The Effects of Literature on Childhood Anxiety and Attachment Issues

Samantha Taylor

University of Maine - Main

Follow this and additional works at: https://digitalcommons.library.umaine.edu/honors

Part of the Child Psychology Commons, Developmental Psychology Commons, and the School Psychology Commons

Recommended Citation
Taylor, Samantha, "The Effects of Literature on Childhood Anxiety and Attachment Issues" (2014). Honors College. 186.
https://digitalcommons.library.umaine.edu/honors/186

This Honors Thesis is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in Honors College by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.
THE EFFECTS OF LITERATURE ON CHILDHOOD ANXIETY
AND ATTACHMENT ISSUES

by

Samantha Taylor

A Thesis Submitted in Partial Fulfillment
of the Requirements for a Degree with Honors
(Psychology)

The Honors College

University of Maine

May 2014

Advisory Committee:
Cynthia A. Erdley, Ph.D., Professor of Psychology, Advisor
Kathleen Ellis, Lecturer in English and Assistant Professor of Honors
Douglas W. Nangle, Ph.D., Professor of Psychology
Kevin L. Duplissie, Director/Head Teacher, Child Study Center
Patricia E. Dieter, M.A., Doctoral Candidate in Clinical Psychology
Abstract

The purpose of the present study was to determine whether children’s literature that targets issues related to anxiety and attachment has any effect on preschoolers, specifically at the beginning of a new school year. A sample of 12 children aged 2 to 4 years who attended a university-based preschool was examined with two parental and teacher questionnaires that assessed childhood anxiety and attachment-related issues. These measures were administered before and after the treatment. The participants were split into three groups: control, reading, and reading with discussion, and then were read two books that focused on the theme of coping with anxiety. Although there were no group differences after the treatment, a main effect for time was found for parent-rated attachment, teacher-rated attachment, and teacher-rated anxiety. Despite the fact that no evidence was found for the treatment playing a role in the change in anxiety and attachment, the passage of time did seem to play a role. Further studies, especially those with larger sample sizes that also involve more extensive interventions are needed in order to more fully examine the potential for positive effects of bibliotherapy on preschool-aged children.
Acknowledgements

I would like to thank Cynthia Erdley, my advisor, for her invaluable help and advice. I would also like to thank my committee members, Kathleen Ellis, Doug Nangle, Kevin Duplissie, and Patricia Dieter for their support with special thanks to Patricia Dieter for her help with data analysis and Kevin Duplissie for his facilitation of data collection at the Child Study Center. In addition, I greatly appreciate the participation of families whose children attend preschool at the Child Study Center at the University of Maine.

Finally, I would like to thank my parents, Les and Sallie Taylor, and my fiancé, Colby Adolphsen, for their unwavering support.
Table of Contents

Introduction ............................................................................................................................ 1
The Influence of Narratives on Behavior ............................................................................. 1
Bibliotherapy: Definitions and Applications ....................................................................... 3
The Transition to Preschool ................................................................................................. 7
Attachment in Preschoolers ............................................................................................... 9
The Present Study ................................................................................................................ 10

Method ................................................................................................................................ 11
Participants .......................................................................................................................... 11
Measures ............................................................................................................................... 11
Procedure ............................................................................................................................... 13

Results .................................................................................................................................. 15
Attachment Analyses .......................................................................................................... 15
Anxiety Analyses ................................................................................................................ 16

Discussion ............................................................................................................................ 17
Attachment and Separation Issues ...................................................................................... 18
Anxiety ................................................................................................................................. 19
Linkage to Previous Research Findings ............................................................................. 20
Limitations ........................................................................................................................... 20
Summary and Future Directions ......................................................................................... 22

References ........................................................................................................................... 23
<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>KCAQ Parent Version</td>
<td>25</td>
</tr>
<tr>
<td>Appendix B</td>
<td>KCAQ Teacher Version</td>
<td>29</td>
</tr>
<tr>
<td>Appendix C</td>
<td>AQP Parent Version</td>
<td>33</td>
</tr>
<tr>
<td>Appendix D</td>
<td>AQP Teacher Version</td>
<td>39</td>
</tr>
<tr>
<td>Appendix E</td>
<td>(Discussion Questions)</td>
<td>44</td>
</tr>
<tr>
<td>Appendix F</td>
<td>(IRB Approval)</td>
<td>45</td>
</tr>
<tr>
<td>Appendix G</td>
<td>(Informed Consent)</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Author’s Biography</td>
<td>49</td>
</tr>
</tbody>
</table>
**Introduction**

Many people would agree that books offer an escape from the real world. Reading is often used to cope with difficult situations and deal with stress. This study was designed to investigate whether this theory can be applied in a practical way to a very young age group. Many children’s books have been written to help children answer specific questions—how to handle a bully, where babies come from, etc. In addition, many books have been written with the intention of helping children adjust to school and their separation from their parents. This study explored whether books that are targeted at anxiety and separation actually helped preschool-aged children deal with these issues as they began a new school year.

**The Influence of Narratives on Behavior**

Hinyard and Kreuter (2007) discussed the ways in which narratives can be used as a persuasion tool, specifically in terms of promoting health and behavior changes. They defined narrative as “any cohesive and coherent story with an identifiable beginning, middle, and end that provides information about scene, characters, and conflict; raises unanswered questions or unresolved conflict; and provides resolution” (Hinyard & Kreuter, 2007, p. 778). They argue that narrative can be used for bringing about changes, because it is one of the most basic forms of communication (Hinyard & Kreuter, 2007). They discuss possible explanations for the effects that narratives have on us, citing the dual-processing models of persuasion, the transportation-imagery model, the social cognitive theory, the precaution adoption process model, and the theory of reasoned action. Dual-processing models are “those that propose distinct ways of processing
information for people who do and do not have the ability and motivation to cognitively process information” (Hinyard & Kreuter, 2007, p. 779), and the transportation-imagery model says that “narrative persuasion occurs because an individual is ‘transported’ into the narrative world” (Hinyard & Kreuter, 2007, p. 781). Bandura’s (1977) social cognitive theory says “by observing a model, individuals can learn a behavior and will be more likely to perform it if they see the model reinforced for the behavior in ways that appeal to them” (as cited in Hinyard & Kreuter, 2007, p. 782). The precaution adoption process model proposes that if individuals believe that a narrative character is similar to themselves, they may adopt the behavior that the character is exhibiting (Hinyard & Kreuter, 2007). Finally, the theory of reasoned action suggests that the approval of another person will influence behavior (Hinyard & Kreuter, 2007).

The theories that Hinyard and Kreuter discuss are convincing evidence that narratives may have an effect on behavior. For instance, the social cognitive theory suggests that if an individual were to hear a story in which the characters have a favorable outcome to their actions, that person would be more likely to mimic the characters’ behaviors. The transportation-imagery model suggests that narratives are convincing because they “transport” individuals to a convincing fictitious world. The precaution adoption process model proposes that individuals who relate to characters in a narrative are more likely to mimic behavior, which suggests that if an individual were to relate to a character who felt anxiety, he would mimic the behaviors that relieved that anxiety. Lastly, according to the theory of reasoned action, if a behavior is approved of by another person, the individual is likely to continue it. Therefore, if a person were to hear a story in which a behavior was approved of, he would be more likely to mimic it.
Bibliotherapy: Definitions and Applications

Developmental bibliotherapy, as defined by Chamberlain and McCulliss (2013, p. 13), is “the use of literature to facilitate healthy social and emotional growth or maintain normal mental health. Developmental bibliotherapy is provided by educators who work with children and young adults.” According to Pardeck (1995) there are four factors that constitute bibliotherapy: 1) recognition of the participant’s need, 2) pairing of books that address that need, 3) reading the book, and 4) follow-up (as cited in Chamberlain & McCulliss, 2013). According to Harvey (2010), the goal of bibliotherapy is to “elicit change in the attitude or behavior of the reader to enhance their problem-solving skills, and hence increase their resourcefulness. It aims to show readers that they are not alone” (as cited in Chamberlain & McCulliss, 2013, p. 14). Goddard (2011) created a list in order to help with the selection of materials for use in bibliotherapy. The items are:

1. motivating and challenging experiences;
2. suitability to age, ability, and maturity;
3. elicits response;
4. range of literacy structures;
5. proper use of language;
6. broadens understanding of diversity;

During bibliotherapy, Lucas and Soares (2013) recommend that a group setting be used. It helps the participants to feel that they belong and are included, and that others
feel the same way that they do. Chamberlain and McCullis (2013) suggest the following discussion questions for use in bibliotherapy:

1. Are you like any of the story’s characters?
2. Do any of the characters remind you of someone?
3. Who would you like to be in the story?
4. Is there anything you would like to change about the story?
5. How would you change the characters, what happened, or how the story ended?
6. What is your favorite part of the story?
7. Did anything in the story ever happen to you?
8. What do you think will happen to the characters in this story tomorrow, in a few weeks, or a year from now?

In the present study, the participants were divided into small groups (2 to 4 preschool students). After they were read a book that focused on the theme of coping with anxious feelings, they were asked follow-up questions based on the question examples provided by Chamberlain and McCullis (see Appendix E for the questions).

Bibliotherapy works by allowing children to relate to the characters in a book (Lucas & Soares, 2013). By doing this, they are able to recognize aspects of their own problems in the text, and gain insight on how to deal with them (Lucas & Soares, 2013). There are four steps that occur during bibliotherapy: 1) recognition, 2) examination, 3) juxtaposition, and 4) self-application (Lucas & Soares, 2013). During recognition, the reader relates his situation to what is occurring in the book. During examination, the reader “reacts emotionally” to the book. During juxtaposition, the therapist and reader interact and the reader gains insight into the situation through the use of the text. Finally,
during self-application, the reader applies his newfound knowledge to the real world (Lucas & Soares, 2013).

In addition to this, there are three types of bibliotherapy: clinical, client-developed, and developmental (Lucas & Soares, 2013). Clinical bibliotherapy is used to help treat severe mental health problems. During client-developmental bibliotherapy, the client is asked to create an ending to the story, which helps promote the relation between the characters and the client. Developmental bibliotherapy is used to “maintain emotional and mental well-being or self actualization” (as cited in McCulliss, 2012). It is often used in school settings to promote mental health among students and to improve relations among peers (Lucas & Soares, 2013).

In 1999, Shechtman studied the effects that bibliotherapy has on childhood aggression. In his study, he divided ten eight-year-old boys into experimental and control conditions. Six of the participants were known to be highly aggressive. The study consisted of ten sessions, during which a story or poem was read and discussion followed. The subject matter of the literature was directed at dealing with aggression. The results of the study showed a decrease in aggression. In discussing the results, Shechtman (1999, p. 50) says, “Literature seemed to have played an important part in facilitating these mechanisms of change, it presented the richness and complexity of life to the children, while stimulating curiosity yet minimizing defensiveness. Children could easily connect to their inner self through their identification with the characters in the literature, allowing them to understand the other's aggression as well as their own.”

In one study, Japanese students who were studying abroad in the United States were treated with bibliotherapy. The students were not recruited for the study based on
mental health status, but it was found that approximately 80% of them showed symptoms of mental distress (Hayes, Jeffcoat, & Muto, 2011). The sample was split into a waitlist group, and a group who received a self-help book. The self-help book was focused on “acceptance and commitment therapy” and the group that received the book was given two months to read it. After that, the waitlist group received the book. It was found that participants who read the book showed improvement in terms of mental health, including the group who received it later (Hayes et al., 2011).

While bibliotherapy for adult use has been widely analyzed, its use in children has been less studied, specifically in preschool children (Döpfner, Görtz-Dorten, Hanisch, Ise, & Kierfeld, 2013). There has, however, been some research performed on the use of bibliotherapy in parent-guided cognitive behavioral therapy. In one study, parents read through a self-help book while receiving some (but not intensive) guidance and counseling through telephone conversations with therapists (Döpfner et al., 2013). This study was targeted at parents of preschool children who demonstrated problem behaviors such as hyperactivity and inattentiveness. The participants were split into two groups, a treatment group and a waitlist group. Over a period of 11 weeks, the treatment group read through a self-help book about parenting children with behavior problems. The participants also received brief, weekly phone calls to reinforce key topics. It was found that the children of the parents who received the treatment significantly improved in terms of behavior. Although this study was focused on parent intervention, it is relevant because it provides evidence that preschool children can be positively affected by bibliotherapy (Döpfner et al., 2013).
One study conducted in 1989 by Koberstein and Shepherd focused on the effects of bibliotherapy on sharing among preschoolers. They described the use of bibliotherapy as helpful in preschools, because it “can aid children in looking outward, promote cognitive awareness, and contribute to an encouraging environment” (Koberstein & Shepherd, 1989, p. 311). For this study, bibliotherapy was combined with the use of puppets. Puppets have been shown to be effective vehicles for communicating with children, allowing them to identify with the characters (Koberstein & Shepherd, 1989). The researchers hypothesized that combining bibliotherapy with puppetry would be an even more effective mode by which to change behavior than the use of just one technique.

The treatment consisted of reading a book to the participants that was focused on sharing, asking discussion questions, and then recreation of the story by both the researcher and the participants. In order to measure the amount of sharing that occurred after the treatment, the researchers used the Frequency-Count Recording procedure, which measured the amount of times that sharing occurred within a ten-minute time period. It was found that after the treatment, the participants not only shared more but also argued less. This is convincing evidence that bibliotherapy has the ability to positively influence preschool-aged children’s behavior.

The Transition to Preschool

Many would agree that the transition into preschool is a difficult time for children, although anxiety in preschool children has not been as widely studied as anxiety in elementary-aged children (Backes, Gontard, Paulus, Sander & Weber, 2014). One study
sought to understand the specific forms of anxiety that preschoolers experience, and its prevalence. It was found that nearly 25% of the over 1,300 participants exhibited signs of clinical anxiety, with social anxiety being the most prevalent, followed by specific phobias and separation anxiety (Backes et al., 2014). Of all the forms of anxiety, it was found that females were more highly affected, with the exception of separation anxiety in which males seemed to be more affected (Backes et al., 2014). The researchers were also interested to see if behavioral inhibition in two year olds was related to anxiety. It was found that 10% of both male and female two year olds exhibited symptoms of behavioral inhibition, and that this was related to future social anxiety, depressive symptoms, and other forms of anxiety (Backes et al., 2014). Based on the results of this study, it is clear that anxiety among preschoolers is an issue that needs to be further studied. The results support the idea that anxiety is a widespread problem among young children, particularly those who are transitioning into preschool.

A similar study sought to understand not only the prevalence of anxiety disorders among preschoolers, but also the comorbidity among different forms of anxiety. It was revealed that generalized anxiety disorder was comorbid with separation anxiety, social phobia, disruptive behavior disorders, and depression (Angold, Copeland, Costello, Egger, Franz & Towe-Goodman, 2013). In contrast to the previous study, it was found that females are more likely to suffer from separation anxiety. This discrepancy is evidence that more research needs to be conducted in order to better understand anxiety among preschoolers.
Attachment in Preschoolers

The type of attachment preschoolers have with their primary caregiver is key to understanding their behavior (Halpern & Kappenberg, 2006). John Bowlby hypothesized that attachment type and behavior are linked, in that a secure attachment between child and parent is the most developmentally advantageous, while an insecure attachment is not (as cited in Halpern & Kappenberg, 2006). According to Bowlby, a child with a secure attachment is “able to develop a solid repertoire of coping skills, including the ability to regulate their emotional behavior” (as cited in Halpern & Kappenberg, p. 853, 2006). In fact, the behavior of a child is often reflective of the type of attachment that the child has with his or her primary caregiver (Halpern & Kappenberg, 2006).

A study conducted by Seven (2010) found a link between preschool to elementary school transition and attachment type. Through a longitudinal study in which attachment type was established in preschool and adaptation was observed in elementary school, it was found that the children who exhibited a secure attachment style were more positively adapted to elementary school and showed fewer behavioral problems (Seven, 2010). Seven goes on to say that “[t]he fact that children who are secure in their attachment display fewer nonadaptive behaviors when they begin at the elementary school’s first grade indicates that secure attachment is a significant variable in school adaptation” (Seven, p. 353, 2010).

A similar study was conducted in which it was found that insecure attachment in preschool was linked with later childhood behavioral problems and depression (Howieson & Priddis, 2012). The researchers were also interested to see if parents were able to accurately indicate their child’s mental state. The study was based on the theory of
attachment that has four categorizations: secure, avoidant insecure, ambivalent insecure, and disorganized (Howieson & Priddis, 2012). A secure attachment is characterized by a relationship in which the child feels that the parent is responsive and available, and is a secure base in which to explore from (Howieson & Priddis, 2012). An avoidant insecure attachment is one in which the child is consistently ignored and neglected, which results in the child relying on solely him/herself for support (Howieson & Priddis, 2012). An ambivalent insecure attachment is caused by unreliable responses from the parent, which results in attention seeking from the child (Howieson & Priddis, 2012). Finally, a disorganized attachment is often considered the most maladaptive, and is usually a result of abuse (Howieson & Priddis, 2012).

It was found that the children who displayed an insecure attachment type in preschool were more likely to exhibit behavior problems than children with a secure attachment type. In addition to this, parents of insecure children were less likely to be able to accurately report whether or not their child was suffering from depression (Howieson & Priddis, 2012).

The Present Study

Given that past research has indicated that bibliotherapy can help individuals deal with stressors, and a significant stressor for many young children is beginning a new year of preschool, the purpose of the present study was to examine whether bibliotherapy using children’s literature might decrease children’s anxiety. The first hypothesis of this study was that children who are suffering from a heightened level of anxiety would show lower levels after exposure to children’s literature aimed at coping with anxiety. The
second hypothesis was that children who are exposed to children’s literature aimed at reducing anxiety are better able to cope with separation from parents than children who are not exposed to such literature.

**Method**

**Participants**

The participants in this study included 12 preschool students (9 boys and 3 girls) who attended the Child Study Center at the University of Maine. Their age range was from 2 to 4 years old with an average age of 3.08 years. All children attending the preschool were invited to participate, and 60% of the children were granted parental consent to be included.

**Measures**

The Kinship Center Attachment Questionnaire and the Anxiety Questionnaire for Preschoolers were used for the present study. A parent and teacher version of each questionnaire was created.

*The Kinship Center Attachment Questionnaire* (Kappenberg & Halpern, 2006). This measure was chosen for this study because it was constructed to measure attachment in preschoolers over time. In addition, this measure was designed to be answered by a caregiver, and is appropriate for use regarding preschool-aged children. The measure consists of four subscales, which are designed to detect positive adjustment/development, negative behavior, negative reactivity, and distancing from caregiver support.
The Kinship Center Attachment Questionnaire parent version (see Appendix A) consisted of 20 statements (Time 1 $\alpha = .714$, Time 2 $\alpha = .603$) that parents were asked to rate on a 1 (strongly agree) to 5 (strongly disagree) Likert-type scale according to how well each statement corresponded to their child. For instance, one item read, “My child plays well with other children” and another stated, “My child has an easy time making friends.”

The Kinship Center Attachment Questionnaire teacher version (see Appendix B) consisted of 20 statements (Time 1 $\alpha = .795$, Time 2 $\alpha = .729$). The questionnaire contained the same items as the parent version, but was adapted for teacher use. For example, the same items as listed above in the parent version read “The child plays well with other children” and “The child has an easy time making friends” in the teacher version.

*The Anxiety Questionnaire for Preschoolers* (Ingram, McDonald, Rapee & Spence, 2001) This measure was chosen because it covers a wide range of symptoms related to anxiety, is designed for caregiver use, and is appropriate for use regarding preschool-aged children. The Anxiety Questionnaire for Preschoolers consists of five subscales, which are designed to detect generalized anxiety, social phobia, separation anxiety, fears of physical injury, and obsessive-compulsive disorder.

The Anxiety Questionnaire for Preschoolers parent version (see Appendix C) consisted of 28 statements (Time 1 $\alpha = .880$, Time 2 $\alpha = .898$) that parents were asked to rate on a 1 (strongly disagree) to 5 (strongly agree) Likert-type scale according to how well each statement corresponded to their child. For instance, one item read, “My child
has difficulty stopping him/herself from worrying” and another item stated, “My child is afraid of meeting or talking to unfamiliar people.”

The Anxiety Questionnaire for Preschoolers teacher version (see Appendix D) consisted of 21 items (Time 1 $\alpha = .889$, Time 2 $\alpha = .887$). The questionnaire contained the same items as the parent version, but they were adapted for teacher use. For example, the items listed above were presented as “The child has difficulty stopping him/herself from worrying” and “The child is afraid of meeting or talking to unfamiliar people.” Some items that were included in the parent version of the AQP were omitted from the teacher version because the teacher would be unable to answer them. For instance, “My child is reluctant to go to sleep without me or sleep away from home” was not included in the teacher version of the questionnaire.

Procedure

The materials for the study were distributed a week after the start of school at the Child Study Center in the fall of 2013, which was a week after the beginning of the fall semester at the University of Maine. The study began by sending home a parental consent (see Appendix I) with the parents of all the children attending the Child Study Center. The Kinship Center Attachment Questionnaire and Anxiety Questionnaire for Preschoolers were also distributed to parents. One parent was asked to complete both questionnaires. The head teacher of the Child Study Center completed a “teacher version” of the same questionnaires for those children whose parents had also completed these questionnaires.
After all the questionnaires had been returned, the children were divided into three groups, accounting for the age of each child. Each group had a roughly equal representation of the ages of the children. The researcher met with the children during the third week of school to read to them. In the Discussion Group, children were read two fictional stories. The books were the *Kissing Hand* by Audrey Penn and *Llama Llama Misses Mama* by Anna Dewdney. In the *Kissing Hand*, a young raccoon struggles with feelings of fear about his first day of school. His mother comforts him by kissing his hand and telling him to remember the kiss in order to feel comforted, and that she is always there for him. In *Llama Llama Misses Mama*, a young llama has trouble falling asleep after his mother tucks him in for the night. He feels frightened and alone, but his mother reminds him that she is there for him as well. After the stories were read by the researcher, she lead a discussion with the children in which she asked a series of questions about the books and the children’s feelings about the books (see Appendix E). There were two Discussion groups, one with two children and one with three children.

In the Reading Only Group, the children were read the two books, but no discussion followed. There were two Reading Only Groups, each which included two children. In the Control condition, children were not read the books until after all data had been collected. There were three children in this condition. There were two Discussion groups which included two and three children. Each group was read to individually in a quiet room at the Child Study Center.

The reading sessions for the Reading Only and Discussion groups took about 15-20 minutes each. Once they were completed, the Kinship Center Attachment Questionnaire and the Anxiety Questionnaire for Preschoolers were sent home again to
the parents, and the same parent was asked to complete the questionnaires. There was about two weeks from when the questionnaires were first completed to when they were completed for the second time. The head teacher of the CSC completed the “teacher versions” again within the same time frame.

**Results**

Possible differences in the preschool children’s attachment and anxiety were examined as a function of the group they participated in and time (before and after the books were read to children).

**Attachment Analyses**

Correlations were run for parent-rated attachment at Time 1 and teacher-rated attachment at Time 1 \((r=.637, p=.026)\) and again for Time 2 \((r= -.620, p=.031)\). Although these ratings were significantly correlated, the Time 2 scores for parent and teacher-rated attachment were found to be negatively correlated. Therefore, analyses were run separately for parent-rated and teacher-rated attachment.

A 3 group (control, reading, and reading with discussion) X 2 time (time 1 and time 2) ANOVA conducted on parent-rated attachment was performed. There was no main effect for group \([F (2, 9) = .017, p= .983]\). There was a main effect for time \([F (1, 9) = 164.793, p <.01]\). Specifically, parents rated their children as having greater attachment at Time 2 than at Time 1 (see Table 1). There was no significant interaction for time and group \([F (2,9) = 2.481, p=.139]\).
A 3 group (control, reading, and reading with discussion) X 2 time (time 1 and time 2) ANOVA conducted on teacher-rated attachment was performed. There was no main effect for group \( [F (2, 8) = 2.753, p= .123] \). There was a main effect for time \( [F (1, 8) = 121.336, p <.01] \). Specifically, the teacher rated students as having greater attachment at Time 2 than at Time 1 (see Table 1). There was no significant interaction for time and group \( [F (2,8) = 1.986, p=.199] \).

**Anxiety Analyses**

Correlations were run for parent-rated anxiety at Time 1 and teacher-rated anxiety at Time 1 \( (r= -.122, p=.706) \) and again for Time 2 \( (r= -.237, p=.510) \). They were not significantly related, and so analyses were run separately for parent-rated and teacher-rated anxiety.

A 3 group (control, reading, and reading with discussion) X 2 time (Time 1 and Time 2) ANOVA was conducted on parent-rated anxiety. There was no main effect for group \( [F (2, 7) = .065, p= .937] \). In addition, there was no main effect for time \( [F (1, 7) = .076, p= .790] \).

A 3 group (control, reading, and reading with discussion) X 2 time (Time 1 and Time 2) ANOVA was conducted on teacher-rated anxiety. There was no main effect for group \( [F (2, 8) = 1.422, p=.296] \). However, there was a main effect for time \( [F (1, 8) = 21.570, p=.002] \). Specifically, the teacher rated children as less anxious at Time 2 than at Time 1 (see Table 1). There was no significant interaction for time and group \( [F (2,8) = 1.735, p=.237] \).
<table>
<thead>
<tr>
<th>Group</th>
<th>Control</th>
<th>Discussion</th>
<th>Just Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Attachment Parent Time 1</td>
<td>51.75 (2.98)</td>
<td>46.40 (9.48)</td>
<td>43.50 (4.04)</td>
</tr>
<tr>
<td>Attachment Parent Time 2</td>
<td>79.00 (4.00)</td>
<td>84.00 (6.04)</td>
<td>86.50 (2.65)</td>
</tr>
<tr>
<td>Attachment Teacher Time 1</td>
<td>68.75 (7.41)</td>
<td>72.00 (2.94)</td>
<td>64.25 (5.19)</td>
</tr>
<tr>
<td>Attachment Teacher Time 2</td>
<td>85.00 (4.36)</td>
<td>79.40 (7.33)</td>
<td>79.25 (3.30)</td>
</tr>
<tr>
<td>Anxiety Parent Time 1</td>
<td>58.50 (13.33)</td>
<td>49.00 (16.63)</td>
<td>47.50 (5.80)</td>
</tr>
<tr>
<td>Anxiety Parent Time 2</td>
<td>50.00 (14.53)</td>
<td>49.00 (15.52)</td>
<td>50.50 (12.45)</td>
</tr>
<tr>
<td>Anxiety Teacher Time 1</td>
<td>60.00 (20.30)</td>
<td>58.20 (8.23)</td>
<td>68.25 (2.75)</td>
</tr>
<tr>
<td>Anxiety Teacher Time 2</td>
<td>47.67 (12.66)</td>
<td>46.40 (8.99)</td>
<td>52.25 (7.93)</td>
</tr>
</tbody>
</table>

Table 1 displays the mean score and standard deviations for each variable by group.

**Discussion**

The purpose of the present study was to determine whether children’s literature that targets issues related to anxiety and attachment has any effect on preschoolers, specifically at the beginning of a new school year. Past research has found that bibliotherapy (“the use of literature to facilitate healthy social and emotional growth or maintain normal mental health” [Chamberlain & McCulliss, p. 13, 2013]) can have a positive effect on the emotional well-being of children, but the use of bibliotherapy with young children has not been widely investigated. This study attempted to fill some of this gap, specifically in terms of anxiety and attachment, which have been shown to greatly influence the development of children.
Attachment and Separation Issues

It was hypothesized that compared to the control group, those children who were read stories that focused on coping with issues of anxiety and attachment would show improvement in their attachment ratings after they were introduced to these books. It was expected that improvements would be seen especially in those who had the opportunity to discuss the content after having the books read to them. However, in the present study, no effect of group was obtained according to either parent or teacher ratings. Thus, it appears that the treatment did not have any effect on the attachment of the preschoolers. There are a variety of possible explanations for these null results, and they will be discussed in detail in the Limitations section below.

Although there were no treatment effects on attachment in the present study, there was a main effect of time. Specifically, based on both parent and teacher ratings children’s attachment improved from Time 1 to Time 2. The main effect for time was likely due to all of the participants becoming more comfortable at preschool as time progressed. As described previously, the study conducted by Seven (2010) found that children who have a secure attachment adapt more positively to elementary school. It is possible that a similar case may exist for the transition into preschool. Of the children from the present study who improved from Time 1 to Time 2, it is possible that they have a secure attachment to their parent(s) based on Seven’s findings.
Anxiety

It was predicted that compared to the control group, those children who were read stories that focused on coping with issues of anxiety would show reductions in their anxiety ratings after they were introduced to these books. It was expected that decreases in anxiety would be seen particularly in those who had the opportunity to discuss the content after having the books read to them. However, in the present study, no interaction between time and group was found. Thus, it appears that the treatment did not have any effect on the anxiety levels of the preschoolers.

In terms of time, although parents did not view children as experiencing different levels of anxiety at Time 1 versus Time 2, the teacher rated children as being less anxious at Time 2 than at Time 1. Thus, it seems that in the school context, children did experience less anxiety over time, which is likely due to growing more comfortable as they spent more time in school. Perhaps the parent ratings did not change because they see their children in a wider variety of contexts, and the anxiety they rated concerned more contexts than only the time that the children spend in school.

Although this study was not designed to understand the degree of anxiety that the participants were facing, the decrease in anxiety from Time 1 to Time 2 indicates that there was room for improvement as the beginning of the school year. Because of the improvement that was also found in attachment from Time 1 to Time 2, it is possible that this agrees with the research findings of Angold et al. (2013), in which it was found that separation anxiety (which is related to attachment style) was comorbid with generalized anxiety.
Linkage to Previous Research Findings

Although in the present study the only effect that was found was due to time (in parent- and teacher-rated attachment and teacher-rated anxiety), this does fall in line with previous studies done on bibliotherapy. For instance, the study performed by Shechtman (1999) revealed that aggression in preadolescent boys decreased over time with the use of bibliotherapy. While the results of this study indicated that the decrease in aggression that was found was linked to the treatment, it does support the idea that negative behavior can decrease over time. Similar to this are the results obtained in the study performed by Hayes, Jeffcoat and Muto (2011), in which students were given a self-help book and their mental health status was studied over time. It was found that their emotional well-being improved over time, although this was also linked to the use of bibliotherapy.

Limitations

A major limitation of the present study was the small sample size. Because there were only 12 participants in total, and thus only about four children per condition, this made it extremely difficult to detect effects that might be related to bibliotherapy. Another limitation is the relatively high socioeconomic status of the participants. The study took place at a preschool on a college campus, where most of the participants’ parents were employed by the University and were highly educated. Furthermore, the sample consisted of almost all white children, with only one Hispanic female among the participants. Because of this, it is difficult to generalize the results to other populations. In addition to this, there was a high proportion of males to females (3:1). This makes it difficult to generalize the results to the female population. In fact, previous research
(Bryk, Haight, Huttenlocher, Lyons & Seltzer, 1991) has indicated that preschool-aged females are more verbal than preschool-aged males. Consequently, perhaps females are more responsive to bibliotherapy than males. It may be that part of the reason no effects of bibliotherapy were revealed in this study was that the great majority of the present sample included males.

Another limitation of the study was that only one parent gave ratings of his or her child. Because of this, the results of the study represent the viewpoint of only one parent, which could be biased. For example, many parents desire to present their child in a socially desirable light and thus give more positive ratings of their children. Responses from both parents may help to reveal some of this possible bias. Related to this is that only one teacher rated each participant. If the teacher had any particular bias towards or against a particular student, that may have affected the results.

It should also be taken into consideration that the parent- and teacher-rated questionnaires were not significantly correlated. It is possible that this occurred because of the parent’s desire to present their child in a positive light. It may also be that rating differences happened because the teacher is only subject to the behavior of the children at school, and similarly, the parent is generally only subject to the child’s behavior at home.

A limitation of the measures used is that they were designed specifically for caregiver responses. That is, the child is not asked these questions of him/herself. Although the caregiver may have some understanding of the emotions that the child is feeling, it is difficult to say whether or not those are truly accurate.
Summary and Future Directions

The original hypotheses of this study were that children would show improvements in their attachment behaviors and lower levels of anxiety after exposure to children’s literature aimed at coping with anxiety. Although it was found that attachment improved and anxiety decreased over time, these changes did not seem to be related to the bibliotherapy treatment. Therefore, the hypotheses of the study were not upheld. This is likely due to the small sample size of the study. In order to better understand the effects of bibliotherapy on attachment and anxiety, future research should be performed with larger sample sizes. Furthermore, future research should be careful to assure that females and males are equally represented. In addition, future research should include more raters of the variables of interest. Ideally, both parents, as well as more than one teacher, would provide ratings. It would also be beneficial to obtain child ratings so that the child’s perspective would be represented.

This study consisted of one reading session for each group, in which two books were read to the participants. Based on prior research in which many sessions of bibliotherapy have taken place, it would perhaps be beneficial to conduct a study in which multiple readings are performed. If an effect were produced, it would seem more likely to be related to the bibliotherapy, rather than as a function of time alone.
References


Appendix A

Kinship Center Attachment Questionnaire

Parent Questionnaire

Directions: Please indicate your agreement with the following items, 1 being strongly disagree and 5 being strongly agree.

1. My child plays well with other children.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

2. My child talks as well as other children of the same age.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

3. My child understands what is said to him or her.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

4. My child has an easy time making friends.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree
5. My child learns from his or her mistakes and stops a behavior when that behavior results in a negative consequence.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

6. My child is kind and gentle with animals.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

7. My child steals things and doesn’t seem to feel bad about his or her behavior.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

8. My child seems overly interested in fire, gore, and blood.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

9. My child destroys or breaks things that belong to others.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

10. My child destroys or breaks his or her own things.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>
11. My child teases, hurts, or is cruel to other children.

1 2 3 4 5

12. My child hoards food or has other unusual eating habits (e.g., eats paper, raw flour, packaged mixes, feces, etc.)

1 2 3 4 5

13. If things don’t go his or her way, my child gets very upset.

1 2 3 4 5

14. My child does not like being separated from me except on his/her terms.

1 2 3 4 5

15. My child is excessively clingy.

1 2 3 4 5

16. My child is excessively whiny.
17. My child has told others that I abuse him or her even though I never have.
1 2 3 4 5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

18. When my child is upset, he or she does not allow familiar adults to comfort him or her but will go to strangers for comfort.
1 2 3 4 5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

19. When my child gets hurt, he or she refuses to let anyone comfort him or her.
1 2 3 4 5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

20. When my child is in pain, he or she doesn’t show it.
1 2 3 4 5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree
Appendix B

Kinship Center Attachment Questionnaire

Teacher Questionnaire

Directions: Please indicate your agreement with the following items, 1 being strongly disagree and 5 being strongly agree.

1. The child plays well with other children.
   1   2   3   4   5
   Strongly disagree   Disagree   Neutral   Agree   Strongly Agree

2. The child talks as well as other children of the same age.
   1   2   3   4   5
   Strongly disagree   Disagree   Neutral   Agree   Strongly Agree

3. The child understands what is said to him or her.
   1   2   3   4   5
   Strongly disagree   Disagree   Neutral   Agree   Strongly Agree

4. The child has an easy time making friends.
   1   2   3   4   5
   Strongly disagree   Disagree   Neutral   Agree   Strongly Agree
5. The child learns from his or her mistakes and stops a behavior when that behavior results in a negative consequence.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

6. The child is kind and gentle with animals.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

7. The child steals things and doesn’t seem to feel bad about his or her behavior.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

8. The child seems overly interested in fire, gore, and blood.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

9. The child destroys or breaks things that belong to others.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

10. The child destroys or breaks his or her own things.

<p>| 1 | 2 | 3 | 4 | 5 |</p>
<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>The child teases, hurts, or is cruel to other children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>12.</td>
<td>The child hoards food or has other unusual eating habits (e.g., eats paper, raw flour, packaged mixes, feces, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>13.</td>
<td>If things don’t go his or her way, the child gets very upset.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>14.</td>
<td>The child does not like being separated from me except on his/her terms.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>15.</td>
<td>The child is excessively clingy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>16.</td>
<td>The child is excessively whiny.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. The child has told others that I abuse him or her even though I never have.

18. When the child is upset, he or she does not allow familiar adults to comfort him or her but will go to strangers for comfort.

19. When the child gets hurt, he or she refuses to let anyone comfort him or her.

20. When the child is in pain, he or she doesn’t show it.
### Appendix C

**Anxiety Questionnaire for Preschoolers**  
**Parent Questionnaire**

Directions: Please indicate your agreement with the following items, 1 being strongly disagree and 5 being strongly agree.

1. My child has difficulty stopping him/herself from worrying.  
   1  2  3  4  5  
   Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

2. My child worries that he/she will do something to look stupid in front of other people.  
   1  2  3  4  5  
   Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

3. My child keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap).  
   1  2  3  4  5  
   Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

4. My child is tense, restless or irritable due to worrying.  
   1  2  3  4  5  
   Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

5. My child is scared to ask an adult for help (e.g., a preschool or school teacher).  
   1  2  3  4  5  
   Strongly disagree  Disagree  Neutral  Agree  Strongly Agree
6. My child is reluctant to go to sleep without me or to sleep away from home.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. My child is scared of heights (high places).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. My child has trouble sleeping due to worrying.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. My child washes his/her hands over and over many times each day.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. My child is afraid of crowded or closed-in places.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. My child is afraid of meeting or talking to unfamiliar people.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. My child worries that something bad will happen to his/her parents.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

13. My child is afraid of thunderstorms.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

14. My child spends a large part of each day worrying about various things.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

15. My child is afraid of talking in front of the class/preschool group (e.g., show and tell).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

16. My child worries that something bad will happen to him/her (e.g., getting lost or kidnapped) so he/she won’t be able to see you again.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>
17. My child is nervous of going swimming.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

18. My child has to have things in exactly the right order or position to stop bad things from happening.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

19. My child worries that he/she will do something embarrassing in front of other people.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

20. My child is afraid of insects and/or spiders.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree

21. My child has bad or silly thoughts or images that keep coming back over and over.

1 2 3 4 5
Strongly disagree Disagree Neutral Agree Strongly Agree
22. My child becomes distressed about your leaving him/her at preschool or with a babysitter.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

23. My child is afraid to go up to a group of children to join their activities.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

24. My child is frightened of dogs.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

25. My child has nightmares about being apart from you.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

26. My child is afraid of the dark.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

27. My child has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening.

1  2  3  4  5
28. My child asks for reassurance when it doesn’t seem necessary.

1 2 3 4 5

Strongly disagree Disagree Neutral Agree Strongly Agree
Appendix D

Anxiety Questionnaire for Preschoolers
Teacher Questionnaire

Directions: Please indicate your agreement with the following items, 1 being strongly disagree and 5 being strongly agree.

1. The child has difficulty stopping him/herself from worrying.
   
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

2. The child worries that he/she will do something to look stupid in front of other people.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

3. The child keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

4. The child is tense, restless or irritable due to worrying.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

5. The child is scared to ask an adult for help (e.g., a preschool or school teacher).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
6. The child is scared of heights (high places).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

7. The child has trouble sleeping due to worrying.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

8. The child washes his/her hands over and over many times each day.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

9. The child is afraid of crowded or closed-in places.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

10. The child is afraid of meeting or talking to unfamiliar people.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

11. The child worries that something bad will happen to his/her parents.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
12. The child is afraid of thunderstorms.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

13. The child spends a large part of each day worrying about various things.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

14. The child is afraid of talking in front of the class/preschool group (e.g., show and tell).

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

15. The child worries that something bad will happen to him/her (e.g., getting lost or kidnapped) so he/she won’t be able to see you again.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

16. The child is nervous of going swimming.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree
17. The child has to have things in exactly the right order or position to stop bad things from happening.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

18. The child worries that he/she will do something embarrassing in front of other people.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

19. The child is afraid of insects and/or spiders.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

20. The child has bad or silly thoughts or images that keep coming back over and over.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree

21. The child becomes distressed about your leaving him/her at preschool or with a babysitter.

1  2  3  4  5
Strongly disagree  Disagree  Neutral  Agree  Strongly Agree
22. The child is afraid to go up to a group of children to join their activities.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

23. The child is frightened of dogs.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

24. The child has nightmares about being apart from you.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

25. The child is afraid of the dark.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

26. The child has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

27. The child asks for reassurance when it doesn’t seem necessary.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>
Appendix E

Discussion Questions

1. Are you like any of the people in this story?
2. Do any of the characters remind you of someone?
3. Who would you like to be in the story?
4. Is there anything you would like to change about the story?
5. How would you change the characters, what happened, or how the story ended?
6. What is your favorite part of the story?
7. Did anything in the story ever happen to you?
8. What do you think will happen to the characters in this story tomorrow? What about in a few weeks? What about a year from now?
Appendix F

MEMORANDUM

TO: Samantha Taylor
1341 Appleton Road
Union, ME 04862

FROM: Gayle Jones
Assistant to the Institutional Review Board for the Protection of Human Subjects (IRB)

SUBJECT: "The Effects of Literature on Reducing a Childhood Anxiety and Separation Difficulties," #2013-08-01

DATE: August 23, 2013

The above referenced project was approved by the University of Maine's Institutional Review Board for the Protection of Human Subjects (IRB) in an expedited review. The approval period is 8/19/2013 through 8/18/2014. A continuing review of this project must be conducted by the IRB before the end of the approval period. Although you will receive a request for this information approximately 6-8 weeks before that date, it is your responsibility to submit the information in sufficient time to allow for review before the approval period expires.

You have an approved, stamped copy of the consent document for this project. The approval for this consent expires on 8/18/2014. This approved, stamped copy must be distributed and used when enrolling subjects during the approval period.

Please remember that each subject must be given a copy of the consent document. Any unanticipated problems or harm to the subject must be reported to the IRB immediately. Any proposed changes in the research must be approved by the IRB prior to implementation. Any significant new findings must be reported to the subject.

If you have questions, please contact me at 1-1498. Thank you.

pc: Cynthia Preble
APPLICATION FOR APPROVAL OF RESEARCH WITH HUMAN SUBJECTS

PRINCIPAL INVESTIGATOR: Samantha Tyler
E-MAIL: Samantha.Tyler@umaine.edu

CO-INVESTIGATORS: NA

FACULTY SPONSOR (Required if PI is a student): Cynthia Kelley

TITLE OF PROJECT: The Effects of Literature on Reducing Childhood Anxiety and Sensation

DEPARTMENT: Psychology

Mailing Address: 344 Appleton Road, Orono, ME 04473

Funding Agency (if applicable): VA

STATE OF PI: If PI is a student, is this research to be performed:

[ ] for an honors thesis/master's thesis? [ ] for a doctoral dissertation?
[ ] for a master's thesis? [ ] for an honors project?
[ ] for other (specify):

1. Does this application modify a previously approved project? Yes [X] No [ ]

2. If yes, please give assigned number of previously approved project:

3. Is an expedited review requested? [ ] Yes [X] No

SIGNATURES: All procedures performed under the project will be conducted by individuals qualified and legally permitted to do so. No deviation from the approved protocol will be undertaken without prior approval of the IRB.

Faculty Sponsor is responsible for oversight of research conducted by their students. By signing this application page, the Faculty Sponsor ensures that he/she has read the application and that the conduct of such research will be in accordance with the University of Maine's Policies and Procedures for the Protection of Human Subjects of Research.

Date: 

Principal Investigator: 

Faculty Sponsor: 

Co-Investigator: 

Co-Investigator: 

FOR TRB USE ONLY: Application No. 2013-09-01 Date received 3/18/2013 Review (ER): 

Expediting Category: I23p.

ACTION TAKEN:

Judged by the category: [X] Modifications required? [ ] (Y) no accepted date

Approved as submitted. Date of next review: [ ] Degree of Risk: 

Approved pending modifications. Date of next review: [ ] Degree of Risk: 

Modifications accepted date: 8/28/2013 Degree of Risk: 

Not approved. (See attached statement)

Redrafted research with human subjects

Date: 8/28/2013 Chair's Signature: 

[Signature]

Date: 

Chair's Signature: 

[Signature]
Appendix G

INFORMED CONSENT FORM

You and your child are invited to participate in a research project being conducted by Samantha Taylor, an undergraduate student in the Department of Psychology at the University of Maine. The faculty sponsor of this research project is Professor Cynthia Eddy of the Department of Psychology at the University of Maine. The purpose of the research is to study the effects of reading particular books that deal with the topic of anxiety on children's anxiety levels and ability to cope with separation.

What Will You and Your Child Be Asked to Do?

If you decide to participate in this project, you will be:

- Asked to fill out two questionnaires regarding your child’s anxiety levels and attachment. Some statements you will be asked to rate include “My child plays well with other children” and “My child has trouble stopping him/herself from worrying.”
- Your child will then be randomly assigned into one of three groups with 1 to 3 other students at the Child Study Center.
  - One group will be read two books. These books are The Kissing Hand by Audrey Penn and Llama Llama Red Pajama by Anna Dewdney. They will then be asked follow-up questions such as “What was your favorite part of the story?” and “Are you like any of the people in this story?”
  - The second group will be read the two books but will not be asked any follow-up questions.
  - The third group will be read the two books. However, the reading session will not take place until about 3 weeks after the start of the project, after parents have completed the two questionnaires a second time (see below).

- After the readings have been completed for Groups 1 and 2, you will be asked to fill out the two questionnaires again. It may take approximately 15 minutes to fill out each questionnaire. (You will be filling out a total of 4 questionnaires, two at the beginning of the study, and then two about a week later.) It will take approximately 30 minutes for your child to participate at the Child Study Center during regular school hours.
- As part of this study, a regular teacher at the Child Study Center will also be completing the two questionnaires regarding your child’s anxiety levels and attachments so that we can have multiple perspectives on your child’s emotions.

Risks

- There is the possibility that you may become uncomfortable answering the questions. However, you may skip any questions you prefer not to answer.
- There are expected to be minimal risks to your child, as being read stories and asked questions about them are typical experiences at school.
Benefits

- Although there may not be direct benefits to you or your child participating in this study, it is possible that your child may experience a reduction in anxiety after the reading session.
- Researchers will learn whether reading children's books that focus on the topic of anxiety affects children's anxiety levels and ability to cope with separation.

Confidentiality

Your name or your child's name will not be on any of the documents. A code number will be used to protect the identity of you and your child. The key linking this code number to your identity will be kept on a computer using special software that protects the confidentiality of the information. Data will be kept in the investigator's locked office. Only Samantha Taylor and the faculty sponsor, Cynthia Edley, will have access to the data. Your name or other identifying information will not be reported in any publications. All data (paper copies of the questionnaires and electronic data) will be destroyed after the study is complete, in May 2014.

Voluntary

Participation is voluntary. If you and your child choose to take part in this study, you may stop at any time. You may skip any questions you do not wish to answer.

Contact Information

If you have any questions about this study, please contact me at 207-975-3235. My address is 1341 Appleton Road, Union, ME 04862. My email address is samantha.taylor@unh.edu. You may also reach the faculty advisor of this study at 207-581-2400. Professor Edley's address is 368 Little Hall, University of Maine, Orono, ME 04469. Her email address is cynthia.edley@unh.edu. If you have any questions about your rights as a research participant, please contact Gayle Jenks, Assistant to the University of Maine's Protection of Human Subjects Review Board, at 581-1498 (or e-mail gayle.jenks@unm.edu).

Your signature below indicates that you have read the above information and agree to participate and allow your child to participate. You will receive a copy of this form.

Signature

Date
Author’s Biography

Samantha Holliday Taylor was born in Santa Rosa, CA on September 27, 1991 and lived in the Napa Valley until the age of 8. She then moved with her family to Midcoast Maine, where she was raised by her two parents, Les and Sallie along with her two siblings, Jamie and Michael. She graduated from South Hope Christian School in 2009 and went on to attend the University of Maine. She received her BA in Psychology with a concentration in Developmental Psychology and a minor in English in May of 2014. As a member, secretary, and executive trip planner of Operation H.E.A.R.T.S., as well as a member of Psi Chi, she is passionate about volunteerism and the UMaine community.

From a young age she has enjoyed reading, which she combined with her passion for psychology and working with children to form her thesis. She plans on pursuing this path by studying School Psychology at the College of William and Mary. She will marry a fellow UMaine alum, Colby Adolphsen, in May of 2014.