parents. While she enjoys being with her friends, she most definitely prefers adult interaction, even when kids her age are around. Brittyn also embraces her actual role as baby of the family. She still gets daily reminders to change her tone as she enjoys talking like a toddler. She is also very “forgetful” when it comes to daily responsibilities. She knows how to charm others in order to get what she wants and attempts to use this skill often when she is with people outside of our family who tend to fall for that charm more than we do! She thoroughly enjoys
entertaining others, and frequently does so with her gymnastics skills, jokes, and hugs. While she can be shy at times, she would be the first one in our family to befriend a stranger anywhere we go.

2. What are some potential etiologies of birth order characteristics?

Upon review of articles, and reflection of my own parenting experiences, I believe that many children fall into the stereotypical birth order roles in large part due to parenting styles. With each child that comes along, attention and resources become more divided, the results of which can have an affect on a child’s ability to grow cognitively and emotionally. A child’s interests may differ from those of their older siblings in an attempt to capture their parent’s attention. Rather than trying to keep up with an older sibling, they find their own activities that they can be recognized for. For example, in Kevin Lamen’s “The Birth Order Book”, he described himself in comparison to his two older siblings, who were both academically gifted. He decided he couldn’t compete with them in that area, so he filled the role as the family entertainer.

When I apply this train of thought towards my own family, it makes sense. When Griffin was born, I was excited to purchase the best toys and equipment for him to use. Books and toys were organized on shelves within easy reach of him and were rotated frequently to offer variety. I loved reading to him most nights before putting him to bed. Aside from our work schedule, he had our (mostly) undivided attention from the time he got up until the time he went to bed. While we had babysitters at times, we often scheduled our own social events around each others’ schedules. Tony golfed while I was home and I shopped while Tony was home. We still had
our own lives and identities, but we were enamored with this little creature that seemed to learn something new every day.

I also think about where we were at in our personal lives at that time. We were in different positions professionally and financially than we are now. When we had Griffin we were young and I was fairly new to my career. I was teaching 3-4 days per week but still had the remaining days to be home with him. Being new to the teaching field, and motherhood, I was especially excited for each new opportunity with my child. I couldn’t wait for Griffin to be old enough to participate in the activities I was preparing for my students at school. Songs, sensory activities, books, and motor activities were often recreated at home during my time with him. Griffin received an excess of our time and attention along with our material resources.

When Nolan was born, we had a few things figured out (or so we thought). Sadly for him, the novelty of some experiences had worn off a bit. I no longer “needed” all the new toys and gadgets. I had matured enough to realize that the toys and books that had survived Griffin were perfectly sufficient for Nolan. I also learned that kids didn’t need a multitude of toys, they could be content and engaged with basic items in their environment. Looking back, I wonder if this explains why Nolan still enjoys playing independently, usually building or creating something. He didn’t have as much “stuff” as Griffin, so he was inadvertently encouraged to be more creative with what we did have. Also, Nolan had the most entertaining gadget of them all, an older sibling. Griffin has always been an entertainer, and Nolan reaped the benefits when he was little. He loved watching his big brother, and eventually, trying to play with him. At that age he still wanted to keep up with his big brother, which led him to engage with the higher-level toys and books that Griffin was using. I was working full time by then, and the excitement of new teacher experiences had begun to wear off as well. Not only did I have less time at home
to spend with Nolan, but I had less excitement about the activities I was doing at school so they didn’t happen at home as much.

The flip side of the extra attention Griffin received was that we were also right there to witness any misbehavior and to quickly follow through with appropriate consequences. If he earned a timeout, the timer was set and we were close by to make sure he stayed put until the timer went off. If not, he went back to the chair and the timer was reset. By the time Brittyn came along, we often lost track of how many times we said “if that happens again, it will be a timeout.” Occasionally, I would forget one of the kids were in time out, so they either left the chair before I asked them to, or unfortunately ended up there longer than planned. Our follow-through was not as consistent as it had been with just one child. With Griffin, we also tried to have conversations once the time out was over regarding his behavior and more appropriate choices that could be made next time. With Nolan and Brittyn those conversations happened less frequently as we were often busy with one of the other kids. While we did a pretty decent job of modeling respect for rules when Griffin was young, survival instincts kicked in with each successive child and we were forced to choose our battles much more often. As a result, Nolan and Brittyn got away with far more than Griffin ever had. When I think about Brittyn’s current struggle with responsibilities and her ability to charm her way through life, I can see a potential connection between that and our parenting style when she was younger. We were exhausted and distracted by all three kiddos and did not take as much time to follow through as we had with just Griffin.

Another difference I can now recognize is how much we did for each of our children. When Griffin was little, our agenda often revolved around him. It seems that we had more time at home and a much simpler schedule. When he was a toddler, we could take the time to let him
try to dress himself or get himself into the car. As more children came along and our schedules
began to fill up with more working hours and more kids’ activities, I feel like we began rushing
more often and therefore did more for the little ones as opposed to giving them time to work
through things on their own. For example, while Griffin would have typically been given time to
zip his own coat, Brittyn’s was more often zipped for her by us or her brothers as we were most
likely running late.

In some ways, and this is somewhat hard for me to admit, I feel like we fell right into the
stereotypical parenting roles that gave our children the stereotypical childhood, at least as far as
birth order is concerned. Working in early childhood while my kids were younger, I felt like I
had both a front-row ticket and a backstage pass to the inner-workings of families. I wasn’t just
engaging with the children, but I was working with the entire family through classes and special
events. I saw the dynamics of various family structures and watched how specific parenting
styles played out in the personalities and behaviors of their children. I saw how quickly the
middle child could get lost in the shuffle while the oldest child did everything first and moments
with the baby of the family were savored because oftentimes parents knew it would be their last
experiences with moments like these. And yet, looking back, I realize I did it too. It should have
been so easy for me to learn from what I was seeing and to replicate what worked well with
families. But, as with any family, it’s easy to get caught up in the daily chaos and do what you
can to get through the day. It’s interesting how, in my memory, we had parented our children
fairly equally. And yet, as I have read more about birth order and unpacked my own experiences
with the kids, it’s so clear that much of their personalities can be connected back to our parenting
style at the time. I really haven’t taken significant time prior to this paper to reflect on the details
of their early childhood experiences and how different they were from one another.
3. Does birth order affect a child’s behavior and performance in the educational setting?

There continues to be on-going debate regarding the connection between a child’s order of birth and their personality traits. Depending on what article, book, or website is being viewed, information may be found supporting either side of this issue. Theorist Alfred Adler and author Kevin Leman would argue that birth order does have an impact on our personalities while Julia Rohrer (and others) would argue the opposite. However, data that examines a child’s academic potential seems to more consistently support a positive relationship between a lower birth order and higher academic performance when looking specifically at IQ scores.

When looking at birth order and intelligence, it is difficult to compare my family with research at this time. Both Ferguson and Rohrer published reports that confirmed the results of previous works indicating that the intelligence level of a child may decrease as their birth order increases. None of my children have ever had their IQ tested and it is yet to be determined how long they will continue their education. However, when comparing standardized tests that have been the same for each of my children, Nolan (middle child) has consistently outscored both of his siblings.

4. What are the most effective ways to respond to a child whom is demonstrating the stereotypical characteristics of their birth order?

Due to the fact that I did not find data indicating a direct correlation between a child’s birth order and definitive personality traits, this question is challenging for me to answer. Regardless of the birth order of the child, I feel that it is imperative to build a relationship with each individual child, both at home and in the classroom. Getting to know a child on a more personal level can help parents and teachers understand their individual personalities, strengths,
and areas of concern. If a child tends to be a perfectionist or over-achiever, I believe it is important to provide a safe place for them to make mistakes and demonstrate the importance of responding appropriately to those situations. In my classroom, I often point out mistakes I have made while modelling how to acknowledge those mistakes and do what I can to fix them. It is common to see students stress about getting an incorrect answer on a test and even go to the extreme of lying or cheating to avoid what they see as failure. As a teacher, I do the best I can to take the emphasis off the score or end result of an assessment and show the importance of the learning process itself. At home, I try to apologize to my kids when it is appropriate. There are times I jump to conclusions or overreact to a situation. When I realize I did not handle the situation the way it should have been handled, I try to have a conversation with the child that was affected, explain my feelings, and discuss how I should have handled it. If I expect my children to be responsible and honest about their mistakes, they need to see that behavior being modeled.

For the child that may be getting lost in the shuffle or potentially making poor choices in order to obtain attention, it is important to ensure they are getting positive attention whenever possible. For some, it might be as simple as giving eye contact or a high five as they enter the classroom. Others may benefit from being acknowledged for demonstrating skills that are a simple expectation of another child. For example, using words like “I noticed you used walking feet all the way from our classroom to the gym today!” may be the encouragement one child needs to continue making appropriate choices. Some children have been raised in families where they are more likely to obtain attention through misbehaviors. They may feel getting negative attention is better than being ignored by their family. For those children, it may be beneficial to overlook as many undesirable behaviors as possible while focusing on any positives. I also believe it is important to recognize children for their unique personalities. One child in my
classroom may be a very strong reader but struggle during motor activities. Another child may have musical interest or talent, but have a difficult time with number sense. Recognizing each child for their individual strengths can help build their confidence and possibly reduce unhealthy levels of competition between them and their classmates or siblings.

If a child in the classroom, or home, tends to give up easily or expect the answer to be given to them, teaching problem solving and celebrating the feeling of accomplishment that comes with independence can be beneficial. While it can be difficult to watch children feel uncomfortable or struggle, I believe it is important for them to push through challenging situations in order to learn what they are capable of. I can think of one particular child in my classroom (who happens to be the youngest child). Between his parents and older siblings, things are often either done for him or he is told how to most efficiently accomplish a task before he has tried it. I do believe that his family members are trying to be helpful. However, when they are not around, he is unsure of himself and will quickly ask for help. One day he was struggling to hang up his snow pants after recess because it was difficult to reach where they needed to go. Another staff member saw he needed help and quickly walked over and hung them up for him. The little boy quickly walked away and joined the rest of the class. A few days later, the same situation presented itself. The boy tried a few times and then looked at me and told me he couldn’t do it. I told him I wanted to see him try again before I offered help. After a few more tries, he was able to problem solve and hang them up independently by stepping on the edge of his locker. The look on his face was one of pure pride and accomplishment! Had someone immediately stepped in and done it for him, the task would have
been completed more quickly, but he would have missed an opportunity to be independently successful, and would have been much less willing to try on his own the next time he was faced with a challenging situation.
Chapter 4: Position Statement

Throughout my research regarding potentials connection between actual birth order and a child’s educational experience, I found numerous sources offering conflicting information. While there is research to confirm that a first-born child is likely to have a higher IQ than later born children, as an educator I feel it is equally important to examine the research regarding the connection between birth order and personality traits. In order to help a child meet his or her full academic potential, it is crucial to build a relationship with them, recognize their strengths, and address areas of concern. Regarding academics, every child has areas where they are able to achieve quicker success, and areas where more difficulties arise. I believe the same could be said regarding their social-emotional skills which are demonstrated through their personality traits. If my work on this research paper had led me to believe in the theory of birth order in regards to personality traits, this information would have been extremely beneficial to me as I work to build a strong classroom community. However, while I do believe children may demonstrate some characteristics that fall into the stereotypical birth order categories, I now feel more than ever that our focus needs to remain on the individual child as they grow and become their own person, as opposed to the order in which they happened to be born. I want to work to avoid labeling a child according to their birth order and keep my focus on getting to know their individual characteristics while building upon those to help them grow as a learner and as a person.
References


Adler University History, retrieved from https://www.adler.edu/page/about/history/about-alfred-adler


Meeting the Social-Emotional Needs of Students Through Implementation of Responsive Classroom Frame-working

by

Shana Stiel

A Starred Paper
Submitted to the Graduate Faculty of
St. Cloud State University
in Partial Fulfillment of the Requirements
for the Degree of
Master of Science
in Early Childhood Special Education

August, 2019

Starred Paper Committee:
JoAnn Johnson, Chairperson
Bradley Kaffar
Ming-Chi Own
# Table of Contents

<table>
<thead>
<tr>
<th>List of Tables</th>
<th>List of Figures</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Introduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Importance and Purpose of Study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Research Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Literature Search Description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Definition of Terms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Literature Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adverse Childhood Experiences (ACEs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Educational Impact of ACEs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsive Classroom</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential Impact of Responsive Classroom on Academic Achievement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Summary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Position Statement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>References</td>
</tr>
</tbody>
</table>
### List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adverse Childhood Experience (ACE) Questionnaire</td>
<td>11</td>
</tr>
<tr>
<td>2. Demographic Information for CDC-Kaiser ACE Study Participants</td>
<td>13</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Probability of Outcomes Based on ACE Score</td>
<td>14</td>
</tr>
<tr>
<td>2. Gains in reading (as measured by the Degrees of Reading Power Test)</td>
<td>29</td>
</tr>
<tr>
<td>3. Figure 3: Gains in Math (as measured by the Connecticut Mastery Test)</td>
<td>30</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

I began my teaching career seventeen years ago in the small town of Hinckley, Minnesota, where I had grown up. In this community, many families had been there for several generations. My first job was that of an Early Childhood Family Education teacher and coordinator. I would be working with children ages 0-5 and their families. My goal was to provide a positive, educational experience in an environment that was warm and welcoming.

The families I worked with came to the school by choice, as formalized education was not required in Minnesota at that age. The program included a variety of weekly events for the entire family, along with special events throughout the year. Additionally, preschool classes were offered for children preparing to enter Kindergarten the following school year. With the exception of the first and last day of class, preschool classes were attended by children only. Typically, our classes were well-attended by nuclear families who prioritized their child’s development and socialization. In many of our families an adult stayed at home with the child until they were old enough for formalized schooling.

Currently, I am teaching a first and second grade combination class in the tiny town of Finlayson, Minnesota. This is a community that appears to be more settled than other area communities as we have a lower percentage of students transferring in and out throughout the year when compared to other area schools. The families in our school also tend to be involved in their child’s academic experience. School events such as PTO meetings and fundraisers, open houses, music programs, elementary athletic events, and conferences are well attended.

Throughout the duration of my educational profession, I have seen significant changes in society, family structure, personal attitudes (both of adults and students), and mental health needs. While these changes are occurring, the demand for higher academic growth and
performance is also on the rise. The changes in these areas puts an incredible stress on the students and staff. Children are coming to school seemingly less prepared to manage social situations, challenges, and conflicts. I have noticed an increase in children diagnosed with autism, ADHD, sensory processing disorders, or a need for mental health services. It can be challenging to keep the prominent focus on academics during the school day. Aside from reading and math, students need to learn how to problem solve, handle disappointment, and respond with self-control and respect when confronted with challenges as those skills are seemingly not taught in many families.

A few years ago, our school elected to dedicate extensive staff time and district funds to a program called Responsive Classroom (RC). According to the RC website, “Responsive Classroom is an evidence-based approach to teaching that focuses on engaging academics, positive community, effective management, and developmental awareness” (About Responsive Classroom, 2019). In order to incorporate this program into school settings, teachers attend week-long trainings, from which they leave with tools, strategies, and ideas to help build a responsive classroom community. The intent is to fully equip school staff to be able to respond to a child’s social-emotional needs and prepare them to problem solve and handle challenges with self-control and respect so they are ready to learn. It was exciting for me to be involved in a workshop focused on the whole child. The training and follow-up communication motivated me to work towards creating a classroom environment where students feel safe, welcomed, respected, and important. As a classroom family, we have worked on establishing clear expectations for our time at school, including daily Morning Meetings, academic choice time, transitions, and Closing Circles. My teacher language has evolved from saying “I like the way
Joey is waiting quietly” to “I notice some friends have their hands at their side, their voices off, and are facing forward. They are showing me that they are ready to go to the gym.”

During the training, we learned a variety of strategies for dealing with misbehavior, including the use of logical consequences. When two of my students used their pencils to write on the gym floor, their first expectation was to take responsibility of their actions by letting the custodian know what had happened. A discussion took place as to what could be done to make the situation right, which resulted in the students requesting cleaning supplies from the custodian and cleaning the floor while their classmates were engaged in another activity. They also wrote notes to their parents letting them know about the incident. Rather than giving them a written and documented referral, which would involve a meeting with the principal or loss of a privilege, they were guided to take ownership of their behavior and do what they could to fix it. In order to redirect the focus to appropriate expectations, an Interactive Modeling activity was planned with the entire class to allow all students time to review and practice how to use writing tools appropriately. This is just one example of how RC training has impacted my classroom management skills. Throughout this paper I will be sharing more about the philosophy and teachings of the Responsive Classroom model.

**Importance and Purpose of Study**

The purpose of this paper is to further explore changes in students’ needs and, as a result, identify necessary changes in the educational setting. I am interested in investigating and reviewing research on juvenile mental health concerns and how those concerns might affect a child’s educational success. How are the social emotional needs of students changing? While I am most interested in how programs such as Responsive Classroom can address these changing needs and provide necessary support to students, I am also wondering what impact a framework
like RC might have on academic growth, represented through classroom participation, daily work, and test scores.

**Research Questions**

In this paper I will review research that has been conducted on the previously mentioned ideas. Through my review of these research articles, I will be examining and responding to the following questions:

1. What is Responsive Classroom?
2. What factors have contributed to the increase of programs such as RC that focus on a child’s social-emotional development?
3. What impact could a program like RC have on a child’s academic performance?

**Literature Search Description**

In order to gather articles to be reviewed and used in this paper, I used the database from St. Cloud State University and the University of Minnesota libraries, including articles from ERIC and MNCAT. I used search terms such “ACEs study”, “Responsive Classroom”, “Responding to ACEs”, and “Building Resiliency”.

**Definition of Terms**

**Nuclear family.** A social unit of two parents and their children.

**ACEs.** Adverse Childhood Experiences. ACEs are stressful or traumatic events, including abuse and neglect.

**Chronic school absenteeism.** Referring to a student missing 15 or more days, either excused or unexcused, during a single school year.

**Complex trauma.** Complex trauma describes both children’s exposure to multiple traumatic events and the long-term effects of this exposure.
HMO. Health Maintenance Organization

Resilience. The ability to adapt successfully to disturbances that threaten development of a positive life course or the ability to resume one following periods of adversity. (Bellis et al 2018)

Responsive Classroom. An evidence-based approach to teaching that focuses on engaging academics, positive community, effective management, and developmental awareness

Toxic Stress. Traumatic childhood experiences which threaten healthy brain development and are associated with life-long health and social issues.
Chapter 2: Literature Review

Adverse Childhood Experiences (ACEs)

The purpose of this chapter is to review and discuss available articles regarding the Responsive Classroom framework. However, before delving into the makeup of Responsive Classroom, it is crucial to learn more about why a program of its type is necessary. Historically, social-emotional frameworks were largely unheard of and seldom put into practice when I began my teaching career. While the creation of Responsive Classroom began in 1981, it was not commonplace for this type of programming to be utilized at that time. As the needs of students have changed, it has become necessary for educational settings to adapt accordingly.

When researching social-emotional needs of children, several resources regarding Adverse Childhood Experiences (ACEs) are available. The website acestoohigh.com gives a brief history regarding events leading up to the original ACE study. The topic of ACES was discovered inadvertently by Dr. Vincent Felitti. Felitti, who worked in an obesity clinic, was trying to determine why so many of his patients were quitting the program despite successful weight loss journeys. Through interviews with former patients, he found the majority of his patients had not been obese as young children. Many of them had put on large amounts of weight in a short period of time. His investigation found their weight gain was often a result of adverse childhood experiences, mainly sexual abuse. Many of his patients were sabotaging their weight-loss success as a form of self-defense. A rape victim, for example, was found to put on excessive weight in the hopes of going unnoticed by men. Eventually, Felitti connected with Dr. Robert Anda, a researcher with the US Center for Disease Control. Anda had been studying the effects of mental illness on a person’s physical health. Together they conducted a mega-study to bring validity to their research (Stevens, 2012).
According to a report published in 1998, the first wave of the original ACES study was conducted in San Diego, CA between late 1995 and early 1996. Over 13,000 members of a large HMO were eligible to participate in the study by answering specific questions about their childhood (Felitti et al, 1998). A second wave of participants were surveyed in 1997.

Table 1

Adverse Childhood Experience (ACE) Questionnaire: Finding your ACE Score

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>While you were growing up, during your first 18 years of life:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Did a parent or other adult in the household often...</td>
<td></td>
</tr>
<tr>
<td>● Swear at you, insult you, put you down, or humiliate you?</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>● Act in a way that made you afraid that you might be physically hurt?</td>
<td></td>
</tr>
<tr>
<td>2. Did a parent or other adult in the household often...</td>
<td></td>
</tr>
<tr>
<td>● Push, grab, slap, or throw something at you</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>● Ever hit you so hard that you had marks or were injured?</td>
<td></td>
</tr>
<tr>
<td>3. Did an adult or person at least 5 years older than you ever...</td>
<td></td>
</tr>
<tr>
<td>● Touch or fondle you or have you touch their body in a sexual way?</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>● Try to or actually have oral, anal, or vaginal sex with you?</td>
<td></td>
</tr>
<tr>
<td>4. Did you often feel that …</td>
<td></td>
</tr>
<tr>
<td>● No one in your family loved you or thought you were important or special?</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>● Your family didn’t look out for each other, feel close to each other, or support each other?</td>
<td></td>
</tr>
<tr>
<td>5. Did you often feel that …</td>
<td></td>
</tr>
<tr>
<td>● You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you?</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Yes/No</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?</td>
<td></td>
</tr>
<tr>
<td>6. Were your parents ever separated or divorced?</td>
<td></td>
</tr>
<tr>
<td>7. Was your mother or stepmother:</td>
<td></td>
</tr>
<tr>
<td>● Often pushed, grabbed, slapped, or had something thrown at her?</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>● Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>● Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?</td>
<td></td>
</tr>
<tr>
<td>8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?</td>
<td></td>
</tr>
<tr>
<td>9. Was a household member depressed or mentally ill or did a household member attempt suicide?</td>
<td></td>
</tr>
<tr>
<td>10. Did a household member go to prison?</td>
<td></td>
</tr>
</tbody>
</table>

Now add up your “Yes” answers: **ACEs score:**

**Note:** Reprinted from CDC-Kaiser ACE Study. Retrieved from acesconnection.com

In the first wave of data collection alone, over 9,000 members responded by completing and returning the survey. Table 2 shows a portion of the results from Wave 1 and 2. It is worth mentioning the majority of participants were well educated, middle-class Caucasian individuals.
Table 2

Demographic Information for CDC-Kaiser ACE Study Participants

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>Percent</th>
<th>(N = 17,337)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>54.0%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>46.0%</td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>74.8%</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>11.2%</td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>7.2%</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>4.5%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>2.3%</td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-29</td>
<td>5.3%</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>9.8%</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>18.6%</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>19.9%</td>
<td></td>
</tr>
<tr>
<td>60 and over</td>
<td>46.4%</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not High School Graduate</td>
<td>7.2%</td>
<td></td>
</tr>
<tr>
<td>High School Graduate</td>
<td>17.6%</td>
<td></td>
</tr>
<tr>
<td>Some College</td>
<td>35.9%</td>
<td></td>
</tr>
<tr>
<td>College Graduate or Higher</td>
<td>39.3%</td>
<td></td>
</tr>
</tbody>
</table>

Upon completion of the questionnaire, participants were assigned an ACEs score. Based on this study, it was found over two-thirds of participants reported the occurrence of at least one adverse childhood experience. Of those, 87% had at least one additional adverse experience. The work of Felitti and Anda also showed a direct correlation between childhood trauma and the prevalence of future issues such as chronic disease, substance abuse, mental illness, prison time, and work issues. Respondents with an ACEs score of 4 or more were found to be seven times more likely to end up in prison, twelve times more likely to attempt suicide, and twice as likely to be diagnosed with cancer or experience a stroke. High maternal ACEs scores were shown to directly impact the experiences of their children (Felitti et al, 1998). Figure 1 shows the probability of negative health concerns as related to an individuals’ ACEs score.

**Figure 1.** The likelihood of potential negative outcomes in association with ACEs. Reprinted from The Original ACE Study, retrieved from http://www.iowaaces360.org.
Educational Impact of ACEs

The information provided in the figure above indicates a person with higher exposure to ACEs is more likely to smoke cigarettes, use drugs, abuse alcohol, suffer from mental illness, and have an increase in physical health issues later in life. The effects a history of adverse experiences can have on a child are startling.

School staff members have a responsibility to educate themselves on how a child’s ACEs score can impact their educational experience. In 2014, a study of childhood adversity was published that went beyond the medical impact of those experiences to examine the potential effects on school engagement. According to that report, the National Child Abuse and Neglect Data System stated “12.5 percent of all US children have had a documented episode of child abuse or neglect reported by age eighteen” (Bethell, Newacheck, Hawes, Halfon, 2014, p. 2107). This statistic measures only the number of documented episodes of child abuse. One can imagine the never reported episodes. In regards to teaching, this data indicates most educators will have multiple students in their classroom whom are dealing with, or have dealt with, adverse experiences.

In order to adequately prepare school staff to offer appropriate support for students with exposure to ACEs, it is important to know how those childhood experiences could impact their time in the classroom. The previously mentioned 2014 report found “children with 2 or more ACEs were 2.67 times more likely to repeat a grade in school. Similarly, children without adverse childhood experiences had 2.59 greater odds of ‘usually or always being engaged in school’ as compared to their peers with more ACEs” (Bethell et al, 2014, p. 2111). It is not unreasonable to assume if a child has had experiences with physical, verbal, emotional, or sexual abuse, participating in school activities could pose a challenge. These children may be coming
to school sleep deprived due to violence or substance abuse in the home. They may be hungry, or suffer from malnutrition. It’s possible they are unsure of where they are staying that night due to separated parents. The list of their potential concerns is lengthy. School systems now have the additional responsibility of helping students cope with their adverse experiences and prepare themselves for a productive educational experience.

Another potentially negative impact of experiencing an adverse childhood is school attendance. A study was reported in early 2017 using the National Survey of Children’s Health (NSCH) to determine any potential connection between ACEs and poor attendance rates. The results indicated a direct association between children’s ACEs and chronic school absenteeism. A child having one or more ACE had a higher likelihood of experiencing chronic absenteeism than a child with no ACEs. As the number of ACEs increases, so does the likelihood of absenteeism (Stempel, Cox-Martin, Bronsert, Dickinson, Allison, 2017). A similar study published in 2018 produced data showing approximately 5% of high school students reporting no ACEs had absenteeism concerns compared to almost 33% of high school students from the same study reporting an ACE score of 4 or more (Bellis, et al 2018). Within the article it stated “ACEs are associated with poorer childhood mental health, attendance at school, educational attainment and anti-social and violent behaviors” (Bellies et al 2018). Not only can it be difficult to get these children to school, but once there, they are more likely to display disturbing and disruptive behaviors than their peers.

The fact that students experiencing ACEs are potentially less likely to attend school is alarming. In order to help these students, first and foremost, they need to be in school. Stempel’s report found chronic absenteeism is known to place children at risk for higher school dropout rates and negative health outcomes (Stempel et al., 2017). These results were supported
by an earlier report published in 2012 where it was stated “Analyses of data from multiple states and school districts…have consistently found chronic absenteeism to be among the strongest predictor of dropping out of high school, stronger even than suspensions, test scores, and being overage for grade...” (Balfanz & Byrnes 2012, p. 25). Students who are frequently missing from school not only miss learning opportunities, but also time to build positive relationships with peers and school staff.

When students with high ACEs scores are attending school, what might their experience look like? How might these previous adverse experiences impact their chances of working towards a positive and productive educational experience? Paper Tigers is a documentary produced by James Redford in 2015, shedding light onto a group of teenage students struggling in their academic setting. At the time of filming, Jim Sporleder was the principal of Lincoln High School in Walla Walla, located in Eastern Washington State.

Lincoln HS is an alternative school where enrolled students have a history of truancy, substance abuse, and childhood trauma. The school had earned a reputation among local teenagers as being the “worst school you could ever go to”. In the film, it was reported students dreaded being sent to Lincoln due to fears of being bullied. Students would often come to school under the influence of drugs and alcohol. They verbally and physically threatened staff and fellow students. There were frequent fights and moments of all-out chaos. Sporleder and his staff had increasing concerns about the student bodies’ history of poor academic performance, behavior issues, and low school attendance rates.

In 2010, Sporleder attended a conference regarding Felitti and Anda’s San Diego based study on ACEs. During this conference, the keynote speaker addressed the issue of complex trauma and the effects of stress on the brain. Following the training, Sporleder returned to
Lincoln High convinced traditional punishments like suspension were only adding to the problems of his students. Sporleder stated: “I was hunting everywhere for the curriculum. It’s not a curriculum. So it was trying to figure out, how do you take this theory and put it into practice?”

Sporleder felt compelled to train his staff on the impact of ACEs and how to respond to the student body using a trauma-sensitive approach. In addition to the typical academic subjects, students were also introduced to the study of ACEs. They were given the opportunity to assess themselves and determine their own ACEs score. In one classroom alone, 13 out of 17 students reported an ACEs score of 5 or more. Thinking back to the research Felitti completed and the impact 4 or more ACEs can have on a person’s physical and mental health, these results were incredibly alarming to Sporleder. Using the information regarding their ACEs score, students at Lincoln were challenged to rise above the experiences of their childhood in an attempt to break the cycle of trauma in their lives. Students could use their ACEs score as a tool for understanding their own risk for health and social concerns and empower themselves to make positive changes for their future.

Lincoln staff responded by building relationships with the students beyond the walls of the classroom. Sporleder and his staff focused their efforts on one particular piece of research from the conference, “all of the risk factors for adverse experiences can be offset by one thing: the presence of a stable, caring adult in a child’s life.” In the absence of a positive relationship with a parent or family member, Sporleder and staff worked to become the adult each child could depend on. Staff members were challenged to investigate the source of the students’ behavior versus the behavior itself. Science teacher Erik Gordon commented: “The behavior isn’t the kid. The behavior is a symptom of what’s going on in their life.”
Consistent meetings were held regarding the wellbeing of Lincoln students. During these meetings, discussions addressed the emotions and behaviors being displayed by the students. Staff members took note of changes occurring in students’ personalities. Support and guidance were offered as needed. The video contained numerous clips of these meetings, where each time the child was being discussed, not simply the student.

In addition to working with students directly, the staff was able to help in other areas. Lincoln High became the first school in Eastern Washington state to open an on-campus health care center in order to address the physical and social-emotional needs of their students. This health care center provided primary care, mental health counseling, and substance abuse counseling to students who could not otherwise access these services due to scheduling, financial, or transportation challenges.

*Paper Tigers* followed six troubled students enrolled at Lincoln for one year. During this time viewers witnessed a glimpse of the trauma each child was experiencing and how the staff responded. Throughout the video, staff discussed how they may have handled the same incident prior to their trauma-sensitive training.

Steven was a 17 year-old senior who had self-proclaimed “problems with authority”. He stated in the documentary he “didn’t understand why anyone else would care about what he was doing”. He often skipped class to drink, smoke weed, or hang out with friends. One day he brought a lighter to school and used it during class. When asked to turn over the lighter, the situation escalated, resulting in Steven shouting profanity at Principal Sporleder and being escorted off campus. Sporleder commented in the past, he would have handed out a 5-day suspension. Instead, his father was called and it was discovered that Steven’s mother had recently left their family, leaving Steven struggling to accept the situation. He was asked to
return to school the following day for a meeting with staff members to discuss the incident and begin moving forward. He commented it was the first time he had been engaged in a productive conversation following an incident at school versus being lectured and disciplined. Instead, he began the process of learning more about his feelings and how and when to respond appropriately. With the help of staff members, he completed a college application and was taken on a road trip to visit a college. Those same staff members eventually helped him move into college where he began working on his teaching degree.

Dianna was a 16 year-old junior who was described by a staff member as “explosive. Explosive joy, explosive anger”. At one point, Dianna threw a chair at one of her most respected teachers. Over time, the staff learned her mom was physically and verbally abusive to Dianna and her siblings. Dianna was told by her mother “if you don’t beat them, I will beat you”. She was also a victim of sexual abuse. Eventually there was a disagreement involving her mother’s new boyfriend and Dianna was kicked out. With nowhere to go, she was facing protective custody within the foster care system until a staff member agreed to take her in and offer her shelter, support, consistency, and love. At the end of the documentary, she was still learning to manage her issues with anger, but had graduated early with a 3.3 GPA.

Aron was a 17 year-old senior who admitted he had a difficult time fitting in at previous schools. His ultimate goal was to go unnoticed. At Lincoln High, one staff member had a goal of her own, simply making and holding eye contact with him. One way of building a relationship with him was to hold instrumental sessions with a group of students. This group communicated mostly through their music as opposed to verbal communication. Eventually Aron stated “I liked being here. I felt like I should be here”. When composing a college application, he was encouraged to use his ACEs to benefit himself. When asked to reflect on an
obstacle he had overcome, Aron wrote about his mother’s struggle with mental illness and how the situation impacted his daily life. Aron went on to graduate and enroll in an art program at Eastern Washington University. One of the Lincoln staff members helped him move into the dorms and buy his first car.

Eternity was an 18 year-old senior with cerebral palsy. She had a sweet, positive disposition but felt she had struggled to find a place to belong. “I never found a school that would help me”. During her time at Lincoln High, she began dating a boy with previous assault charges. Through conversations with staff members and health care providers at the on-site clinic, she was offered guidance and taught about positive, healthy relationships. After graduating from Lincoln High, she enrolled in a community college and worked toward a degree in zoology.

Kelsey (14 year-old freshman) and Gusatavo (17 year-old junior) began dating during the year Paper Tigers was filmed. Each had dealt with family drug use, abuse, and anger issues. Kelsey had previously attempted suicide. While they were a source of support for each other, their relationship became toxic as they struggled with jealousy and outside influences. The staff offered guidance and support through meetings and access to the on-site clinic in an effort to help them create a healthy relationship before it became physically violent. When the movie ended, the couple had separated but were both doing well individually. Gusatavo had moved away and was working while Kelsey was demonstrating personal and academic growth at Lincoln High.

Each Lincoln High staff member worked with the student body to identify individual ACEs and utilize various strategies to overcome those experiences while making positive changes in their academic and personal lives. They arranged bus passes and conducted morning
home visits to truant students. When discussing students’ drug abuse, staff members targeted potential causes for the behavior itself, as opposed to consequences alone. The staff members were permanently impacting their students’ lives in a positive way. One teacher challenged educators to “love them unconditionally. Believe their behavior might be beyond their control.” While basic subjects were being taught, “academics falls second to the person and making a better human being”. The staff at Lincoln High demonstrated an understanding of the importance of addressing the whole-child, and the results were very positive.

At the conclusion of the movie, it was reported since 2010, Lincoln High had seen 60% fewer office referrals, 75% fewer fights, and 90% fewer suspensions. The student body also demonstrated a 55% increase in math assessment scores, a five-fold increase in graduation rates, and a three-fold increase in seniors with definitive plans for college (Redford et al., 2015).

**Responsive Classroom**

The student body at Lincoln High was mainly comprised of children with high ACEs scores. In order to help them overcome those experiences and build resiliency, staff members adopted a trauma sensitive approach to learning. One example of such an approach is the Responsive Classroom framework. By implementing a framework such as RC, school systems are fostering positive relationships between the staff and students, and between the student themselves.

According to the Responsive Classroom website, “Responsive Classroom is an evidence-based approach to teaching that focuses on engaging academics, positive community, effective management, and developmental awareness. The emphasis is on helping students develop their academic, social, and emotional skills in a learning environment that is developmentally
responsive to their strengths and needs.” (responsiveclassroom.org, 2019). Essentially, it is a logical way of teaching that addresses the needs for both academic and social learning.

Development of the Responsive Classroom model began in 1981 when a group of classroom teachers formed an organization called Northeast Foundation for Children (NEFC). The intent of this group was to research ways to incorporate both academic and social skills into the daily school routine. This group recognized the importance of meeting the social and behavioral needs of a student in order to fully equip them for academic growth (Rimm-Kaufman, Fan, Chiu, You, 2007). Their work and ideas grew into the Responsive Classroom approach, which continues to evolve each year through collaboration with classroom teachers and further study of children’s needs. According to their website, RC is now described by the Collaborative for Academic, Social, and Emotional Learning (CASEL) as one of the most “well-designed evidence-based social and emotional learning (SEL) programs” (responsiveclassroom.org, 2019).

Through training with Responsive Classroom, six guiding principles are identified:

1. Teaching social and emotional skills is as important as teaching academic content.

2. How we teach is as important as what we teach.

3. Great cognitive growth occurs through social interactions.

4. How we work together as adults to create a safe, joyful, and inclusive school environment is as important as our individual contribution or competence.

5. What we know and believe about our students—individually, culturally, developmentally— informs our expectations, reactions, and attitudes about those students.

6. Partnering with families—knowing them and valuing their contributions—is as important as knowing the children we teach. (responsiveclassroom.org/about/principles-practices)
Using these principles, Responsive Classroom introduces key practices designed to create an environment conducive to meeting the needs of students and helping them reach their highest learning potential. In the K-6 setting, nine practices are gradually established into the classroom. Each of these practices is published on their main website and in the materials provided during training for the school staff to reference as needed.

1. Interactive Modeling: “An explicit practice for teaching procedures and routines (such as those for entering and exiting the room) as well as academic and social skills (such as engaging with the text or giving and accepting feedback)” During an interactive modeling lesson, the teacher models what the desired behavior looks like (without using their words), then invites the students to discuss what they noticed. Students are encouraged to use language describing what did happen, versus what did not happen. For example, when a teacher is modeling how to walk across the room to line up, a student may comment “I noticed you didn’t run”. The teacher might then respond “what did I do?” The goal is to guide students to focus on the desired behavior, rather than the undesired behavior. After discussion, a student is chosen to model the behavior before a follow-up discussion occurs. All students are then given a chance to practice the expectation. This is done often at the beginning of the school year or when a new routine is introduced. It is also reviewed and practiced throughout the year as needed.

2. Teacher Language: “The intentional use of language to enable students to engage in their learning and develop the academic, social, and emotional skills they need to be successful in and out of school”. Paying attention to the 3 R’s (reinforcing, reminding, and redirecting) prompts appropriate teacher language. Instead of saying “I like how George didn’t run down the hallway”, it is more productive to comment “I notice friends using
their walking feet. They are helping to keep our school a safe place”. Teacher language reinforces the desired behavior while taking the attention away from undesirable behavior. It clearly establishes expectations.

3. Logical Consequences: “A non-punitive response to misbehavior that allows teachers to set clear limits and students to fix and learn from their mistakes while maintaining their dignity”. Rather than punishing the students with a pink slip or loss of privilege, logical consequences help guide students to problem solve ideas for taking responsibility of their behavior and take steps towards fixing the damage that may have been done. Staff members may benefit from pausing before discussing an undesired behavior with a student in order to avoid punitive consequences, such as missing recess or getting a referral, and focus on a consequence which provides the students an opportunity to learn from the situation.

4. Interactive Learning Structures: “Purposeful activities that give students opportunities to engage with content in active (hands-on) and interactive (social) ways”. By working with peers in small groups to explore a learning topic, students are given more time to share their thoughts and ideas within the group. Students may work together to respond to the same question or goal, or they may establish unique roles within the group in order to accomplish a learning task together. Because these learning structures provide a smaller and safer environment than whole-group discussions, students may be more willing to contribute their own ideas than they would in a larger setting.

5. Morning Meeting: “Everyone in the classroom gathers in a circle for twenty to thirty minutes at the beginning of each school day and proceeds through four sequential components: greeting, sharing, group activity, and morning message”. This practice can
be beneficial to the entire classroom family as the group begins each day interacting with one another. The morning message is a great way to introduce a new skill being taught that day, or review previously learned skills. Depending on how the morning has gone before arriving at school, students (and teachers) may be walking into the classroom feeling happy, sad, stressed, fatigued, distracted, antsy, etc. Morning Meeting provides a time to regulate those feelings and begin the school day in a positive way. This also allows the group time to get to know each other as a classroom family through sharing. Individuals can learn more about one another as everyone expresses their likes and dislikes and reactions to particular questions.

6. Establishing Rules: “Teachers and students work together to name individual goals for the year and establish rules that will help everyone reach those goals”. While it may be quicker for teachers to make a list of students’ expectations and establish consequences to assign when those expectations are not met, Responsive Classroom provides a guide for creating rules as a classroom family, with input from all members. Through group discussion, practices are established to ensure the classroom and school are safe and welcoming places to be. When those established rules are not followed, logical consequences are put into place. This may involve a student practicing the desired behavior, such as using walking feet as they travel from the classroom to the gym. By encouraging the students to work with the teacher as a team member, an inclusive environment is being built where students feel comfortable making contributions to the group.

7. Energizers: “Short, playful, whole-group activities that are used as breaks in lessons”. The goal is to allow students a chance to use their bodies while giving their brains a rest
in order to help them focus on the next learning activity. Responsive Classroom training introduces a variety of energizers to use throughout the day.

8. Quiet Time: “A brief, purposeful and relaxed time of transition that takes place after lunch and recess, before the rest of the school day continues”. As with other RC practices, this may look different between classrooms. Some teachers allow students to work on iPads during this time, while others may only offer paper and writing tools or books. This time can also be used to check in with students who may be needing extra support in a particular area. If scheduling allows for an extended quiet time, students can receive individualized instruction while still having time to make their own choices.

Quiet Time is a privilege in the RC model. For example, if a student is capable of completing an academic activity independently during math but makes different choices with their time, they may need to complete the assigned activity before making their own choices.

9. Closing Circle: “A five- to ten-minute gathering at the end of the day that promotes reflection and celebration through participation in a brief activity or two”. This practice gives staff and students a time to calm their bodies and minds while reflecting on the day. Closing circle can be utilized as a chance to discuss potential changes in behavior for the following day. Books may be read to the class, or there may be a discussion regarding upcoming events. Closing Circle may also be a time for celebrations from the day. The goal of Closing Circle is to provide time for students to have closure at the end of the day so they are able to leave the classroom on a positive, calm note.
While these practices may differ slightly between classrooms, the core value of each practice is consistent throughout a Responsive Classroom building. This continuity between classrooms and grade levels can help alleviate the stress of transitions for students.

**Potential Impact of Responsive Classroom on Academic Achievement**

There are many benefits to implementing a framework addressing the social and emotional needs of students, a program such as Responsive Classroom. Proper implementation can help children build more positive relationships with their peers and teachers, feel a stronger sense of importance and belonging, and give them the skills they need to be able to problem-solve issues more independently. The progress students make in these areas can be witnessed through conversations with students and observations of classrooms.

How might the benefits of RC be viewed in a more measurable way? Specifically, does the implementation of the Responsive Classroom framework have an impact on reading and math test scores? A study was published in 2007 addressing that question (Kaufmann et al). Second through fourth-grade students from a large American school district were divided into a control and intervention group before being followed between one to three years until they graduated from their particular middle school. (Second graders were followed through second, third, and fourth grade for a total of 3 years, while fourth graders were followed for one year). The average size of each cohort was approximately 450 students. Because each of these cohorts were part of the same school district, the guidelines for reading and math instruction remained constant. Figures 2 and 3 display partial results of this study.
Figure 2. Gains in Reading (as measured by the Degrees of Reading Power Test). Reprinted from Social and Academic Learning Study on the Contribution of the Responsive Classroom Approach by Sara E. Rimm-Kauffman, October 2006, retrieved from responsiveclassroom.org/
Copyright 2006 by Northeast Foundation for Children, Inc.

Over the course of the study, results indicated students in classrooms using the RC model achieved higher post-test scores than those in the control group, but only if students had received the intervention for more than one school year. For students receiving just one year of RC interventions, the effect was positive, but “not statistically significant” (Rimm-Kaufman et al, 2007). Additionally, Rimm-Kaufman and her team noted the longer students were exposed to the RC intervention, the higher the increase in test scores would be. When looking specifically at math, data was translated into probability terms. For the students in third grade who had received one year of RC intervention in their classroom, it was reported while the students
attending the control school with no RC exposure had a 50% chance of reaching Goal level, students attending the RC intervention schools had an approximate 76% chance of reaching Goal level. Students followed in the study for three years had even more positive results. While students attending the control school with no RC exposure had a 50% chance of reaching the Goal level, students attending the RC intervention schools had an approximate 86% chance of reaching Goal level (Kaufmann et al, 2007). Reviewing this data shows Responsive Classroom, and other similar social-emotional frameworks, can help students better prepare themselves for learning and improve their academic performance, while also providing a positive, life-long impact on a child as they become better equipped to handle challenges they are likely to face.
Chapter 3: Summary

When this research journey began, I was hoping to dig deeper into the needs of my students and better prepare myself to provide for their social-emotional and academic needs. I wanted to work towards building a more inclusive classroom, where students of all abilities could work together in a safe environment. In particular, I was seeking more information about the Responsive Classroom framework and how such a program can meet the changing needs of students to enable them to get the most from their educational experience. Three questions were identified at the beginning of this paper as the focus of my research.

1. What is Responsive Classroom?

As discussed previously, Responsive Classroom is an evidence-based approach to teaching utilizing guiding principles and practices to help children develop academically, socially, and emotionally within the school setting. The RC framework identifies six guiding principles. While I had some experience with RC through a previously attended weeklong training along with follow-up visits, I wanted to revisit the heart of RC to learn more about the impact it could have on my students. Specific reflection on the guiding principles was insightful as I examined my own teaching and identified areas to improve upon.

“Teaching social and emotional skills is as important as teaching academic content.” I would argue it may be more important. When a child’s social and emotional needs are not being met, it can be difficult for them to keep their focus on academic content. Earlier this year, I noticed a second-grade student struggling to remain engaged in a math activity. She was a very respectful student who consistently demonstrated an understanding of the standards being presented. She had a high level of participation in most classroom activities. Although she has the support of her grandparents, who now have full custody of her, her mom continues to
struggle with drug addiction and has been in treatment several times. I would estimate her ACEs score to be at least five. Despite her background, the behavior I was noticing this day was somewhat out of character for her. During a private meeting with her, she let me know she had spoken to her mom over the phone the previous night and was struggling to process the content of that conversation. She expressed her concerns regarding potential upcoming changes and what that would mean in terms of her safety and well-being. Due to the child’s concern regarding this situation, she was unable to fully engage in classroom activities. After a long discussion and a plan for communicating her thoughts and concerns to her grandparents, she rejoined her class and was remained actively engaged in classroom activities. Without addressing her emotional needs, I believe her academic participation would have been limited for the remainder of the day.

“How we teach is as important as what we teach.” Again, I would actually challenge this statement as I feel how we teach is potentially more important than what we teach. It is apparent each child learns in his or her own way. Some students are visual learners, while others benefit from verbal instruction. Some students prefer to work in groups, while others need time to process information independently. Regardless of what type of learner a child is, all children will have more academic success in a classroom where they are made to feel welcome, safe (physically and emotionally), respected, and valued. When a student’s idea is rejected, criticized, or labeled as wrong by their peers or an adult, they are less likely to continue to contribute their ideas to the group and may struggle to remain engaged in the lesson.

“Great cognitive growth occurs through social interactions.” As I reflect on this principle, I think of the math curriculum we are currently using in our district. During our lessons, the students are exposed to a variety of strategies for solving the same math problem.
Rather than requiring students to sit in their seats listening to me present a lesson for the entire
duration of our math time each day, our curriculum invites daily opportunities for students to
interact with peers and share ideas with the group. Through classroom discussions, partner
work, and small group activities, students are able to explain in their own words how they
worked through a particular problem. I feel many students benefit more from this time to
interact with their peers regarding a concept than they would from simply listening. It also
reinforces the idea they are all unique and learn in their own way. This is a time for us to respect
and celebrate our differences.

“How we work together as adults to create a safe, joyful, and inclusive school
environment is as important as our individual contribution or competence.” Buddy classrooms
and the use of chill chairs are both examples of how Responsive Classroom guides staff
members to work as a team. Buddy Classrooms are created to use when students need time and
space away from their classroom activities. Chill Chairs are set up in each classroom with the
expectations of their use discussed early in the school year and reviewed as needed. They
provide students a space to be away from peers while still having access to the lessons in the
classrooms. Students can choose to utilize this space on their own, or they may be invited there
by an adult. Once there, they take time to regain self-control or reset themselves. When they are
ready, they are invited back to the group. Typically, either the classroom teacher or the buddy
teacher will reflect with the student once control has been regained and time allows. Reflection
time is a chance to discuss the current expectations as compared to the student’s behavior. Part
of this discussion includes an opportunity to discuss more appropriate behavior choices. Rather
than excluding or embarrassing a child for displaying an undesired behavior, the child is given
time and space to calm their thoughts and bodies before reflecting on their behavior and planning appropriate choices for similar situations in the future.

“What we know and believe about our students—individually, culturally, developmentally— informs our expectations, reactions, and attitudes about those students.” I often explain to parents when undesirable behaviors are occurring in the classroom, my goal is to establish the purpose of the behavior in order to respond appropriately. For example, last year I had a second-grade boy who frequently (and loudly) made a unique noise. Several times a day, he would blurt this noise while walking down the hall, working independently, playing on the playground, or in response to something being said to him. This behavior was consistently disruptive to the students around him. One day the noise level in our classroom grew to a higher volume than was typical. I noticed he put his hands over his ears and repeatedly made the dinosaur noise. Later that day, I had an opportunity to conference with him privately. I told him I had noticed he was now making the noise several times each day and asked him to tell me more about it. Through our conversation, he revealed to me he sometimes made the noise when he was frustrated, because he was feeling overwhelmed by the activities and noises around him, or “because it’s just funny!” Together we problem solved a list of replacement behaviors that would meet his particular needs while allowing the class to remain engaged in their own learning. He could raise his hand and ask for help when he was frustrated, use his words to ask friends around him to use a quieter voice or request to work in a quieter setting when he felt overwhelmed, and make the sound silently in his brain when he just needed some humor. While we still occasionally heard the noise, it was far less frequent and I saw an increase in the replacement behaviors we had practiced. Without learning more about this student and the
purposes of the behavior, it would have been very difficult to respond in a way that would meet his needs and the needs of those around him.

“Partnering with families—knowing them and valuing their contributions—is as important as knowing the children we teach.” While we spend a significant amount of time with our students, I feel their parents are still the most influential teacher in their lives. Parents know their children in ways we do not. Their time spent with the student is in a much different setting than the controlled and scheduled environment of school. Working together as a team can be the most effective way to meet the needs of the student’s whole-self. Often times communication between the school and home can highlight useful information regarding a child’s behavior. This communication also builds consistency between home and school, making it easier for a child to understand their expectations.

The guiding principles of Responsive Classroom helped establish the basic practices of Interactive Modeling, Teacher Language, Logical Consequences, Morning Meeting, Energizers, and Quiet Time. When examining these practices, I feel Teacher Language, Logical Consequences, Energizers, and Quiet Time are well established practices in my classroom. Through the routine of Morning Meeting, I have noticed students seem to thoroughly enjoy getting to know staff members on a more personal level. My students know my favorite foods, they know I dislike winter, and they are very curious about my hobbies. I enjoy the moments when they can see their teachers as humans that potentially have similar likes and dislikes. Finding a way to build personal references into the academic lessons has been a great way to keep them engaged, especially when discussing more challenging topics. It has also been helpful to learn more about their interests and hobbies outside of school. Incorporating their interests into our daily lessons keeps them engaged and makes the learning task meaningful to them.
Interactive Modeling was a process used often in my classroom in the beginning of the year as we worked together to establish routines such as properly using materials, transitioning between activities, and safely using equipment in the gym. Because I teach in a multi-age classroom and I have some students for two years in a row, I now realize I failed to use this structure as often this year as I did when I started the position last year as more than half my students had participated in these activities previously. This is a practice I will need to mindfully implement each year in order for my students to have a strong understanding of the expectations along with frequent opportunities to practice appropriate routines. While Closing Circle is a regular occurrence in my classroom, it is lacking the depth it could have. We often quickly say goodbye to each other and discuss important reminders regarding behavior, upcoming events, etc. However, it would be beneficial to build in more time for students to share and reflect on their day in order to provide them with positive closure before heading home. Looking at the Responsive Classroom practices, Establishing Rules is an area of needed growth for me. While I enjoy facilitating conversations regarding the best practices in the school, I struggle to give the students ownership over the ultimate rules implemented in the classroom. Despite their young age, this is something I would like to put more emphasis on in the coming years. Currently I have the least amount of experience with Interactive Learning Structures.

2. What factors have contributed to the increase of programs such as RC that focus on a child’s social-emotional development?

I believe the increase awareness of a child’s adverse experiences has driven educational systems to re-examine their practices and make necessary updates to the daily structure and expectations. Felitti and Anda’s study found over two-thirds of their participants reported at least one adverse childhood experience. Of those, 87% had at least one additional adverse
experience. The work of Felitti and Anda also showed a direct correlation between childhood trauma and the prevalence of future issues such as chronic disease, substance abuse, mental illness, prison time, and work issues. I feel it is important to repeat the fact reported by the National Child Abuse and Neglect Data System stating “12.5 percent of all US children have had a documented episode of child abuse or neglect reported by age eighteen” (Bethell et al., 2014, p. 2107). It is evident children are coming into our classrooms each day dealing with trauma on some level. Without addressing those traumas, students are less likely to gain the skills needed to participate in educational activities and show sufficient academic growth. It is our responsibility as educators to create and environment and consistent routines that best meet the needs of our students.

3. What impact could a program like RC have on a child’s academic performance?

Overall, it is evident through available research a framework such as Responsive Classroom can have a lasting and positive impact on all students. This was specifically demonstrated through the work published in Rimm-Kauffman’s reports. Moreover, the longer a student is exposed to a program like RC, the more impactful the benefits will be. While all students can grow through social-emotional frameworks, it is especially productive for a child whom has experienced a high number of adverse childhood experiences. Through appropriate frameworks, students are provided tools to help regulate and respond to high emotions while also being taught how to build resiliency in order to better respond to trauma that may occur. These are skills that may be lacking due to their home life situations. Incorporating a whole-child mindset into the educational system helps better prepare students for academic growth by first addressing their basic social and emotional needs.
During Paper Tigers, Responsive Classroom was not identified as the specific framework being used by the staff at Lincoln High. However, I see many similarities between the strategies being utilized in the documentary and the practices taught through RC training. Staff in both groups look at the specific child versus simply the behavior being displayed. Strong relationships are fostered between staff and students. Positive relationships are also encouraged between the students themselves. Expectations are made clear while any consequences identified as necessary are non-punitive and directly related to the behavior that occurred. Logical consequences provide students with time to learn and practice positive responses to challenging situations.

The growth demonstrated at Lincoln High, both in academic scores and the decrease in behavioral occurrences, reflects the impact a program such as Responsive Classroom can have on students across multiple areas of their lives.
Chapter 4: Position Statement

Through this research process, I have established it is likely for any student to have at least some exposure to adverse experiences. While we have no control over what happens in their personal lives, as educators we can help them move beyond those experiences by providing a safe environment for them to build positive relationships with adults and peers, regulate their emotions, and communicate their thoughts and ideas in an appropriate way. I think about the students from Paper Tigers and the situations they had already experienced at such a young age such as abuse, drug use, and abandonment. The staff at Lincoln High built trusting relationships with these students and met their individual needs to assist them in overcoming their past.

When reflecting on the school district my children currently attend, and my husband and I both work in, I know there are vast discrepancies between Hinckley-Finlayson and Lincoln High. HF is a mainstreamed, PreK-12th grade public school district whereas Lincoln High is an alternative school for teenage students. The combined population of the two towns making up our district is just over 2,000 while Walla Walla, Washington has a population of over 31,000.

However, there are similarities as well. While our student body more than likely has a lower average ACEs score than that of Lincoln High, there are absolutely students in our district (and any given district) struggling with adverse childhood experiences each and every day. We live in a district known for families living in poverty. Over 55% of our students qualified for the free and reduced lunch program during the current school year. Like Lincoln, we also have staff members who go above and beyond each day to help our students. Many of us are more than willing to help, but have previously lacked the type of training much of our student body could most benefit from. One of Principal Sporleder’s quotes resonated strongly with me after watching Paper Tigers; “The beauty about ACEs is, though the outcomes are incredibly accurate
and predictable with no interventions, there is tremendous hope with interventions.” Through this documentary, the staff at Lincoln High in Walla Walla, Washington State certainly demonstrated how a child with high ACEs could benefit from building a relationship with a positive adult role model. Each of the adults on staff worked to provide the appropriate interventions in order for students to have the best possible educational experience.

For a child who has, or is experiencing adversity, the negative impacts discussed previously are concerning. Students with exposure to trauma are, and will continue to be, entering our school building daily. How can we help? The NSCH study mentioned earlier concluded in order to assist these students and lower the rate of chronic absenteeism, schools could benefit from adopting a trauma-sensitive framework. A trauma-sensitive school is a place where staff members (including custodians, food service workers, teachers, support staff, administration, and bus drivers) work together in order to build an environment where students can feel safe physically, socially, emotionally, and academically. The goal is for students to build relationships, work on self-regulation and communication skills, and achieve success when engaged in academic and non-academic activities. Working with students to grow in these areas can help them overcome adversity, face new challenges, and achieve strong academic growth. Through this research process and my own experiences, I believe Responsive Classroom can accomplish these goals.
References

About the CDC-Kaiser ACE Study, as retrieved from cdc.gov/

About Responsive Classroom, as retrieved from https://www.responsiveclassroom.org/about/


Original ACE Study, as retrieved from acesconnection.com


The Original ACE study, as retrieved from www.iowaaces360.org/ace-study.html