10-2014

Implicit Bias about Disabilities: Does it Exist for Forensic Interviewers and Could It Affect Child Credibility Decisions in Child Abuse Investigations: An Exploratory Study

Elizabeth Reiman
Graduate Center, City University of New York

How does access to this work benefit you? Let us know!
Follow this and additional works at: https://academicworks.cuny.edu/gc_etds
Part of the Social Work Commons

Recommended Citation
https://academicworks.cuny.edu/gc_etds/466

This Dissertation is brought to you by CUNY Academic Works. It has been accepted for inclusion in All Dissertations, Theses, and Capstone Projects by an authorized administrator of CUNY Academic Works. For more information, please contact deposit@gc.cuny.edu.
IMPLICIT BIAS ABOUT DISABILITIES: DOES IT EXIST FOR FORENSIC INTERVIEWERS AND COULD IT AFFECT CHILD CREDIBILITY DECISIONS IN CHILD ABUSE INVESTIGATIONS: AN EXPLORATORY STUDY

by

Elizabeth Reiman

A dissertation submitted to the Graduate Faculty in Social Welfare in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2014
This manuscript has been read and accepted for the Graduate Faculty in Social Welfare in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Professor Gerald P. Mallon

______________________________

Date Chair of Examining Committee

Professor Harriet Goodman

______________________________

Date Executive Officer

Professor Irwin Epstein

Professor Willie Tolliver
Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK
Abstract

IMPLIED BIAS ABOUT DISABILITIES: DOES IT EXIST FOR FORENSIC INTERVIEWERS AND COULD IT AFFECT CHILD CREDIBILITY IN CHILD ABUSE EVALUATIONS

By

Elizabeth Reiman

Advisor: Profession Gary Mallon

This research project considered two questions regarding forensic interviewers: Do forensic interviewers hold implicit biases toward people with disabilities? If so, could this influence whether a forensic interviewer finds a child with a disability believable? To examine these questions, a quantitative exploratory study was conducted. Using an online survey, participants were randomly assigned to read a scenario about a child’s disclosure of sexual abuse (children with and without a disability), and respond to questions about the believability of the child. Participants then completed an adapted version of the Disability Attitude Implicit Association Test (DA-IAT). The results yielded four significant findings. First, implicit bias about disabilities does exist in the forensic interviewer population. The results suggest that bias about disabilities exists on a continuum (High Bias, Low Bias and No Bias) and not in a binary representation as previously measured by other authors. Second, of all the interviewer characteristics that might predict representation in the three bias groups, only professional discipline was significant. The third conclusion demonstrated that, the interviewer attributes showed a significant relationship to credibility but none of the child characteristics were associated. The fourth finding was that the identification of a disability prior to the interview could affect the interviewer’s bias score. The results raise the question of how interviewer’s implicit bias about disabilities can change the course of an interview. Using
this information as a starting point, further research on this topic is critical to forensic interview best practice. The training of these specialized practitioners needs to move beyond simply providing basic information about disabilities and begin to explore interviewers’ beliefs, attitudes and values about people with disabilities.
This dissertation is dedicated to my parents (Mary and David Bernard) and my grandparents (Edgar and Elizabeth Beck) for their unshakeable belief in what I could accomplish. Both my mother and grandmother were very strong women who taught and modeled for me that women can achieve whatever they set their mind to. Their confidence in me gave me the courage to attempt this feat. My father and grandfather were my ultimate motivators with their spirit that always encouraged me to keep going. I am sure that they are looking down and watching this momentous occasion. This is my gift to them.
ACKNOWLEDGEMENTS

There are so many people who have helped me on this dissertation journey that deserve recognition in helping this dream become a reality, but that would take too many pages. Therefore this is my short list. The first people to acknowledge are my dissertation committee for their guidance and support, particularly Dr. Epstein who kept me on the straight path when I would veer off track, and Drs. Mallon and Tolliver who each came up with the right words when I felt lost. My family provided their support and belief that I could accomplish this academic challenge even purchasing me an iPad, which they had engraved, “Future PhD” (that was 3 years ago). My brother deserves special recognition for his patience teaching me about use of commas and guiding the writing process. During this process my husband regularly took on many additional responsibilities so that I could devote my time to finishing this work. Another important person in this process was Dr. William Bannon; his statistical guidance and patience made it possible for me to perform my own data analysis and truly understand the meaning of my results. My Thursday evening Practice Lab cohort (at Silberman) was very supportive and encouraging and believed that I would get this finished even when I had my doubts; they also took up the slack for me during that final semester. And finally my colleagues at WIHD (Westchester Institute for Human Development) for by filling in, covering for me, and giving me the time off I needed to complete this work and make it happen.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>v</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>vii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xiii</td>
</tr>
<tr>
<td>CHAPTER I: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of Research Question</td>
<td>2</td>
</tr>
<tr>
<td>Role of Forensic Interviewer</td>
<td>10</td>
</tr>
<tr>
<td>Major Concepts of Research</td>
<td>13</td>
</tr>
<tr>
<td>Child Sexual Abuse</td>
<td>13</td>
</tr>
<tr>
<td>Disability</td>
<td>14</td>
</tr>
<tr>
<td>Forensic Interview and Interviewer</td>
<td>17</td>
</tr>
<tr>
<td>Disclosure</td>
<td>19</td>
</tr>
<tr>
<td>Credibility</td>
<td>20</td>
</tr>
<tr>
<td>Implicit Bias</td>
<td>24</td>
</tr>
<tr>
<td>Theoretical Frameworks of People with Disabilities</td>
<td>28</td>
</tr>
<tr>
<td>Relationship of Research Question to Social Work Practice and Policy</td>
<td>32</td>
</tr>
<tr>
<td>Purpose of Study</td>
<td>33</td>
</tr>
<tr>
<td>Summary of Introduction</td>
<td>35</td>
</tr>
<tr>
<td>CHAPTER II: LITERATURE REVIEW</td>
<td>36</td>
</tr>
<tr>
<td>Historical Context</td>
<td>36</td>
</tr>
</tbody>
</table>
Design Decisions 81
   Methodological Choices 81
   Measuring Variables 83
   Sampling Decisions 85
   Construction of Survey Decisions 85
Target Population 86
Sampling Strategy 88
Setting 90
Instrumentation 91
Procedures 95
   IRB 95
   Human Subject Protection 97
Data Collection 99
Data Storage and Management 100
Data Analysis 102
   Analysis of Demographic Variables 102
   Analysis of Implicit Bias 104
   Analysis of Child Credibility 108
CHAPTER IV: RESULTS 111
   Demographic Variables 114
   Implicit Bias about Disabilities Variable 119
   Child Credibility Variable 128
   Summary of Results 138
CHAPTER V: DISCUSSION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of Research Project</td>
<td>140</td>
</tr>
<tr>
<td>Interpretation</td>
<td>146</td>
</tr>
<tr>
<td>Limitations</td>
<td>148</td>
</tr>
<tr>
<td>Implications</td>
<td>149</td>
</tr>
<tr>
<td>Significance to Field of Social Work</td>
<td>152</td>
</tr>
<tr>
<td>Conclusion</td>
<td>155</td>
</tr>
</tbody>
</table>

APPENDIX

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Case Vignettes</td>
<td>158</td>
</tr>
<tr>
<td>B: DA-IAT</td>
<td>167</td>
</tr>
<tr>
<td>C: Recruitment Letter</td>
<td>170</td>
</tr>
<tr>
<td>D: Informed Consent Letter</td>
<td>171</td>
</tr>
<tr>
<td>E: Letter of Organizational Participation</td>
<td>173</td>
</tr>
<tr>
<td>F: Exploratory Factor Analysis</td>
<td>174</td>
</tr>
<tr>
<td>G: IRB Approval Letters</td>
<td>179</td>
</tr>
</tbody>
</table>

REFERENCES 182
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Descriptive Analysis Forensic Interviews with Children with and without Disabilities</td>
<td>116</td>
</tr>
<tr>
<td>Table 2</td>
<td>Descriptive Analysis Level of Training</td>
<td>117</td>
</tr>
<tr>
<td>Table 3</td>
<td>Descriptive Analysis Length of Time Conducting Forensic Interview</td>
<td>117</td>
</tr>
<tr>
<td>Table 4</td>
<td>Cronbach’s Alpha rating of DA-IAT (adapted) Questions</td>
<td>120</td>
</tr>
<tr>
<td>Table 5</td>
<td>Chi Square Revised Discipline by Bias Score</td>
<td>123</td>
</tr>
<tr>
<td>Table 6</td>
<td>Chi Square Training Model by Bias Score</td>
<td>124</td>
</tr>
<tr>
<td>Table 7</td>
<td>Chi Square Training Level by Bias Score</td>
<td>125</td>
</tr>
<tr>
<td>Table 8</td>
<td>ANOVA Bias Score and Forensic Interview CWD and CWOD</td>
<td>126</td>
</tr>
<tr>
<td>Table 9</td>
<td>ANOVA Length of Time and Bias Score</td>
<td>126</td>
</tr>
<tr>
<td>Table 10</td>
<td>Chi Square Scenario D by Bias Score</td>
<td>128</td>
</tr>
<tr>
<td>Table 11</td>
<td>Chi Square Bias Score and Scenario C</td>
<td>129</td>
</tr>
<tr>
<td>Table 12</td>
<td>ANOVA Forensic Interview CWD and High Bias Category</td>
<td>129</td>
</tr>
<tr>
<td>Table 13</td>
<td>ANOVA Continuous Child Variable and Scenario Read</td>
<td>132</td>
</tr>
<tr>
<td>Table 14</td>
<td>ANOVA Dichotomous Child Variable and Scenario Read</td>
<td>132</td>
</tr>
<tr>
<td>Table 15</td>
<td>Descriptive Analysis of Forensic Interviewer Characteristics</td>
<td>135</td>
</tr>
<tr>
<td>Table 16</td>
<td>ANOVA Forensic Interviewer Characteristics and Scenario Read</td>
<td>137</td>
</tr>
<tr>
<td>Table 17</td>
<td>ANOVA Interviewer Comfort Level and Bias Score</td>
<td>137</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Discipline of Sample Population</td>
<td>115</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Revised Discipline of Sample Population</td>
<td>115</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Forensic Interview Training Model</td>
<td>118</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Distribution of DA-IAT Scores</td>
<td>121</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Distribution of DA-IAT3CAT</td>
<td>122</td>
</tr>
</tbody>
</table>
CHAPTER I: INTRODUCTION

Child sexual abuse is a significant problem in the child welfare arena. Of the child maltreatment reports nationwide, sexual abuse consistently represents 9% of the substantiated cases (Child Maltreatment, 2011). Children with a disability are at a higher risk for being victims of child abuse, yet those who conduct the investigations have limited knowledge about working with this population. This situation is further complicated by how society views people with disabilities, many of which are not conscious beliefs or attitudes. Those who conduct child sexual abuse investigations are frequently interviewing children who have a disability, yet do they hold implicit bias toward these children?

This research project seeks to answer two questions that concern the investigative process of child sexual abuse cases; is implicit bias about disabilities present in forensic interviewers who conduct child sexual abuse investigations and second if it exists, how does it influence the forensic interviewers’ decision making about the credibility of a child with disability? In order to contextualize these questions, it is necessary to understand several concepts, 1) Forensic interviewing and interviewers, 2) Child sexual abuse investigations, 3) Children with disabilities, 4) Implicit bias, and 5) Societal attitudes about people with disabilities. This study describes the major trends in the field, historical background and a review of the literature regarding each of these concepts. This research is important to the fields of social welfare and forensics because children with disabilities are at higher risk to be a victim of child abuse (Lee, Harrington, Chang & Connors, 2008; Stalker & McArthur, 2010; Sullivan & Knutson, 2000; Westat Inc., 1991). It is therefore critical to understand what could affect the outcome of these investigations. Since one of the basic tools used to gather “evidence” is the forensic interview, it is necessary to recognize both child and interviewer influences that could
alter the outcome of any given forensic interview about child sexual abuse. As will be
demonstrated in this research, implicit bias about disabilities exists in society; so given the
concern about children with a disability being abused more often, is this bias present in those that
cconduct the investigations about possible abuse? Ultimately this study will answer the two
questions stated above utilizing a quantitative exploratory approach that is framed within
disability theory.

In this project, several conventions of vocabulary and usage will be followed. For
brevity, the term “child(ren) with a disability” will be abbreviated CWD. Also, the term
“developmental disabilities” is the current and preferred description of the population being
studied. However, some older studies use the term “mental retardation;” this archaic usage, while
offensive to some, will be included for historical accuracy. Lastly, since the fields of child abuse
and treating children with a disability have not traditionally been integrated, the topics will be
considered separately throughout this paper; however, the final proposal will weave these two
fields of practice together.

Statement of Research Question

To understand the research question it is important to contextualize it first. This section
will offer this information. Previous research has been conducted about the many variables
implicated in child abuse investigations: the differences between typically developing children
and children with a disability; factors that can influence the child’s disclosure during forensic
interviews; societal views about people with disabilities; and the existence of implicit bias about
disabilities in the general public as well as in specific populations. However, at this point in
knowledge development no one has studied whether there is an intersection of implicit bias about
disabilities and forensic interviewers. Considering that children with a disability appear to be at
higher risk for sexual abuse (Sullivan & Knutson, 2000) it is important to assess whether or not these two phenomena are intertwined. The most reasoned approach is to review the literature of each of these areas first and then test to see if implicit bias about disability exists and then how it impacts the outcome of the forensic interview with a child with a disability. The purpose of this study is to answer these questions: 1) When conducting an investigation into child sexual abuse, do forensic interviewers have an implicit bias about disability that affects their decision about the credibility of a child’s statements during a forensic interview? 2) If this bias exists, I how is it manifested?

The beginning point of the study is reviewing the context in which these issues arise, and why they are important. This section of the research will consider prevalence of child sexual abuse and disability, how forensic interviews are used to investigate allegations of child sexual abuse, and possible factors that can impact the outcome of a forensic interview.

In the field of child maltreatment, child sexual abuse accounts for approximately 9% of the substantiated cases and children with disabilities (CWD) have higher rates of child maltreatment than typically developing children (U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children’s Bureau, 2012). Furthermore, children with disabilities are sexually abused more frequently then typically developing children (TDC) (Crosse, Kaye & Ratnofsky, 1993; Horton & Kochurka, 1995; Sullivan & Knutson, 2000,). Early studies have shown a child with a disability is between 1.8-3.4 times more likely to be sexually abused than a child without a disability (Mansell, Sobsey & Moskel, 1998; Sullivan & Knutson, 2000). There are more recent statistics about the prevalence of child sexual abuse among children with disabilities. The National Child Abuse and Neglect Data System (2011) reported that 9.5% of child maltreatment
cases involve sexual abuse. That report also indicated that 11% of children who were victims of child maltreatment had an identified disability. The report cautioned that this figure might be an underestimation, since the number reflects only children with an identified disability and not those merely suspected of having a disability. The most recent National Incidence Study 4 (NIS4) reported descriptive data from child protective service providers as well as from other key professions such as medical and mental health providers about child maltreatment. The NIS-4 report demonstrated that in 2005-2006, 1.4 children per thousand with a disability were sexually abused compared to 2.4 children per thousand without a disability. These statistics are inconsistent with the other data available and the authors noted that their sample of children with disabilities was very small, less than 100 children and therefore may not necessarily be a true reflection of the incidence of abuse. Since this is the first time that status of disability was reported, the process for accurately identifying a child with a disability may not reflect the true numbers. However, this report is important because it is the first time that a nation survey included disability status.

Both child-related problems about disclosure and the methodological issues contribute to the inability to accurately count of child victims of sexual abuse. According to London, Bruck, Ceci and Shuman (2007), incidents of child sexual abuse are underreported in general; and those that are reported to law enforcement or child protective services do not include all the disclosures that may occur in alternative settings such as mental health diversion programs, or in other service provider settings. Children may also deny abuse even when confronted, or may disclose and then recant more than once (London et al., 2007). Furthermore, it is estimated that only 20% of cases of sexual abuse involving a person with a disability are reported to police (Murphy 2001; Watson, 1984.). Moreover, the verbal disclosure is typically the sole evidence that abuse
occurred; there is rarely any physical evidence such as medical findings (London, Bruck, Ceci & Shuman, 2007; Pipe, Orbach, Lamb & Cederborg, 2007). In addition, typically sexual abuse involves only the victim and the perpetrator; there are rarely outside witnesses to corroborate the activity (Pipe, Orbach, Lamb & Cederborg, 2007). This can significantly affect the disclosure statistics for children with disabilities, who often have language impairments and are unable to adequately explain what may have occurred. Without a credible disclosure, the case will not proceed to either criminal or family court and a child may not be eligible for services. This again highlights the importance of the forensic interview in protecting children.

As for the methodological problems there are currently two options for studying this co-morbidity. One way researchers use to locate cases of sexual abuse is by interviewing adults with disabilities to determine if they have a history of child sexual abuse (Hard, 1986; Ryerson, 1984). Using a retrospective approach introduces methodological and ethical problems as this approach limits the potential cases because it depends on a person recollection of incidents of abuse from childhood and labeling them as abusive. According to Briere (1992) asking adults about past events can blur the cause and effect relationship; these recollections can be diminished by the lapse in time or influenced by the person’s current psychological functioning. There is no way to independently corroborate these accounts and these reports have problems with the validity of the criterion (Briere 1992; Nurcombe, 2000). The other technique employed to identify potential cases is to study known victims of sexual abuse and assess whether they have a developmental disability (Chamberlain, 1982; Kvam, 2000; Sobsey & Doe, 1991; Sullivan & Knutson, 2000). This approach becomes more complicated because the frequency of formal assessments used to diagnosis a disability occurs in only a few of the studies (Sullivan & Knutson, 2000). The detection of these cases is challenged further by the lack of communication
between the two fields of study, disability and child maltreatment. According to Andrews and Veronen (1993) agencies that work with people with disabilities do not maintain information regarding sexual victimization, while agencies that work with victims of sex crimes omit information regarding disabilities. These authors highlight that neither agency has trained staff to recognize the population they do not serve. Therefore many people with disabilities may go unidentified as victims of abuse, and victims of abuse may not be identified as having a disability. This second approach relies on information obtained from official reports, incidence reports, many of which are not reported to professional child protection or law enforcement officials (Finkelhor, 1994; London, et al., 2007).

In 1988, partly in to respond to this problem, legislation was passed that focused on the co-morbidity issue; the Child Abuse Prevention, Adoption and Family Services Act (Pub L No 100-294), for example, mandated that information be compiled through research studies to determine the incidence of child maltreatment among children with disabilities. The National Incidence Studies (NIS)-2 included information about disability, but the decision about the existence of a child’s disability was determined by the Child Protective Services worker (Kendall-Tacket et al., 2005) rather than by a professional or a parent. Subsequently, the NIS-3 did not include disability status at all. In the most recent NIS-4 report, disability status was included; however, only 35 of the states reported this information (Shannon & Agorastou, 2006; Sullivan & Knutson, 1998). New York is not one of the reporting states. Among state child protective services agencies, 38% are required to document a pre-existing developmental disability in their case record and 28% must include the specific type of disability (Shannon & Agorastou, 2006). Thirty-one of the states report that the documentation of the disability can be noted in the narrative section of the case record but is not required (Shannon & Agorastou,
of the states that do report on disability, statistics indicate that 7.3% of the children involved in substantiated child maltreatment cases also had a developmental disability.

While these efforts were a step forward, problems continue to exist around identifying and reporting cases of abuse with children with disabilities. Hibbard and Desch (2007) note that child protective service caseworkers only reported cases where there was an existing clinical diagnosis of a disability and not necessarily those in which a disability might be suspected, which may yield inaccurate and/or underreported results. Another problem in accurately identifying these cases is that there is no uniform definition of disability throughout child welfare agencies (Algood, Hong, Gourdine, & Williams, 2011). It is clear that proper identification of cases continues. Grappling with a definition of disability with be detailed later in this research.

Moving from the macro level to the micro level, how are reported child sexual abuse cases investigated? Investigations of child sexual abuse rely on both physical evidence (such as medical findings, DNA, sexually transmitted diseases or even pregnancy) and verbal evidence; children reporting what happened during a forensic interview and corroboration by others who may have witnessed the event or to whom the child initially reported the allegation. In these cases, the substantiation of allegations frequently depends upon disclosures from the child victims (Craig, Scheibe, Raskin, Kircher, & Dodd, 1999); physical evidence of sexual abuse is generally very limited (Fanetti, O’Donohue & Bradley, 2006). The child’s account of what occurred becomes the focus on these investigations and the forensic interview plays in this process (Bottoms, Nysee-Carris, Harris & Tyda, 2003).

What is known about forensic interviewing in allegations of child sexual abuse? As society identifies cases of child sexual abuse, more children undergo forensic interviews (Persona, Bottoms & Sorenson, 2006). These interviews underscore three key factors that arise
during the investigation: 1) Concerns about the current and future safety of a child; 2) Whether there is sufficient evidence to bring criminal charges against the alleged perpetrator and; 3) The necessity of therapeutic and supportive service interventions for the child and non-offending family (Persona, Bottoms, & Sorenson, 2006). Accordingly, interviews must be conducted in an open, neutral, analytic manner with minimal stress to the child (Sgroi, 1982). To maximize credibility The goal is to reduce the potential influences to a child’s memory or the accuracy of their information, to conduct interviews that are developmentally and culturally sensitive, to use techniques that elicit reliable information, and to reduce the potential for coercive or leading questioning (Persona, et. al, 2006). These types of interviews would also most likely result in a reduction of the number of interviews a child experiences; which in turn leads to fewer inconsistencies in the overall narrative.

Best practice in these investigations encourages that trained forensic interviewers conduct the specialized interviews. Forensic interviewers can have a wide variety of backgrounds including Child Protective Services caseworkers, Assistant District Attorneys, Assistant County Attorneys and police officers. Most forensic interviewers participate in a special training in order to conduct a forensically sound and developmentally appropriate interview. During training, specific protocols and guidelines are taught to standardize forensic interviews. More details about forensic interviewing and these protocols and guidelines will be discussed later in this paper.

One product of these interviews is the interviewer’s decision about the child’s credibility. The complex and powerful decision about believability frequently involves Child Protective Services caseworkers, law enforcement officers and prosecutors (Connolly, Price, Lavoie & Gordon, 2007). The perception of credibility relies on two basic components, the child’s
cognitive capacity and the child’s honesty (Connolly et al., 2007; Ross, Jurden, Lindsay & Keeney, 2003). To assess this, the interviewer must rely on the child’s statements and whether the information obtained is consistent (i.e. reliable) and believable (i.e. valid). Determining the child’s believability weighs heavily on the outcome of any case child sexual abuse case, but it is more challenging when the child has a disability. Jurors and others must perceive children with a disability’s testimony as more accurate and less suggestible than typically developing children in order to counteract negative stereotypes about people with disabilities (Peled, Iarocci & Connolly, 2004). Earlier literature suggested that children with disability made poor witnesses due to memory limitations and suggestibility (Bottoms, Nysee-Carris, Harris, & Tyda, 2003). On the other hand, Seidman (2000) found that persons with developmental disabilities are capable of providing accurate reports of past events involving sexual information. Dent (1986) was one of the first researchers to study children with developmental disabilities as eyewitnesses and concluded that they did not make poor witnesses when non-suggestive questions were used. Other researchers (Leippe, Romanczyk & Manion, 1991; Milne & Bull, 2001; Perlman, Ericson, Esses & Isaacs, 1994) also found that this population could make effective witnesses if properly questioned. Bottoms and Goodman (1994) found that honesty and sincerity were more significant factors than cognitive abilities when considering child sexual abuse cases.

The child’s credibility is influenced by a number of different factors, some that pertain to the child and others related to the interviewer. As described earlier perception about credibility focuses on cognitive ability and honesty, however there are other factors that can influence how believable a child may be. The child focused issues such as memory, suggestibility and consistency of responses (Connolly et al., 2007); credibility also depends on perceptions of a child being trustworthy (Bottoms, Nysee-Carris, Harris, & Tyda, 2003). Others considerations
relate to the interviewer and include issues of question type, knowledge about disabilities, and the role of the interviewer and their potential bias. While the focus of this study is on those behaviors and processes that are related to the forensic interviewer, it is necessary to be knowledgeable about those factors that impact the child being interviewed. The issues related to the children will be discussed in detail in the literature review section of the paper.

**The Role of the Forensic Interviewer**

The forensic interviewer has a significant role in the investigative process. Interviewers are expected to conduct a neutral and unbiased conversation with a child. However, is the interviewer free from bias? Panghorn (2009) stresses that the interviewer’s job is to find the truth rather than to prove the case or get a conviction. Research about confirmatory bias of forensic interviewers is limited. By definition, this concept refers to finding what one expects to find based on previous experience or knowledge or questions asked (Bruck & Ceci, 1999; Ceci & Bruck, 1994; Panghorn, 2009). This type of bias occurs when interviewers gather information about what occurred before interviewing the child, then use this information to guide the interview rather than following the child’s lead. When they have this information in advance, forensic interviewers may unwittingly project their own past experiences onto the current situation, which can significantly impact the outcome of the interview. The National Association of Social Workers in the Code of Ethics outline the importance of social workers providing services that reflect an understanding of cultural differences, thus limiting the role of bias in their work (NASW, 2012). Yet in social work practice, decision-making about child welfare cases is influenced by caseworker’s personal experiences and personality (Stokes & Schmidt, 2012). Panghorn (2009) contends that when an interviewer is presented with too much information, he/she may respond to certain answers provided by the child and/or ignore other pieces of
information. He explains that the interviewer is responsible for considering external influences that may account for a child’s answers, and that even experienced interviewers can apply past experiences to a current situation. Bruck and Ceci (1999) go as far to say that interviewer biases can completely change the architecture of the interview. Panghorn (2009) writes that there is a lack of identification of these confirmatory biases and that even well intentioned interviewers may not recognize their own internal biases. Panghorn (2009) does not specifically address issues of bias toward children with disabilities; his points are applicable to this population as well. If these biases exist with forensic interviewers, might additional biases apply to feelings and beliefs about disabilities?

Bias can affect people in many ways. People are aware of their explicit biases, which include segregation or gender based hiring rules. Implicit biases are unconscious -- unspoken prejudices and behaviors that exclude people based on social constructs. In recent history, laws have been enacted to prohibit explicit biases. Much of the literature about implicit and explicit bias comes from the field of social psychology, where studies have focused on other social identities than disability. In the past, attitudes about race, religion, and other socially constructed categories were measured using explicit measures that could predict explicit bias (Penner, Dovidio, West Gaertner, Albrecht, Dailey & Marknova, 2010). A common approach was to interview people about their feelings about a particular group; in the past, participants felt comfortable acknowledging negative feelings about a particular group. However, the civil rights laws of the 1960’s changed the face of racism and made open acts of discrimination morally and legally wrong (Dovidio & Gaertner, 2002). While explicit expressions of negative beliefs and feelings about particular groups have been reduced, the literature implies that discrimination toward vulnerable populations (including people with disabilities) continues.
Stepahnikova, Triplett and Simpson (2011) suggest the attitudes have not changed; only the ways in which they are expressed. These repressed beliefs emerge in more subtle forms of behavior known as implicit bias. According to Dovidio and Gaertner (2010) personal denial of prejudice can co-exist with unconscious and prejudicial feelings and beliefs. This happens because implicit biases are primarily automatic in nature and often not part conscious thought (Cameron, Payne, & Knobe, 2010; Kawakami, Moll, Hermsen, Dovidio & Russin, 2000). The result is more subtle forms of discrimination that may be unintentional, such as nonverbal behavior and negative decision-making choices in complex situations (Penner, Dovidio, West, Gaertner, Albrecht, Dailey & Markova, 2010).

Much of the literature about implicit bias has focused on race, sexual orientation and religion; as it applies to people with disabilities. According to Larson (2009) society in general is less aware of, or perhaps less willing to admit to, its own implicit bias toward the disabled. In our society, people with disabilities are generally considered less capable than able-bodied people; some of these beliefs are explicitly expressed but most of them are not outwardly acknowledged. These beliefs and attitudes about disability apply to both children and adults. For example, according to Levin (2011), negative perceptions about disabilities begin early; children between the ages of 3 and 6 have been shown to recognize and characterize individuals with physical disabilities negatively. Nabors (1997) showed able-bodied preschoolers pictures of people with and without disabilities and asked the children with whom they would prefer to play; the preschool children demonstrated an overwhelming preference toward the able-bodied playmates. These biases begin very young and can transform into prejudice and even hate if not identified and corrected (Levin, 2011). It seems likely that bias related to CWDs generally exists,
starting early in childhood and without a conscious attempt to mitigate it this problem will show up in many circumstances with varying degrees of consequence.

**Major Concepts in This Dissertation**

There are several important concepts that pertain to this study; they are child sexual abuse, disability, forensic interviewers and interviews, disclosure, and credibility. For clarity and context, each is defined and explored individually.

**Child sexual abuse.**

There is not a single definition of child sexual abuse nationally or internationally. The Child Abuse Prevention and Treatment Act (CAPTA) mandated that states define child abuse and neglect including a definition of child sexual abuse. One of the first authors to define this term was Suzanne Sgroi who wrote about child sexual abuse in the 1980s. While her work was written at the beginning of the awareness of child sexual abuse, the concepts she identified are still applicable today. Sgroi (1982) defined child sexual abuse as any sexual act, including both touching and non-touching behaviors, committed by either an adult or older adolescent on a child. The age of the children, their developmental capacity and maturational difference all place children in a significantly weaker position in their relationship with the perpetrator. Through the use of direct or implicit coercion, perpetrators maintain power and authority over child victims. With this level of control, the perpetrator is able to gain the child’s compliance with the sexual act. Many other authors and professional organizations have described child sexual abuse (American Psychological Association, n.d; the American Professional Society of Child Abuse, n.d.; Berliner & Elliott, 2002; Finkelhor, 1994). While there are differences in the way each state define child sexual abuse, there are several common elements in the definition. In all the definitions, child sexual abuse involves an imbalance in power between the child and the
offender, behaviors that can be either touching (contact with body parts such as fondling, genital contact or penetration) or non-touching behavior (such as exposure, child pornography or voyeurism) and that the child is unable to consent to engaging in this activity either because of age or developmental level of functioning (American Psychological Association). The Federal Child Abuse Prevention and Treatment Act (CAPTA) of 1974 characterized child sexual abuse in a similar manner; 2010 Reauthorization of CAPTA added the co-morbidity of child abuse and domestic violence into its definition (Child Welfare League of America, n.d.). In addition the World Health Organization adds to their definition that the behavior must violate society laws or social taboos (World Health Organization, n.d.).

Child sexual abuse occurs to both typically developing children as well as children with disabilities. However children with a disability are placed at a higher level of risk for various reasons; some of those are; children with a disability are frequently taught to be compliant with adults in the helping role; CWDs may have limited ability to express themselves; the “red flag” behaviors identified in typically developing children are often attributed to the child’s disability and they often feel isolated and lonely, and so appreciate the attention. (Berliner & Elliott, 2002; Faller, 2007). In addition, CWDs have relatively greater exposure to more adults than typically developing children. CWDs often have multiple adults in their lives such as therapists, aides, and other helping professionals. All of the factors place children with a disability at increased exposure and risk for being victims.

**Disability.**

There are several ways to define disability. The traditional, medical model labels the deficits that a child has in relation to his/her non-disabled counterpart. This definition describes the impairment and the limitations present compared to that of a child without the disability...
(Project Ability, 2008). This definition places a premium on being able-bodied and fails to recognize the contributions that a person with a limitation can offer. The American with Disabilities Act (ADA) utilizes a three-part definition of the term “disability.” According to the ADA (2012) a disabled person is an individual who has a physical or mental impairment that substantially limits one or more major life activities; OR has a record of such an impairment; OR is regarded as having such an impairment. This definition is a legal one as opposed to a medical one and therefore has a very broad scope (ADA National Network, n.d.).

The World Health Organization’s International Classification of Function (ICF) offers another definition. The ICF classifies a person’s condition based on a list of body conditions and structures coupled with a list of activities and participation; it also includes environmental factors that may increase/hamper participation (World Health Organization, n.d.). This definition recognizes that a person may experience a reduction in health, which could cause a disability in functioning at any time; this small change substantially increases the number of people who, over the course of a lifetime, may fall into this category, thus “mainstreaming” the experience (World Health Organization, n.d.). Utilizing this approach shifts the focus from the cause of the disability to the functioning of a person with a disability. It also contextualizes the disability and considers the social aspects, not merely the biological or medical deficits.

Disabilities studies and theorists maintain that a disability is a socially constructed concept; the disability is viewed not as a physical or mental defect but as a cultural and minority identity (Reid-Cunningham, 2009; Seibers, 2010). That is, that people with a disability are part of a culture of people with physical, cognitive and behavioral limitations; but they are not a homogenous group. Klotz (2003) for example defines disability as a complex social, biological, medical and cultural phenomenon. This definition incorporates many factors that could affect a
person and focuses on accessibility to services and community involvement as opposed specific symptoms. Johnson (2010) goes further to state that using critical disability theory the physical and mental differences in people with a disability cannot be ignored, but rather it must be confronted; people with disabilities should be able to have life experiences that are similar to those without a disability.

The above designations refer to people in general, however when identifying children, the term most frequently used is developmental disability. The National Association of Council on Developmental Disabilities has defined “developmental disability” as a chronic or severe disability that begins in childhood (0-21 years of age) and will last for a lifetime. The disability may be cognitive, physical, or a combination of both, and significantly limits the child’s day to day adaptive functioning in one or more of the following areas: self-care, communication, learning, mobility or the ability to work and live independently. People who have a developmental disability will likely need support in education, work and living to remain in their communities. (National Association for people with Developmental Disabilities, n.d.). CWDs account for 13.4% of all children in school in the United States according to the National Center for Educational Statistics in their 2007-08 statistics.

In the early literature, children with a disability were considered any child with any type of impairment. This approach is problematic for many reasons; for one thing, it assumes that children with a disability are a homogeneous group, a gross inaccuracy since children with a disability have a wide range of needs and functioning levels. It is crucial to make a more nuanced assessment of the child’s limitation and how it will affect his/her functioning and what adjustments are needed for the child to achieve success. Cedarborg and Lamb (2006) go even further, arguing that groups of children with disabilities are a heterogeneous group even when
they share a similar diagnosis. Dr. Boyle Chief of the Developmental Disabilities Branch at the Center for Disease Prevention Center corroborated this view when she presented a report to the House Committee on Government Reform; she stated that the prevalence of children with disabilities in the United States was approximately 17% (http://www.hhs.gov/ash/testify/000406c.html). However, she then enumerated the specific types of disability affecting the children; she reported that 42% had a specific learning disabilities, 23% had a speech and language impairment, 13% were mentally retarded/developmental delayed, 7% had emotional disturbance, 3% were autistic and 12% had other disabilities (Project Ability, 2008). One must exercise caution however when considering these numbers as they include only children who have been identified as having a disability, but not those where there is only a suspicion the existence of a disability. For the purpose of this dissertation, a child with a disability will be a child with a cognitive, behavioral, and/or social impairment that diminishes a child’s ability to communicate and understand language, has cognitive limitations that effect learning, and/or impacts on their ability to attend to a task at hand.

**Forensic interview and forensic interviewer.**

The forensic interview is a critical component of the child sexual abuse investigation; it is the primary tool used to gather information concerning the allegations, and to determine the child protective services and/or law enforcement investigation. The purpose of this interview is to evaluate the truth about allegations of child abuse (Lippert, Cross, Jones & Walsh, 2008). According to Poole and Lamb (1998), it is important to distinguish between forensic and clinical interviews; the primary distinction is that forensic interviews must maintain a neutral and object approach. Corroborating statements made by the child and not assuming he/she is being honest, providing a physical environment that is basic and free from distractions and creating an
atmosphere that discourages fantasy and/or play accomplish this. The interactions between the child and the interviewer must minimize the possibility of suggestibility or coercion. To accomplish this Poole and Lamb (1998) offer a series of guidelines for conducting forensic interviews. These recommendations include:

- Goal of the interview is fact finding,
- The interviewer assumes a neutral position and serves as a conversational guide.
- The interviewer should clarify any ambiguities and not interpret the child’s behavior or statement.
- The interviewer’s techniques should be subject to empirical evaluation.
- The interview space should be free from suggestion, distraction and/or intimidation (for example, the number of tools or play objects should be limited).
- The demeanor of the forensic interviewer should be relaxed and neutral, and should avoid communicating emotional reactions or expectations.
- Forensic interviewers should use techniques that minimize the potential for suggestibility.
- The forensic interviewer should use a hypothesis-testing approach, which means that alternative explanations about the allegations must be ruled out.
- These interviews should also be child-focused, attending to the developmental and cultural circumstances of a child.

Sgroi (1982) explains that an interview should take place in a safe, private place. The interview should be conducted with only the child, even if the interviewer needs to help the child transition from the caregiver. Sgroi (1982) also insists that the interviewer must understand the child’s developmental level and make appropriate accommodations for the interview to be successful.
These general guidelines describe the ideal environment and circumstances for forensic interviews and are what investigators strive to use. According to Faller (2007), there are currently a dozen interview guidelines and protocols in circulation, each with the goal of eliciting the purest and most accurate information possible. Interview protocols like CornerHouse’s RATAC, Rapport, Anatomy Identification, Touch Inquiry, Abuse and Closure, (Walters, Holmes Bauer, & Vieth, 2003), Cognitive Interview (Fisher, Brenner & McCauley, 2002), NICHD, National Institute of Child Health and Human Development (Orbach, Hershkowitz, Lamb, Esplin & Horowitz, 2000), Stepwise (Yuille, 2002) and New York State Best Practices have been developed. These protocols attempt to formalize the way forensic interviewers conduct their interviews, and standardize the manner in which questions are asked. Using these techniques, an anticipated outcome is to minimize leading questions and thus minimizing the suggestibility of the child.

**Disclosure.**

In order to obtain objective information regarding the possible allegations of child sexual abuse, the interviewer must encourage the child to narrate in his/her own words what has occurred; a child is expected to verbally explain the events and the salient details of the situation. These statements are called a disclosure. The disclosure of child sexual abuse for most children is a complex process rather than a single event, the narrative often develops over a period of time with new information emerging as the child remembers additional details (Faller, 2008). Children may not always be ready to tell an authority figure about what occurred and might deny or minimize their victimization even when there is compelling evidence that they have been abused (Sjoberg & Lindblad, 2002). Children can make disclosures either accidentally or purposefully (Faller, 2007). An accidental disclosure occurs when a child does not tell someone
what happened, but instead a third party observes the abuse, notices symptoms that are suspicious for abuse, or overhears a child discussing the abuse with another person and reports this information to an authority (Faller, 2007). A purposeful disclosure involves a child deliberately reporting his/her experience to another person (Collings, Griffiths, & Kumalo, 2005). According to London, Bruck, Ceci and Schuman (2007), children who have made even a partial disclosure prior to the forensic interview are more likely to disclose during the interview.

There are many things that can impact this disclosure. Some are related to the child, such as the relationship the child has to the offender, the child’s memory, suggestibility and response patterns. Others are specific to the forensic interviewer: types of questions used; understanding of the role of the interviewer; and personal bias. These ideas will be described in greater detail later in this paper.

**Credibility.**

Credibility is a significant factor when making forensic decisions in child sexual abuse cases. What makes one person more credible than another? What role does a disability play in determining a child’s credibility? In child sexual abuse cases, credibility refers to the believability of the child and involves assessing a child’s competence and trustworthiness (Davies & Rogers, 2009). According to Bottoms and Goodman (1994), honesty and sincerity were found to be more significant than a child’s cognitive ability. Younger children were perceived as being more honest and trustworthy; they are also sexually naïve, and thus less likely to fabricate a sexual encounter (Bottoms & Goodman 1994; Davies & Rogers, 2009; Rogers & Davies, 2007; Stein, 2006),

People’s beliefs about children with disabilities could skew their views of a child’s credibility. Society often regards a child with a disability as lacking the cognitive capacity to
provide a clear and accurate account of an event, which undermines the child’s credibility (Milne and Bull, 2001; Perlman, Ericson, Esses & Isaacs, 1994). On the other hand, societal attitudes suggest that children with disabilities are naïve about sex, and are therefore incapable of fabricating a story about a sexual event. The result is that children with disabilities are generally considered trustworthy (Bottoms & Goodman, 1994; Davies & Rogers, 2009).

The child’s credibility is crucial because before prosecutors consider legal action, they must answer two important questions: a) does the child’s disclosure have merit? and b) is the child’s disclosure sufficiently reliable to bring the case before the court system?. Since there is rarely any physical evidence, one must rely on a child’s statements (Bottoms, Nysee-Carris; Harris & Tyda, 2003; London, Bruck, Ceci & Shuman, 2007; Stein, 2006,). Peled, Iarocci and Connolly (2004) contend that children with disabilities may have less access to legal support due to unwarranted bias regarding their reliability as a witness. They argue that jurors need to perceive a child’s testimony as highly accurate with low suggestibility in order to contradict negative stereotypes about disabilities (Peled, Iarocci, & Connolly, 2004).

Prior to the child advocacy and structured interview protocol movements, judges and jurors often decided children’s believability exclusively (Cederborg, 1999; Perry & Wrightsman, 1999). These determinations were frequently based on attributes such as personal characteristics or the child’s narrative style (Cederborg, 1999), without regard to the actual content of the statements. Negative personality and stylistic qualities were deemed as signs of weak characters and ultimately less credibility (Goffman, 1963). Furthermore, a child’s response often depended on the specific question asked and by whom (prosecutor or defense attorney), or the method of question asked (Perry & Wrightman, 1991).
Determination of the child’s credibility was rarely made on the disclosure’s merit alone. Other factors include the age of the witness (Castelli, Goodman, & Ghetti, 2005; Connolly, Price, Lavoie, & Gordon, 2007), their ability to report memories consistently (Bergman, Narby & Cutler, 1995; Connolly, et al., 2007; Leippe, Romanczyk, & Manion, 1991), and the ability to resist leading questions (Castelli, et. al., 2005; Karla & Heath, 1997; Schmidt & Brigham, 1996). The use of a two-factor approach focusing on cognitive competence (accuracy of memory and ability to answer lawyer’s questions) and intended honesty (truthfulness, likelihood of fabrication) has also been an important focus (Connolly, et al., 2007; Ross, Jurden, Lindsay & Keeney, 2003). Other research examines the connection between believability, confidence (Cutler, 1988) and likeability (Leippe, 1992).

Other factors that might influence credibility are outside the control of the child; for example, whether the abuse is a single event or a repeated event (Connolly, et. al., 2007). The role of unconscious or implicit bias of the forensic interviewer can also play a role (Stein, 2006). The forensic interviewer may opt to ask (or not ask) particular questions based on preconceived notions about what may have occurred (Stein, 2006); this impacts how others view the credibility of the child’s account. Azar and Goff (2007) suggest that subtle forms of bias can have a powerful influence on people and significantly affect their choices, professional decision-making, and the application of social information in the child welfare system. The lack of awareness of their own biases leads people to make errors in judgment (Azar & Goff, 2007). Studies, nationally and internationally, about decision making in child welfare related to risk and safety show that caseworkers decisions are affected by not only the facts but also by personal experiences and beliefs (Gambrill, 2005; Munro, 1999; Stokes & Schmidt, 2012).
The child’s credibility has a significant impact on the outcome of child abuse investigations. For example, in the 1994 case of State v Michaels, a New Jersey Appellate Court overturned the conviction of Ms. Michaels because the interview of the victim was considered improper, and because the allegations in the case were based on unreliable memories and poor investigative techniques (Stein, 2006). Judges used taint hearings to determine whether the child’s statements prior to trial are a result of accurate facts or contaminated interviews of child either by poor interviewer style, multiple interviews or overzealous interviewers (Schaaf, Alexander, Goodman, Ghetti Edelstein & Castelli, 2002). If it is believed to be tainted, then the judge can and will refuse to admit the statements into the proceedings. This is based upon the belief that overly suggestive questions of a child will forever taint their description of an event(s) (Lyons, 1999)

But is credibility measurable? There has been a significant focus on the question of what makes a child more believable in the eyes of judges and jurors (Cederborg, 1999; Lamb, 1998; Myers, Redlich, Goodman, Prizmich & Imwinelreid, 1999). One comprehensive system for evaluating credibility in sex abuse case is known as the Statement Validity Assessment (SVA). The SVA has three components: structured interview of the victim; the assessment of the transcript of the victim’s account using the Criteria Based Content Analysis (CBCA); and a validity checklist that analyzes information from the first two parts (Pezdek, Morrow, Blandon-Gilton, Goodman, Quas, Saywitz, Pipe, Bidrose, Rogers & Brodie, 2004). The CBCA has received the most attention in the credibility literature, with mixed results (Lamb, 1997; Pezdek, Finger, & Hodge, 1997; Pezdek & Hodge, 1997). According to Cederborg and Lamb (2006), the Swedish Supreme Court has relied upon the Statement Reality Analysis (SRA) in addition to the CBCA to determine the credibility of a child. One criticism of both of measures is that it assumes
that the quality and content of reports about events that were actually experienced will differ from events that did not occur (Cedarborg & Lamb, 2006; Lamb, 1998). While the CBCA may be able to distinguish between plausible and implausible, the precision is insufficient to be used in a forensic setting (Cedarborg & Lamb, 2009). Moreover, none of these measures have been tested on children with learning difficulties or other handicapping conditions (Cedarborg & Lamb, 2009). A few studies have combined questions from other instruments to assess the credibility of children (Bottoms, Nysse-Carris, Harris & Tyda, 2003; Podell, Kastner, Kastner, 1996). This topic will be covered in greater detail later in the paper.

**Implicit bias.**

Bias is defined as a set of ambivalent beliefs about a person or a group of people that exist across different ethnic groups including race, religion, sexual orientation, physical disorders and disabilities (Lam, Tsang, Chan, & Corrigan, 2006). These stereotypical thoughts may or may not be consciously available and are difficult or impossible to control (Anderson, 2010). According to Azar and Goff (2007) a person organizes previous experiences into schemas and these serve as templates for memory. These schemas are reactivated when similar situations arise. The activation process is both automatic and unconscious (Blair, & Banaji, 1996; Penner, Dovidio, West, Gaertner, Albrecht, Dailey & Markova, 2010). If these templates contain biased or inaccurate content it can lead to rigid thinking, biased data gathering, premature closure of the decision-making processes, or misinterpretation of one’s own responses (Azar & Goff, 2007).

Before explaining implicit bias, one must first understand explicit bias. Explicit bias is a set of feelings and beliefs about a group of people that is conscious, personally acknowledged and openly described (Anderson, 2010). This type of bias was seen prior to the civil rights movement when people acted in an openly discriminatory manner specifically to African
Americans. Explicit bias frequently stems from a belief that a psychopathology lies within the person or group; that is there is something internal to the individual that makes them the target of bias (Anderson, 2010). This type of bias serves to boost the self esteem of people in power, promoting feelings of superiority and economic advantages over those who were discriminated against (Dovidio & Gaertner, 2002).

How is this bias created? Bias is connected to the concept of stigma. The word stigma can be traced back to the ancient Greeks who believed that bodily differences were viewed as a negative attribute and a comment on the moral status on the person (Goffman, 1963). More recently stigma is viewed as a means that society uses to categorize people by recognizing individual attributes that are different from others in that group. These categorizations are binary oppositional categories (Fook, 2002) and serve as the basis for prejudgment (Allport, 1986). According to Goffman (1963) these categorizations lead to the development of a social identity; and they also serve to justify discriminatory practices and preserving power of the non-marginalized group (Fook, 2002). The anticipation of discrepancies leads one to have expectations about that person and to place demands on them based on these perceived differences. According to Goffman (1963) society then views the person as tainted and able to be discounted. Goffman (1963) identified three types of stigma; physical deformities, character flaws inferred from a known record, such as prison or addiction, and tribal stigma that refers to race, nation or religion that is transferred through lineage. Based on these assumptions of differences a person can enact a variety of discriminatory behaviors (Goffman, 1993).

In the past, attitudes about race, religion, and other socially constructed categories were measured using explicit measures that could predict explicit bias (Penner, et. al., 2010). These measures frequently involved simply interviewing people about their feelings about a particular
group. However, the enactment of the civil rights laws of the 1960’s, changed the face of explicit racism by making open acts of discrimination morally and legally wrong (Dovidio & Gaertner, 2002).

Implicit bias, on the other hand, is an unconscious process applied to socially constructed populations, including people with disabilities. Implicit bias is the result of two combined processes -- normal cognitive processes, and socio-cultural and historical influences (Anderson, 2010). As part of normal cognitive functioning, people categorize and make generalizations about people and events in order to store them in their memory. But these experiences can be modified based on socio-cultural and historic factors. Furthermore, Anderson (2010) explains that, as new information becomes available, it is added to the initial schema without necessarily taking the time to fully assess and examine the new knowledge. This can lead to short cuts, which can result in the development of stereotypes. These social categorizations divide people into two groups; those that the person belongs to, the “in” group and the “other” or outside group (Anderson, 2010). Larson (2009) identified four common themes about implicit bias; 1) it is pervasive, 2) it differs from conscious preferences and beliefs about a person, favoring beliefs about “in” groups (same group as perceiver) and negative characteristics of “out” groups (others group), 3) it predicts consequential behavior and affects the interpretation of the socialization and interactions with others, and 4) it is malleable and can be adjusted according to the perceiver’s motivation. Implicit bias is deeply rooted and can significantly affect the way that a person interacts with someone from the “other” group.

Historically, prejudices were viewed as part of in the individual’s belief system and were acceptable in society. However, in the 1990’s, there was a theoretical shift in the field of social psychology regarding the development of prejudicial thinking (Hodson, Dovidio & Gaertner,
This shift focused on basic and normal cognitive processes, describing two core influences on a person's attitudes: 1) that stereotyping occurs as people process information about themselves and others and results in negative beliefs about the “other group” (Hodson, et al., 2010); 2) that society’s social and experiential factors can have either a positive or negative impact (Hodson, et al., 2010).

While bias still exists, the way that it manifests itself is different. Stephanikova, Triplett and Simpson (2011) suggest that the negative beliefs and attitudes are repressed and emerge in more subtle forms of expression. According to Dovidio and Gaertner (2010), denial of personal prejudice can co-exist with unconscious and negative feelings and beliefs about the same group. These subtle forms of discrimination may be unintentional, and include nonverbal behavior and negative decision-making choices in complex situations (Penner, et al., 2010). Society in general is less willing to admit to, or even be aware of, its own implicit biases, (Larson, 2009). However those who are targeted are acutely sensitive to these behaviors and receive a conflicting message; the person with the bias makes an attempt to present in a outwardly positive manner but sends unconscious and automatic negative signals which is interpreted as being deceitful and disingenuous (Penner, et al., 2010). Martin Gilens focused on attitudes about race in the public welfare area (1999) and the political arena (2005). Stephanikova, Triplett and Simpson (2011) present that there is little evidence in the research literature that specifically links implicit attitudes to racially biased behavior. These authors suggest that this might be a result of the research practice itself. Studies often rely on self-report questionnaires or hypothetical scenarios rather than observed behavior (Stephanikova et al., 2011). These unconscious beliefs, attitudes and thoughts are often not recognized or expressed yet have a large impact on their work and social interactions.
Theoretical Frameworks Typifying People with Disabilities

There are various theories that can apply to the understanding of disabilities, though they generally involve two distinctly different approaches; one supports the beliefs of able-bodism and, the other that views disability as a socially constructed phenomenon. Traditionally, the medical model has been used to define disabilities. This model posits that there are two categories of organisms, normalcy and pathology; normalcy is defined as the lack of pathology and pathology is defined as something that disrupts the integrity of the organism (Mason, Pratt, Patel, Greydarus & Yahya, 2010). Using this model, a disability is viewed as an internal deficit that limits the person’s ability to participate fully in society. The concept of “ableism” suggests that society creates deeply held negative attitudes toward disability, which shape the categories of “otherness” by categorizing people based on their differences rather than the commonalities (McClean, 2011). According to McClean (2011), words used to describe the disabled include ill-health, incapacity, dependency. This vocabulary leads to societal affirmation of the notion that being able-bodied is desirable and provides privilege to those who are “normal” and silencing and demoting those who are disabled (McClean, 2011). For example, when a parent gives birth to a child with a disability, the medical community considers it a loss and that parents must mourn the loss of their dream of the “perfect” child before they can adjust to their situation (Mason, et al., 2010). Authors argue that these beliefs result in institutionalized thinking and create barriers for participation for people with a disability. For example, Mays (2006) contends that this model marginalized people with disabilities and limited their access to services based on their physical or mental impairment. Utilizing this approach places the responsibility to reduce symptoms and problems caused by the disability on health and human services professionals, which, reinforces a level of dependency on society by the person with the disability.
(Mackelprang, 2010). This point of view has created considerable mistrust within the Disability Community, because of inadequate access to services and encounter discrimination within the medical community (Mason, et al., 2010).

Similarly, the moral model implied in a deficit approach and places the root of the disability as a manifestation of God’s displeasure, a natural aberration and/or a sin (Mackelprang, 2010). In this context, a disability is viewed as an opportunity for able-bodied people to reach salvation by caring for those who are disabled. This model supports maintaining social control of people with disabilities by providing charity and ostracizing them from the mainstream (Mackelprang, 2010).

Both the medical and moral models perceive able-bodied people as normal, while those that do not fit into this group are considered “others.” The concept of “othering” is a means to discredit people using socially constructed means to devalue people (Barter-Godfrey & Taket, 2009; Goffman, 1963). This theoretical approach utilizes a deficit model and can result in inequality and oppression (Barter-Godfrey & Taket, 2009). The emergence of the social model is in sharp contrast to these traditional approaches. The social model begins with the assumption that people with a disability are not the problem and removes the blame from the individual and their biological make up (Nario-Richmond, 2010; Tregaskis, 2000). The social model views the disability as arising from external societal factors such as discrimination and devaluation; it places the responsibility on “normalized” society for excluding this group of people. Proponents of the social model believe that the traditional models rely on the importance of maintaining exclusionary policies and practices by non-disabled people (Nario-Richmond, 2010; Tregaskis, 2000). Tregaskis (2000) further states that these other models support society’s reliance on a rigid structure in order to maintain a calm workforce where conformity is rewarded. The social
model in contrast focuses on what people with disabilities can contribute to the make up of a diverse society, with particular emphasis on the rights of people with disabilities, especially the right to self-determination (Mackelprang, 2010; Siebers, 2010).

The social model was the impetus behind the reformulation of disability theory. This theory states that a disability is a socially constructed phenomenon; the disability is viewed not as a physical or mental defect but a cultural and minority identity (Siebers, 2010). This theoretical framework suggests that the concept of disability is in itself oppression aimed at excluding afflicted people from participation in society, while failing to recognize that a person with a disability makes contributions to society (Siebers, 2010). The British Social Model of disability distinguishes impairment from a disability. In this model, disability is defined as discrimination that arises from social attitudes and environmental barriers, while impairment is considered the functional limitation of a person due to a physical or mental condition (Egilson & Traustadottir, 2009). Traditionally, this model was applied to adults, though it has recently been used with children as well. The World Health Organization’s International Classification of Function is a framework for measuring health and disability. In their definition, the WHO acknowledges that a disability can be a universal experience for people rather than only a minority of the population. This definition shifts the focus from the cause of the disability to the impact that it may have on a person or society, and considers the social aspects of the disability in addition to the medical and/or biological dysfunction (World Health Organization, n.d.). Disability theory highlights the notions of societal injustice and oppression as well as lack of access to services for people with disabilities. The theory removes the stigma of impairment from the individual or group and places the onus on societal beliefs and lack of inclusion in
every day life. The need for change lies within society’s social and environmental factors rather than on the individual.

Finally, attachment theory has been used to explain society’s attitude toward people with disabilities. According to Vilchinsky, Findler and Werner (2010), the quality of the attachment and interaction patterns established in infancy produces a mental model that organizes cognitive and affective behavior to shape a person’s self-image and social relationships. To activate the attachment system, a fear or stress must be present. In this case, the disability is a new and ambiguous stimulus that is perceived as a threat and therefore activates attachment system; the thought of interacting with a person with a disability produces a attachment related schema which in turn influences the attitude about people with a disability (Vilchinsky et al., 2010). The type of attitude created is dependent upon the type of attachment pattern the able-bodied person developed in infancy. So, for example, a person with either an anxious or avoidant attachment response might create negative thoughts about the person with a disability and this discomfort can lead to a distancing from the person and situation (Vilchinsky et al., 2010). In contrast, a securely attached person is better able to manage the stress of dealing with a person with a disability, which results in more positive attitudes. Attachment theory also demonstrates how this response pattern is cyclical; the person with the disability perceives societal response to them as negative and then they in turn react by withdrawing or isolating themselves (Vilchinsky et al., 2010).

These theories and characterizations offer explanations about the perception of people with a disability (PWD); the result of these perceptions is often negative and serves to isolate and exclude PWDs. Given this devalued and invisible position that children with disabilities have been placed in by society, it leaves them as easy targets for sexually abuse (Smith & Harrell,
2013). Is it possible that these same factors that dehumanize this group are present in the investigation of allegations of child sexual abuse in general and specifically regarding the forensic interview? This possibility brings with it the potential for iatrogenic abuse by their protectors and advocates.

**Relationship of Research Question to Social Work Practice and Policy**

The purpose of this research was to determine whether the implicit bias about disabilities prevalent in the general population exists within the forensic interviewer community; and, if so, does it affect the outcome of forensic interviews of children with special needs. The results will provide important feedback for both the children being interviewed and the forensic interviewer. There are several ways that this study could benefit the field of forensic interviewing. For example, there is considerable research supporting the use of a structured protocol for interviewing children in child sexual abuse investigations. Of those studies, many have focused on the child’s characteristics that could influence the interview outcome including memory (Lamb & Fauchier, 2001), suggestibility (Ceci & Freidman, 2002; Gudjonsson & Henry, 2003), and age of child (Lamb, Sternberg, Orbach, Esplin, Stewart and Mitchell, 2003; Pipe, Lamb, Orbach & Esplin, 2004). A few have concentrated on the most effective question types (Korkman, Santtila, Westeraker & Sandhabba, 2008; Orbach, Hershkowitz, Lamb, Sternberg, Esplin & Horowitz, 2000; Sternberg, Lamb, Orbach, Esplin & Mitchell, 2001), and the role of the interviewer (Faller, 2007) in providing a safe yet objective environment for the child. One study considered the influence of interviewer confirmatory bias when interviewers receive information about the case prior to the interview (Panghorn, 2009). However, no study to date has considered whether forensic interviewers carry implicit bias about disabilities, even though children with disabilities are known to be a higher risk for victimization, and, if these
unconscious beliefs are present how might this influence the determination of credibility?

This new information could affect the way that forensic interviewers conduct their interviews and how decisions about credibility are obtained. The notion of unconscious automatic response to people with disabilities could certainly impact the outcomes of forensic interviews conducted with children with disabilities. Panghorn (2009) refers to the idea of confirmatory bias whereby the interviewer relies on previous knowledge or experience to make decisions about what to ask and how to pose the questions as well as what information to pay attention to during the forensic interview. Is it possible that forensic interviewers unconsciously make choices about the questions they ask because of a predetermined belief or attitude about the capacity or credibility of a child with a disability? To date no one has considered or applied this notion to the forensic interviewer population, though it has been studied in other fields of practice including the court system. No research regarding forensic interviewers’ belief systems and attitudes about children with disabilities in child sexual abuse cases has been found.

**Purpose of the Study**

This study is intended to lead to improved policies, practices and training for forensic interviewers. Presently, forensic interviewers are trained in one of several different structured protocols. These trainings focus on techniques that minimize the potential for suggestibility, increase the child’s ability to narrate his/her story, provide guidelines about child development to ensure age appropriate questions, and offer methods for engaging the child in an objective yet supportive manner. Forensic interviewers are also provided with information about trauma and how children may respond to questions, enabling them to recognize and understand a child’s behavior. Recently, a few of the structured interview protocols have added some basic knowledge about different types of disabilities that a child might present with. This information
is helpful but does not address the concern that society in general has strong beliefs about the capabilities of people with disabilities, nor does it focus on helping forensic interviewers systematically assess their own beliefs about, experiences with, and attitudes toward children with disabilities. This is particularly problematic when forensic interviewers are determining the credibility of a child’s disclosure. As has been described earlier in this paper, it is not acceptable in today’s society to acknowledge one’s negative attitudes, prejudices or beliefs about a vulnerable group (Anderson, 2011). Therefore, people are unlikely to respond to direct questions about children with disabilities unless there is a supportive environment in which to do so. In addition, while current forensic interviewer training emphasizes the importance of minimizing general bias related to suggestibility, interviewer question style and other types of influences, no attention has focused specifically on forensic interviewers conscious or unconscious beliefs and values about children with disabilities. If there is no opportunity to consider one’s own belief systems, it is unlikely that interviewers’ thoughts and values will come to the surface.

One factor that should be considered when discussing implicit bias about disabilities is the background of forensic interviewers. Since forensic interviewers come from such varying occupations and career paths (including social work, law enforcement, child protection and the legal system), there are varying degrees of self-awareness about one’s belief systems. In social work education, for example, students are encouraged to routinely examine their beliefs and biases about others, in order to reduce unconscious prejudice. However, many of the other professions conducting forensic interviews do not encourage self-assessment, leaving children vulnerable to unconscious bias about disabilities. The results of this study could demonstrate the existence of this type of bias and therefore support the importance of self-awareness about feelings about people with disabilities.
By increasing understanding of the role that implicit bias about disabilities might play in the forensic interview process, there is the potential for the expansion of training curriculum which could help provide children with disabilities equal to forensically sound and developmentally appropriate forensic interviews.

This research may also ensure that children with disabilities receive equal access to the same high quality forensic interview that available to typically developing children.

**Summary**

As described earlier, children with disabilities are more vulnerable to being victims of child sexual abuse than typically developing children. Therefore, it is important they receive the same objective, forensically sound interview that their counterparts experience. While children with disabilities are more likely to be abused, the structured protocols have not been adapted to meet their special needs. In fact, forensic interviewers are on their own to figure out how to adjust the structured protocol techniques and questions used during these interviews. Children with a disability should not be denied access to a developmentally appropriate, forensically sound interview due to implicit bias about their disability. Not only could the interview be less effective due to interviewer biases, but the determination of the child’s credibility could be affected as well.

In conclusion, this study is intended to provide information about possible forensic interviewer bias regarding children with disabilities that, if relevant, could be added to the already existing curricula. This would certainly enhance the likelihood that children with disabilities receive the most appropriate interview possible and that decisions about credibility are made based on the merit of the disclosure with minimal interference from the forensic interviewer’s internal beliefs about disabilities.
CHAPTER II: LITERATURE REVIEW

Historical Context

In order to adequately present the background for this research, it is necessary to analyze three separate histories: 1) forensic interviewing of child victims in child sexual abuse cases; 2) the emergence of the focus of children with a disability in these cases and; 3) societal views about people with disabilities. While it is clear that these narratives intersect, they each have different backgrounds. Also, the nature of this intersection is slowly emerging in both practice and research. This dissertation will first outline the history of forensic interviewing in child abuse cases and then the history of people with disabilities.

History of child sexual abuse and children with disabilities.

Protecting people with developmental disabilities from sexual abuse and exploitation has been an issue since at least 1899 (Tharinger, Horton & Milea, 1990). In 1968, Vincent Deference, the director of the Children’s Division of the American Humane Association, published a study entitled “Protecting the Child Victim of Sex Crimes Committed by Adults” (Sgroi 1982) in which he showed that adults were sexually abusing children. However, at that time, few agencies were addressing this problem. Society did not want to believe that adults would have sexual encounters with children (Faller, 2007). According to the Allan Roeher Institute (1989), it was not until the emergence of the feminist movement in the 1970s that the concept of incest came to the attention of the public. As the silence was broken, the awareness of the extent and nature of the problem grew (Allan Roeher Institute, 1989).

Despite this emerging awareness of sexual abuse among typically developing children, in the 1970’s, children with disabilities were not yet identified as a group at high risk. Society had a difficult time simply believing that people with developmental disabilities might be sexual
beings (Baladerian & Bissada, 2001; Allan Roeher Institute, 1989). In addition, many people were concerned that by allowing people with disabilities to be sexual beings, they would reproduce offspring that would be disabled as well, perpetuating the ongoing existence of the disability (Allan Roeher Institute, 1989). However, parents of children with disabilities and certain organizations whose mission was to work with this population did acknowledge the potential for this risk. Wooden (1976) and Rogers (1972) described girls with developmental disabilities living in juvenile homes or institutions often being incarcerated to protect them from victimization (Allan Roeher Institute, 1989). In the 1970’s, girls with disabilities were also being sterilized to prevent pregnancy from exploitation (Allan Roeher Institute, 1989). Other literature shows that parents voiced concern about the vulnerability of their children to sexual abuse (Allan Roeher Institute, 1989).

As discussed earlier, the principles of normalization and de-institutionalization had a profound impact on the field of sexual abuse and people with disabilities. Societal attitudes and beliefs about people with developmental disabilities changed; society began viewing people with disabilities as sexual beings (Chamberlain, Rauh, Passer, McGrath & Burket, 1984). An increased awareness of the rights of both children and people with disabilities led to blurrier boundaries and expectations of this population. As people with developmental disabilities gained more rights, questions regarding sexual abuse began to emerge. Identifying people with developmental disabilities as a special population is a process called “class legislation” (Tharinger, Horton & Millea, 1990). The class legislation of people with developmental disabilities offered them protection in some areas, but also restricted some of their rights. The rights of people with developmental disabilities expanded; they were permitted to lawfully engage in sexual relationships, marry, and prevent sterilization without consent. However, this
also made it more difficult to protect developmentally disabled individuals from exploitation on the basis of their limitations (Tharinger, et. al., 1990). Baladarian (1991) suggests that as society began to provide intervention for children who were sexually abused, awareness that special populations including the developmentally disabled might also be experiencing this problem.

**History of investigations of child sexual abuse.**

Prior to the 1980’s, little thought was given to the techniques used for investigating child sexual abuse or the way children were interviewed about these allegations. However, with the dramatic increase in the number of reported cases of child sexual abuse and several highly publicized child sexual abuse cases, many problems were identified related to interviewing children about past events (Fanetti, O’Donohue & Bradley, 2006; Lamb, Orbach, Hershkowitz, Esplin & Horowitz, 2007; Wakefield, 2006). These cases led to a renewed interest in the reliability and suggestibility of children as witnesses in general, and with children with disabilities specifically (Ceci & Freidman, 2000). Questions about a child’s capacity to tell a complete and accurate narrative and whether the interviewer influenced the information that a child provided during an investigative interview were raised (Lamb, Orbach, Hershkowitz, Esplin & Horowitz, 2007). According to Wakefield (2006), researchers conducted many studies to assess whether children make good witnesses and how to best elicit information from them. The results suggested that children are generally able to provide accurate, reliable and forensically sound information, but that they could be susceptible to suggestion. One of the most significant problems concerned the methods/techniques used to question children and how disclosures may have been contaminated or were inaccurate based on interview style (Fanetti, et. al., 2006; Sternberg, Lamb, Orbach, Mitchell & Esplin, 2001; Wakefield, 2006). Research suggested that young children were more suggestible than older children (Sternberg, et. al.,
2001) and that children with disabilities were highly suggestible. The number of times a child was questioned following an initial disclosure had an impact on the reliability of the information over time; the more often the child was questioned, the less reliable the information (Wakefield, 2006). Other research demonstrated that while the use of open-ended questions by an interviewer provided the most accurate and complete disclosures, few interviewers were implementing this style of questioning even after participating in trainings (Lamb, et. al., 2007).

In response to these concerns, researchers and practitioners began to formalize the process for interviewing children (a “forensic” interview). A forensic interview is designed to be administered by a specially trained interviewer, and to elicit facts and details about a child’s experience. Both open-ended and forced choice questions (Sternberg et al., 2001) can be used in a forensic interview. We will discuss which types of questions are the least suggestible later in this paper.

Specialized interview guidelines and structured protocols were developed for use during a child abuse forensic interview of a typically developing child (Faller, 2007). One of the first protocols emerged from the Evidentiary and Assessment Program, a child advocacy center in San Diego California in 1983. According to Davies, Coles, Albertella McCulloch, Allen and Kekevian (1996), the interview protocol featured a set of guidelines for interviewers rather than as a script. These guidelines delineated different phases of the interview, and identified the types of information the interviewer should obtain during each phase. These guidelines did not focus on the specific types of questions to be asked or appropriate ways to ask them. While it provided some structure to these interviews, it did not consider the ways that the interviewer’s questions could influence or direct the child’s disclosure.
In the 1990’s researchers focused on the quantity and quality of the information that was obtained during investigative interviews. In response to earlier criticism that I was using staged interviews in a laboratory environment in their studies, researchers initiated reviewing videotaped interviews from the field. The results of these studies demonstrated that interviewers were not asking the most effective types of questions for eliciting a child’s personal narrative (Orbach, Hershkowitz, Lamb, Sternberg, Esplin and Horowitz, 2000). As a result, guidelines and structured protocols were developed to obtain the most meticulous and accurate information possible from a child, and to reduce the potential for interviewer bias and misinterpretation. They were developed by professional organizations such as the American Professional Society on the Abuse of Children (APSAC) and the American Academy of Child and Adolescent Psychiatry (AACAP), as well as by groups of professionals such as Lamb and Orbach (1994), Fisher and Geiselman (1992) and Goodman and Melinker (2007). In the mid-1990’s, experts in the field joined with professional organizations to create recommendations for interviewing practices. They proposed a sequence of stages during the interview process and created an interview structure (Faller, 2007). In 1997, Sternberg developed the first partially scripted protocols. Sternberg (2007) evaluated the effectiveness of these scripts and found that open-ended questions were more effective in eliciting a child’s personal narrative.

Investigators also tried to understand which elements of the interview process were most effective in obtaining the purest and most accurate disclosures from children. Lamb and Sternberg partnered with the National Institute of Child Health and Human Development and several other researchers internationally to develop the National Child Health and Human Development (NICHD) protocols (Faller, 2007). In response, some professional organizations, such as the American Professional Society on the Abuse of Children (APSAC) and the American
Academy of Child and Adolescent Psychiatry voiced concern that the protocols were too rigid and should instead be considered guidelines (Faller, 2007).

According to Faller (2007), there are currently a dozen interview guidelines and protocols in circulation whose goal continues to be to elicit the purest and most accurate information. Several interview protocols have been developed: CornerHouse created RATAc, Rapport, Anatomy Identification, Touch Inquiry, Abuse and Closure (Walters, Holmes Bauer, & Vieth, 2003), Cognitive Interview (Fisher, Brenner & McCauley, 2002) and NICHD, National Institute of Child Health and Human Development (Orbach et al., 2000), Stepwise (Yuille, 2002) and many states developed their own, New York State implemented Forensic Interview Best Practices (FIBP). These protocols formalized the approach to interviewing children and standardized the manner in which children were asked questions. Each minimizes the number of leading questions asked and thus mitigates the suggestibility of a child. These protocols and guidelines are currently being used regularly and are considered forensic interview best practice.

**History of how people with disabilities are viewed.**

Historically, the perceptions of people with disabilities show significant variability, though most of the beliefs about this group have been negative. In 1969, Allan Roeher Institute pointed out that society’s views about people with disabilities are not static, and that documentation of discrimination goes back to Greek and Roman times (Munyi, 2012). For example, Plato suggested that deformed children should be put away, whereas early Christians believed that disease was a means of purification and not a sin or disgrace (Munyi, 2012). By the 16th century however, perceptions changed again and Martin Luther and John Calvin preached that evil spirits possessed people with disabilities; the treatment of people with disabilities was physical and/or mental pain to exorcise them of the spirits (Munyi, 2012). The societal norms
during this period reflect the need to be protected from people with disabilities based on a few acceptable myths that related to social Darwinism (Mason, Pratt, Patel, Greydanus, & Yahya, 2010; Munyi, 2012). There was a belief, for example, that people with disabilities could degrade the human race based on their genetic makeup that could be passed along to offspring. During the second half of the 18th century, humanitarian reforms generated hope of better treatment of people with disabilities. However, this movement was unsuccessful and eventually led to the return of policies designed to limit exposure of people with disabilities to the rest of society, including laws prohibiting marriage and supporting sterilization. Further action included social segregation whereby children and adults with disabilities were moved out of their homes and communities, and were placed into large institutional settings. These policies were so expensive that, in the early 20th century, a policy shift occurred – people with disabilities were no longer moved; instead they were socially controlled. This approach remained in effect until the 1950’s (Mason, et al. 2010).

Two organizations were formed around this time, whose focus was serving people with disabilities; United Cerebral Palsy (UCP) in 1949 and National Association of Retarded Children (NARC) in 1950. These organizations were started by parents advocating for service provisions for their children with disabilities. This movement raised awareness of the plight of people with disabilities and led anthropologist Margaret Mead to include in her studies people with disabilities as “normal Americans” (Redi-Cunningham, 2009). In the 1960’s parents of children with disabilities organized and joined forces with UCP and NARC to demand that basic medical, educational and social needs of children and adults with disabilities be recognized as basic human rights. There is an interesting parallel to the civil rights movement, in that both attempted to raise awareness of the rights and unmet needs of a marginalized population. A core belief was
that people with disabilities belonged with their families and in their communities in order to
gain access to health, education and social services (Mason, et al., 2010). Over time, this
movement led to an overt perception that people with disabilities in the United States should be
recognized and accepted as people with different human abilities.

A few important federal laws were passed supporting increased access to services for
people with disabilities. In 1973, the Vocational Rehabilitation Act was passed prohibiting
discrimination of employment based on disability status in federally funded programs. In 1975,
Federal law PL 94-142 was passed granting children with disabilities access to free public school
education regardless of their disability; it also mandated that this education must occur in the
least restrictive environment. In 1990, the Vocational Rehabilitation Act was revised and the
Individual with Disability Education Act (IDEA) was passed. While these laws pertained to
children, similar legislation was enacted for adults. IDEA was revised in 1990 and led to the
development of the American with Disabilities Act (ADA). The ADA prohibits discrimination in
employment or access to goods and services for adults, and entitles students to reasonable
accommodations and modifications in order to “level the playing field” within their educational
programs (Mason, et al., 2010).

There has also been legislation regarding child welfare and children with disabilities. In
1988, the Child Abuse Prevention, Adoption and Family Services Act (Pub L No 100-294)
mandated that information compiled through research studies determine the incidence of child
maltreatment among those with disabilities. This Act was amended in 2003, retitled the
“Keeping Children and Families Safe Act,” to provide a federal definition for states to use as
guidelines in developing their own laws against child abuse and neglect.
While most of this historical information discusses the plight of people with disabilities in the United States, there are similar concerns internationally. Various cultures and communities respond differently to this population (Reid-Cunningham, 2009). For example, in parts of Africa such as Nigeria, Kenya and Zimbabwe, people with disabilities are viewed as a curse to a family and are rejected or abandoned by their families and community (Munyi, 2010). On the other hand, among the Ga in the Accra region of Ghana, “feeble minded” people are viewed with awe and are respected by other in that society (Munyi, 2012). Lippman noted in 1972 that people from Denmark and Sweden maintain responsibility for these individuals and provide significant and effective rehabilitation services to this population (Munvi, 2012). Lau and Cheung (1999) studied society’s view toward people with intellectual disabilities and mental health difficulties in Hong Kong. In their randomized sample study, they found that people had more stereotypic responses to people with mental health difficulties than people with intellectual disabilities, and that both personal exposure to people with intellectual disabilities and education levels were significantly associated with lower discrimination.

Hence there is a long history both nationally and internationally of negative attitudes and beliefs about people with disabilities. Bias about PWDs continues to exist today though recent laws have reduced the overt expression of these thoughts.

**Major Studies in Sexually Abused Children with Developmental Disabilities**

In 1989, Sobsey and Varnhagen reported that most people with developmental disabilities experience some type of sexual abuse in their lifetime (Davies, 2009). Another study reports that between 90 and 99% of people with developmental disabilities will be sexually abused by the age of 18 (Finkelhor, 1979). In addition, of those victims of sexual abuse with disabilities, 79% were victimized more than once (Sobsey & Doe, 1991).
There are several questions that arise when assessing the link between sexual abuse and children with disabilities. A number of studies look at the prevalence of child sexual abuse in general without focusing on whether the child has disabilities (Finkelhor, 1986). Many studies conducted in the area of sexual abuse and children with developmental disabilities are qualitative. Methodological challenges and attitudes toward people with disabilities have limited the amount of research available (Andrews & Veronen, 1993). For example, Andrews and Veronen (1993) point out that some of the methods used to obtain research subjects involve random sampling of households from the general population and therefore may not reach individuals with disabilities. Another difficulty associated with studying the connection between disabilities and sexual abuse relates to the mission of the agency collecting the data.

There are a few studies that document the prevalence of sexual abuse of children with disabilities; different researchers used different approaches in their studies. Some studies obtain a history of sexual abuse in childhood through interviews with adults with disabilities (Hard, 1986; Ryerson, 1984). A few studies look specifically at children who were sexually abused and also had a disability (Chamberlain, 1982; Sobsey, 1990; Sullivan & Knutson, 2000). In these last studies, the variable of disability was determined through formal assessments. Chamberlain (1982) interviewed girls with IQ scores of 69 and under which placed them in the range of mental retardation and found that 33% of the females with mild mental retardation and 25% of those with moderate mental retardation were victims of sexual abuse and/or incest. Sullivan & Knutson (2000) identified children who met Nebraska State Education Law 51 as having a disability and determined that CWDs were 3.4 times more likely to be sexually abused than typically developing children. Krajewski and Flaherty (2000) compared high school students
identified as having a learning disability and/or behavior/social problem to non-disabled students and found that the children with learning disabilities were more often victims of child abuse.

The prevalence of sexual abuse among children with developmental disabilities has been studied internationally as well. Balogh, Bretherton, Whibley, Berney, Graham, Richold, Worsley and Firth (2001) looked at adolescents in a psychiatric unit in the United Kingdom and found that 49% reported sexual abuse. This study has been criticized for its small sample size. Morris (1999) reported that in a small local English community, children with disabilities comprised only 2% of the total population yet 10% of the child maltreatment cases. Kvam’s (2000) study in Norway looked at child sexual abuse among children who are handicapped. Kvam reported that the prevalence of CWDs who were sexually abused was less than what other researchers had previously found, especially in regard to children with more severe disabilities. She concluded that her results might reflect that children with disabilities do not report sexual abuse as frequently as those without disabilities. In New Zealand, Briggs (2006) interviewed students aged 11-17 with learning disabilities and found that 32% of girls in this population reported sexual abuse. When the students’ school counselors were interviewed about these students, they reported that 44% of the students were abused. Briggs noted that boys had a similar rate of sexual abuse. Akbas, Turia and Karabekiroglu, Pazvantoglu, Keskin and Boke (2009) studied children who were victims of sexual abuse and had mental retardation in Turkey. Their findings noted that 80% of children with mental retardation were subjected to multiple forms of sexual abuse compared to 70% in the control group. In addition, children with mental retardation had a significantly higher rate of vaginal penetration (50%) compared to the control group (15%). However, the authors noted that more than 50% of the crimes committed against
people with disabilities are never reported to authorities, and, when they are reported, few are prosecuted criminally.

**Forensic interviews and disclosure of child sexual abuse in general.**

While many children do report child sexual abuse, a significant number of many children fail to disclose or report their abuse (London, Bruck, Ceci & Shuman, 2005). Various researchers have looked at the disclosure rate among children, and found that children often do not disclose immediately. According to London, Bruck, Ceci and Shuman (2005) while 37-42% of children report the abuse within 48 hours, it took between six months to a year for others to report. Elliott and Briere (1994) reported that 75% of children do not disclose sexual abuse within the first year. On the other hand, Bruck and Ceci (2004) reviewed many of the studies on disclosure of sexual abuse and reported that failure to disclose is a myth, and that several of the studies with the highest support for this idea had weak methodologies.

As stated earlier in this paper disclosure is a process and not an event (Faller, 2007). According to London and Bruck (2007), one predictor of a child disclosing sexual abuse during an interview is whether they have told someone about the abuse prior to the interview. Some other factors that influence disclosure include: understanding and having a memory of the abuse; the child’s emotional reaction to the abuser; concern about consequences of a disclosure; family support including being believed; and the investigator’s response to the disclosure (Lippert, Cross, Jones & Walsh, 2009). However, before a child can make a disclosure, he/she must recognize the sexual acts as abusive (Collings, Griffiths & Kumalo, 2005); this can be particularly challenging because the abuser often cloaks his/her actions as a game or secret (Faller, 2007).

The forensic interviewer must contend with all these factors when uncovering the
potential for abuse. Accordingly, interviews must be conducted in an open, neutral, analytic manner with minimal stress to the child. The goals are to reduce the potential influences to a child’s memory or reporting of information, to conduct interviews that are developmentally and culturally sensitive, to use techniques that elicit reliable information, and to reduce the potential for coercive or leading questioning (Persona, Bottoms & Sorenson 2006). One anticipated outcome of improved interviews is the reduction of the number of interviews a child experiences; this leads to fewer inconsistencies in the overall narrative.

**Forensic interviews and disclosure of child sexual abuse in children with disabilities.**

Paradoxically, while children with disabilities are at a higher risk for sexual abuse, they are also the less likely to report the abuse or to be believed. As Sullivan and Knutson (2000) explain, a child with a disability is not likely to disclose abuse unless they are directly asked about it.

While disclosing sexual abuse is difficult for all children, a developmental disability can significantly inhibit an individual’s ability to communicate with others (Anderson & Heath, 2006). Children with disabilities fail to disclose more than typically developing children (Hershkowitz, Lamb & Horowitz, 2007; Kvam, 2000). Children with disabilities often have cognitive and communication deficits that increase their potential for abuse because they cannot express themselves and may not have the necessary language/vocabulary to report abuse (Horton & Kochurka, 1995). Of those children with disabilities who do disclose sexual abuse, between 67-70% waited for over one month before reporting the last incident (Hershkowitz, Lamb & Horowitz, 2007). In addition, children with severe disabilities fail to understand the nature of the abuse more often, while children with mild disabilities showed limited understanding of the circumstances surrounding the sexual abuse (Hershkowitz et al., 2007). At one time, there was a
belief that children with disabilities were more likely to act out sexually if they were being
sexually abused. However, Mansell, Sobsey and Moskal (1998) found that children with
disabilities did not reveal abuse through behavioral manifestations any more frequently than
children without disabilities. Moreover, these behavioral manifestations are often attributed to
the child’s disability rather than to the abuse, especially in comparison with typically developing
children. There are other reasons that children may not disclose, including fear of not being
understood by their caregiver and/or parent (Kvam, 2000) and caregivers failing to report known
abuse of a CWD (Crosse 1993). For example, Crosse (1993) reported in 43% of child protective
services cases, a close relative was aware of the abusive situation and did not report it when it
involved a child with a disability compared to 11% of children when there was no disability.
This raises important questions about, one how parents/caregivers view the systems designed to
protect their child(ren) and second do they feel that the child will not be believed? Parents or
caregivers of CWDs often lack the confidence in the judicial system and the ability of the
prosecution to convict the abuser; consequently, they choose not to subject their children to this
process (Kvam, 2000). While disclosure is challenging for any child, clearly children with
disabilities encounter many different obstacles around disclosing abuse than typically developing
children.

Factors That Can Affect the Outcome of a Forensic Interview with a Child with a
Disability

When conducting a forensic interview with a child with a disability, many factors may
affect the outcome. Some are specifically related to the child such as memory, suggestibility and
response patterns. As described earlier, traditionally, children with disabilities were thought to
make ineffective witnesses due to poor memory, high levels of suggestibility, and confusion
when providing testimony (Milne & Bull, 2001; Perlman, Ericson, Esses & Isaacs, 1994).

However, recent studies (Nathanson & Crank, 2004; Saywitz & Synder, 1996) have shown that when a CWD is interviewed using specific techniques, he/she can provide relevant and detailed information about the nature of his/her victimization. Others factors that can influence the outcome of a forensic interview relate to the interviewer and include issues of question type, the role of the interviewer, the interviewer’s knowledge about disabilities, and interviewer bias. Memory, suggestibility and response pattern will be considered separately and will review the literature for both children with and without a disability. This next section will review child-related factors that could influence the disclosure process during the interview.

**Child Factors That Can Influence a Forensic Interview.**

**Memory.**

A child’s memory is a critical variable during a forensic interview. Information about younger children is relevant to the study of children with disabilities since their mental age may be more similar to chronologically younger children. Young children are able to remember large amounts of accurate information about incidents that they have personally experienced (Goodman, 1984) and these youngsters can provide sequentially organized and coherent narratives (Pipe, Lamb, Orbach & Esplin, 2004). The type of memory the interviewer elicits affects the accuracy of information the child provides (Lamb & Fauchier, 2001; Thorensen, Lonnum, Melinder, & Magnussen 2009). The use of open-ended questions tap children’s recall memory whereas option-posing, directive questions and yes/no questions draw from recognition memory (Thorenson, Lonnum, Melinder & Magnussen, 2009). Children’s’ use of recall memory provides longer, more accurate and more informative reports than the use of recognition memory (identification).
According to Lamb, Sternberg, Orbach, Esplin, Stewart and Mitchell (2003), however, young children are able to remember less information and provide shorter accounts of their experiences when compared with older children. In addition, these children are more likely to respond incorrectly to suggestive and/or forced choice questions about their experiences. Other authors suggest using “cued invitations” to help younger children provide more detail in their disclosures (Saywitz, Goodman & Lyon, 2002). Cued invitations are described as statements made by the interviewer that reflect back on information that the child has already provided (Saywitz Goodman & Lyon, 2002). According to these authors (2002), retrieval aids such as unbiased body identification pictures increase a child’s ability to recall information spontaneously, reducing the number of leading questions asked during an interview. These authors suggest that forensic interviewers proceed cautiously as there is still the potential for false reporting to occur. According to Faller (2007), factors such as stress, trauma and script memory can influence a child’s memory. She defines script memory as the blurring of specific memories into one script. For example, if a child has experienced ongoing abuse, his/her ability to retain precise details of a specific occurrence may be reduced.

**Memory in children with disabilities.**

There is a limited amount of research that looks specifically at a child’s memory about actual child abuse or traumatic events. Schaaf, Alexander Goodman Ghetti Edelstein and Castelli (2002) report that children’s memory for traumatic events as opposed to neutral events is different and that the trauma can impact how the memories are stored and retrieved. Bower (1992) directs the attention to particular details of an event and then maintains the cognitive focus on these specifics. Van der Kolk (1996) on the other hand suggests that stress overwhelms the child’s coping strategies, which results in inefficient memory processing. This topic is
difficult to research in part because of the significant ethical considerations involved. Instead, researchers must create mock scenarios and then ask children questions about their recollection of that situation. Bruck, London, Landa and Goodman (2007) conducted one of the larger studies about how children on the Autism Spectrum’s recall current and past events; they looked at the skills that children with Autism Spectrum Disorder (ASD) had for reporting child victimization compared to typically developing children (TDC). Specifically, they looked at Autobiographical memory (AMB), which was defined as the ability to recall personally experienced events. In terms of current events, TDC’s accuracy in reporting events was 80% while ASD was 63%, with older ASD children being more accurate than younger ASD children. For past events, TDC reported 66% accuracy and ASD reported 50% accuracy. One important note is that while children with ASD showed deficits in remembering personally experienced events and produced fewer details of recent and past life events; their errors were related to omission or forgetting of data as opposed to providing false information. The authors concluded that the poorer Autobiographical Memory of children with ASD was due to deficits in their recall of the events and not greater suggestibility.

There is some additional research about the ability of children with mental retardation to disclose information about staged events and videos (Agnew & Powell 2004), to recall health examinations, and to resist leading questions about this examination (Michel, 2000 in Saywitz 2007). Other research shows that children with learning disabilities have poorer narration skills than children without learning disabilities (Lerner, 1997; Scott & Windsor, 2000,).

**Suggestibility.**

Ceci and Friedman, (2000) define suggestibility as relating to pressure to conform to what the child thinks the interviewer wants to hear. There are two ways that a child can be
susceptible to suggestion: auto-suggestion, and social factors. With auto-suggestion, a child gives a response to the interviewer that he/she thinks reflects what is supposed to have happened. The social factor, also known as mental obedience, is the child’s desire to conform to the expectations and pressure of the interviewer (Ceci & Freidman, 2000).

Ceci and Friedman (2000) demonstrate that the interviewer’s language can influence the child’s desire to conform. There are two types of suggestive response: yield and shift. Yield is described as the witness giving into the leading questions and providing the answer that he/she thinks is expected; shift is when a child changes an answer as a way to cope with pressure from the interviewer, negative feedback or repeated questions. It has been documented in the literature that children are generally considered to be more suggestible than adults (Ceci & Freidman, 2002; Gudjonsson & Henry, 2003), yet is this truly accurate? To measure this suggestibility, Gudjonsson and Henry (2003) developed an instrument called the Gudjonnson Suggestibility Scale (GSS) to measure yield and shift suggestibility in children and adults. The specifics of this measure will be reviewed further when considering children with disabilities.

**Suggestibility with children with disabilities.**

Milne and Bull (1996) were among the first researchers to look at the ability of children with disabilities to recall information during a forensic interview. The authors considered the cognitive interview as a systematized method to increase the quality and quantity of the information obtained from witnesses without a corresponding increase in inaccuracy. The results of their study showed that children with a diagnosed learning disability in special education were able to remember more details about a video that they had previously watched as long as a structured interview format was used. However, these children reported more incorrect details when suggestive questions were used. This suggests that children with learning disabilities may
be more prone to adjusting their answers based on their perception of what the interviewer wants to hear. This study attempted to describe the target population (children with disabilities) as opposed to comparing it to a control group (children without a disability).

According to Saywitz, Esplin and Romanoff (2007), children with cognitive impairments are more suggestible than similarly aged children without cognitive limitations with certain types of questions such as “yes/no” and misleading questions. However they also point out that these differences disappear when children with a disability are compared to children with similar mental ages. Recognizing the need to compare children with disabilities to children of similar mental age as opposed to chronological age is a significant factor in this research and should be considered when choosing sampling frames.

Agnew and Powell (2004) compared children with intellectual disabilities to children without disabilities in interviews that focused on both memory and suggestibility. The children in this study were matched for mental age as opposed to chronological age. Overall, their findings supported the idea that children with disabilities were able to provide accurate information about an observed event. However, they also suggest that children with disabilities provide less clear and complete narratives than typically developing children when interviewed using the open-ended, free recall narrative approach. These conclusions provide a more complete understanding of the special needs of children with disabilities during an interview.

It is not solely the child’s cognitive functioning that impacts his/her story and potential suggestibility; there are also social, emotional and motivational issues that play a significant role in the accuracy of a child’s account. To uncover these influences, Agnew and Powell (2004) interviewed children with a disability after a forensic interview; they offer some anecdotal data about children with disabilities. Based on these interviews, Agnes and Powell posit that children
with disabilities were more anxious, self-conscious and concerned with how the interview would interrupt their daily routine at school. The children also reported deferring to the interviewer as the expert, rather than relying on their own knowledge. In order to hide their own limitations and appear more competent to the interviewer, CWDs would follow the direction of the interviewer as they attempted to keep up with the conversation. A child with a disability also shows a strong desire to please the adult interviewer and cooperate and comply with their requests; this often results in the child feeling more compelled to provide some information even if it was inaccurate. Agnew and Powell (2004) also indicate that a child’s prior experience, perception of his/her own ability, previous experience with being asked questions, anticipating the type of expected responses and the perceived role of the interviewer all affect children’s responses during an interview. The authors acknowledge that an interview demands increased attention and is dependent on language competence for all children; however children with a disability have a particular desire to complete the process as soon as possible since it taps areas in which they may feel less confident.

To measure suggestibility a few studies use the Gudjonsson Suggestibility Scale (GSS). Gudjonsson and Henry (2003) examined the relationship between learning disabilities and suggestibility using the GSS, and found that children with learning disabilities have much higher recall than adults with learning disabilities. They also found that children with learning disabilities are more suggestible than children without disabilities. The most suggestible group is children with moderate learning disabilities. When the authors compared memory and suggestibility using this scale, they found that people with learning disabilities are not a homogenous group, and that some children with learning disabilities are more suggestible than others. One concern about this measure is that the GSS taps semantic memory rather than
episodic or autobiographical memory (memory used to disclose an event). Another study using the GSS by Milne, Clare and Bull (2002) found that people with intellectual disabilities are more likely to be misled by the interviewer and therefore more suggestible than people without disabilities, although both groups changed their answers in response to negative feedback from the interviewer. Children with a disability might be more suggestible than typically developing children, however the forensic interviewers can use strategies to minimize this difficulty (Milne, Clare and Bull, 2002).

Response patterns of children with disabilities.

The literature suggests that there are ways to interview children with disabilities that can enhance the outcome. Children with disabilities are capable of communicating their experiences if properly interviewed (Anderson & Heath, 2006). Lancaster LEA Child Protection Services provided an information packet to its child protection workers about working with children with disabilities, including a list of recommended techniques for interviewing children with disabilities (Lancaster LEA Child Protective Services, 2004). Among the recommendations is the need for simple and clear statements, and clarification of the interviewer’s understanding of what child says using child’s own words. Interviewers were also advised to adjust the pace of the interview to the child’s, and document what was said versus what was gestured.

Proper preparation before an interview is crucial (Anderson & Heath, 2006; Baladerian, 2006). Interviewers should gather information about the nature of the specific disability including cognitive and physical impairments, communication style, need for interpreter or special materials such as Braille or augmented communication boards, possible medication, appropriate contacts prior to the interview, and attention span (Anderson & Heath, 2006; Baladarian, 2006). Additional techniques to maximize the quality of the interview are similar to
those an interviewer would use with younger children. The importance of developing a rapport
with the child, using simple and clear language and open-ended questions as much as possible
are highlighted in Baladarian’s presentation at a national conference. One specific concern
Baladarian (2006) emphasizes is the person’s desire to please or “give the right answer”. To
avoid this, she recommends that the interviewer not provide differential responses to the
answers, such as choice questions. Another important part of interviewing children with
disabilities is to begin with open-ended questions but avoid using “if..then” or “why” questions.

Preparing a child with a disability for an interview might reduce some of the issues of
memory and suggestibility without leading the child. Saywitz, Esplin and Romanoff (2007)
compared two research-based interview procedures used with children with learning disabilities;
the Cognitive Interview, and Narrative Elaboration Training (NET). The NET is a structured
protocol that provides children with prompts and “cues” to assist their recollection of the events.
The Cognitive Interview utilizes a set of guidelines for conducting an interview and is described
earlier in this paper. With both procedures, children were able to describe more information
about previously staged events (Saywitz, Esplin & Romanoff, 2007). As seen earlier in this
paper, neither of procedures tested used true forensic interviews about real allegations of sexual
abuse, which are more emotionally charged than the staged scenarios. On the other hand, this
study offers a strategy for interviewing CWDs that does not appear to increase suggestibility.

Nathanson and Crank (2004) also studied the effectiveness of the NET. Previous studies
of children with disabilities showed that using this method of preparation increased the accuracy
and completeness of the subject’s recall. Nathanson and Crank evaluated NET with children
with learning disabilities. In this study, 39 children with learning disabilities were randomly
assigned to either NET or the control group that used general positive support techniques. The
results demonstrated that among children with a disability, those trained with NET provided significantly more correct information (49%) than those without the training. Moreover, there were no changes in the number of errors when additional information was added.

**Credibility.**

Credibility is a significant factor when making forensic decisions in child sexual abuse cases. Child credibility refers to the believability of the child’s statements (Bruck, Ceci & Hembrooke, 2001). What makes one person more credible than another? What roles does a disability play in determining a child’s credibility? In child sexual abuse cases, credibility refers to the believability of the child and involves assessing a child’s competence and trustworthiness (Davies & Rogers, 2009). According to Bottoms and Goodman (1994), honesty and sincerity were found to be more significant than a child’s cognitive ability. Younger children were perceived as being more honest and trustworthy; they are also sexually naïve, and thus less likely to fabricate a sexual encounter (Bottoms & Goodman 1994; Davies & Rogers, 2009; Rogers & Davies, 2007; Stein, 2006).

People’s beliefs about children with disabilities could skew their views of a child’s credibility. Society often regards a child with a disability as lacking the cognitive capacity to provide a clear and accurate account of an event, which undermines the child’s credibility (Milne and Bull, 2001; Perlman, Ericson, Esses & Isaacs, 1994). On the other hand, societal attitudes suggest that children with disabilities are naïve about sex, and are therefore incapable of fabricating a story about a sexual event. The result is that children with disabilities are generally considered trustworthy (Bottoms & Goodman, 1994; Davies & Rogers, 2009).

The child’s credibility is crucial in child abuse cases because before prosecutors consider legal action, they must answer two important questions: a) does the child’s disclosure have merit;
and b) is the child’s disclosure sufficiently reliable to bring the case before the court system? Since there is rarely any physical evidence, one must rely on a child’s statements (Bottoms, Nysee-Carris, Harris & Tyda, 2003; London, Bruck, Ceci & Shuman, 2007; Stein, 2006). Peled, Iarocci and Connolly (2004) contend that children with disabilities may have less access to legal support due to unwarranted bias regarding their reliability as a witness. They argue that jurors need to perceive a child’s testimony as highly accurate with low suggestibility in order to contradict negative stereotypes about disabilities (Peled, Iarocci, & Connolly, 2004).

Additionally, when experts from various backgrounds including mental health professionals, prosecutors, judges, and social workers were shown interviews of children about a visit from Sam Stone (Leichtman & Ceci, 1995), and asked to judge the child’s credibility, the professionals were very inaccurate (Bruck, Ceci & Hembrooke, 2001).

Prior to the child advocacy and structured interview protocol movements, judges and jurors often decided children’s believability exclusively (Cederborg, 1999; Perry & Wrightsman, 1999). These determinations were frequently based on attributes such as personal characteristics or the child’s narrative style (Cederborg, 1999), without regard to the actual content of the statements. In the legal process children’s weaknesses are often emphasized increasing the potential for the child to feel embarrassed about the disclosure and children to be perceived as less credible (Ghetti, Alexander & Goodman, 2005; Goffman, 1963). Furthermore, a child’s response often depended on the specific question asked and by whom (prosecutor or defense attorney), or the method of question asked (Perry & Wrightman, 1991).

Determination of the child’s credibility was rarely made on the merit of disclosure alone. Other factors include the age of the witness (Castelli, Goodman, Ghetti, 2005; Connolly, Price, Lavoie, & Gordon, 2007), their ability to report memories consistently
(Bergman, Narby & Cutler, 1995; Connolly, et al., 2007; Leippe, Romanczyk, & Manion, 1991), and the ability to resist leading questions (Castelli, et al., 2005; Karla & Heath, 1997; Schimdt & Brigham, 1996). The use of a two-factor approach focusing on cognitive competence (accuracy of memory and ability to answer lawyer's questions) and intended honesty (truthfulness, likelihood of fabrication) has also been an important focus (Connolly, et al., 2007; Ross, Jurden, Lindsay & Keeney, 2003). Other research examines the connection between believability, confidence (Cutler, 1988) and likeability (Leippe, 1992).

Other dynamics that might influence credibility are outside the control of the child; for example, whether the abuse is a single event or a repeated event (Connolly, et al., 2007). The role of unconscious or implicit bias of the forensic interviewer can also play a role (Stein, 2006). The forensic interviewer may opt to ask (or not ask) particular questions based on preconceived notions about what may have occurred (Stein, 2006); this impacts how others view the credibility of the child’s account. Azar and Goff (2007) suggest that subtle forms of bias can have a powerful influence on people and significantly affect their choices, professional decision-making, and the application of social information in the child welfare system. The lack of awareness of their own biases leads people to make errors in judgment (Azar & Goff, 2007).

The child’s credibility has a significant impact on the outcome of child abuse investigations. For example, in the 1994 case of State v Michaels, a New Jersey Appellate Court overturned the conviction of Ms. Michaels because the interview of the victim was considered improper, and because the allegations in the case were based on unreliable memories and poor investigative techniques (Stein, 2006). Tainted hearings were utilized
by judges to attempt to determine whether the questioning of the child victim prior to trial was contaminated and therefore refuse to admit the testimony into the court proceedings (Schaaf, Alexander, Goodman, Ghetti, Edelstin, & Castelli, 2002).

Is credibility measurable? There has been a significant focus on the question of what makes a child more believable in the eyes of judges and jurors (Cederborg, 1999; Lamb, 1998; Myers, Redlch, Goodman; Prizmich & Imwinkelried, 1999). One comprehensive system for evaluating credibility in sex abuse case is known as the Statement Validity Assessment (SVA). The SVA has three components: structured interview of the victim; the assessment of the transcript of the victim’s account using the Criteria Based Content Analysis (CBCA); and a validity checklist that analyzes information from the first two parts (Pezdek, Morrow, Blandon-Gitlin, Goodman, Quas, Swaywitz, Pipe, Bidrose, Rogers & Brodie, 2004). The CBCA has received the most attention in the credibility literature, with mixed results (Lamb, 1997; Pezdek, Finger, & Hodge, 1997; Pezdek & Hodge, 1997). According to Cederborg and Lamb (2006), the Swedish Supreme Court has relied upon the Statement Reality Analysis (SRA) in addition to the CBCA to determine the credibility of a child. One criticism of both of measures is that it assumes that the quality and content of reports about events that were actually experienced will differ from events that did not occur (Cedarborg & Lamb, 2006; Lamb, 1998). While the CBCA may able to distinguish between plausible and implausible, the precision is insufficient to be used in a forensic setting (Cedarborg & Lamb, 2009). Moreover, none of these measures have been tested on children with learning difficulties or other handicapping conditions (Cedarborg & Lamb, 2009). A few studies have combined questions from other instruments to assess the credibility of children (Bottoms, Nysse-Carris, Harris & Tyda, 2003; Podell, Kastner, Kastner, 1996). This topic will be covered in greater detail later in the paper.
Interviewer factors that could influence the forensic interview.

I have reviewed child-related issues that might impact a forensic interview in this section current research on forensic interviewer factors will be reviewed. To start there are a few simple procedures that make the interview more successful. Following this brief discussion specific interviewer factors will be presented in more depth. According to Poole and Lamb (1998), there are several other key concepts for conducting an effective forensic interview. The interviewer should schedule the interview as close to the time of discovery of the abuse as possible, this increases the potential that child’s memory of the event is fresh and that details do not become confused (Lamb & Fauchier, 2001). At the beginning of the interview, the interviewer should describe the purpose of the interview, the expectations of the child during this process, and the ground rules for the interview. This can minimize confusion on the part of the child. In addition, the interviewer’s choice of questions is important, because different types of questions can significantly impact both the quantity and accuracy of the child’s responses (Lamb & Fauchier, 2001; Lamb, Orbach, Hershkowitz, Esplin & Horowitz, 2007; Thorenson, Lonnum, Melinder & Magnussen, 2009). While not discussed in the literature or in practice, interviewers should also assess whether they have any conscious or unconscious bias that could impact the interview.

Role of the interviewer.

Can the verbal and nonverbal interactions of the forensic interviewer influence the child’s responses? Is it best practice for an interviewer to provide no support for or feedback to the child? Can an interviewer ever be completely unbiased, especially when it involves a child with a disability? These questions will be reviewed in this section.
The role of the forensic interviewer is to provide a neutral and unbiased conversation with a child, does providing social support influence the interview? In order to help the child engage in the interview process, the interviewer needs to establish a rapport with the child. According to Bottoms, Quas, and Davis (2007), social support includes both verbal and nonverbal interactions between people. Carter, Bottoms and Levine (1996) studied the use of social support on the outcome of the forensic interview. They assessed the impact of the interviewer’s verbal (rapport building) and nonverbal (smiling often, warm and friendly voice, and relaxed body position) interactions on the suggestibility of the child. The results indicate that these types of social support did not cause children to respond to misleading information posed by an interviewer. In a similar study, Davis and Bottoms (2002) considered the effect of social support by the interviewer on anxiety and self-efficacy. An underlying premise of this study was that children are anxious and feeling powerless when coming to a forensic interview. Is assigned the children to either supportive or non-supportive interviews and then re-interviewed them. The use of social supports as described in the previous study was shown to reduce anxiety, which led to better memory of the events and resistance to false suggestions made by the interviewer; children receiving the supportive interview remembered significantly more correct information and had fewer errors in misleading and suggestive questions. Hershkowitz and her colleagues (2007) conducted a third study, in Israel, which focused on using positive and negative interview styles during the forensic interview. These results show that the children who were interviewed using socially supportive behavior made more disclosures than the children interviewed using a neutral approach. These three studies are significant because they contradict the idea that interviewers achieve the best outcomes only when they are completely neutral.
Imhoff and Baker-Ward (1999) on the other hand showed that a supportive interviewing style has no effect on children’s responses to specific and misleading questions. These results may reflect the mild type of neutral behavior used in this study compared to the other three studies. In conclusion, an interviewer who remains neutral might in fact negatively affect the goals of the forensic interview.

*Types of questions used in forensic interview.*

Because it is important that the results of a forensic interview stand up to empirical scrutiny, much of the literature focuses on effective protocols to gather accurate and uncontaminated details about the events. Most studies agree that open-ended questions provide more thorough details (Korkman, Santtila, Westeraker and Sandhabba, 2008; Orbach, et. al., 2000; Sternberg, et. al., 2001). One of the criticisms of these early studies concerned methodology; the interviews in the studies were conducted in situations such as playing in a playroom and not on actual field forensic interviews about abuse allegations. This is significant since as discussed above children are influenced by increased anxiety, stress and other emotional feelings.

The most effective methods to analyze how forensic interviewers are asking questions is reviewing actual videotapes of interviews. This is particularly challenging in the United States because of the rules of evidence that apply to these digital recordings; accordingly, much of this research was done in other countries, including Finland (Korkman, Santtila, Westeracker & Sandhabba, 2008), Israel (Lamb, Orbach, Herskowitz, Horowitz & Abbott, 2007), and Norway (Thorensen, Lonnum, Melinder, & Magnussen, 2009). In the United States, Lamb and Fauchier (2001) were able to analyze digitally recorded forensic interviewers because they had access to their own videotapes and forensic interviewers. Overall, the results were similar to those
obtained in laboratory studies. Lamb and Fauchier’s (2001) developed a rubric for analyzing utterance types used during forensic interviews. When assessing questions types used many other researchers have applied this rubric. Lamb and Fauchier (2001) demonstrated that interviewers using open-ended utterances generated fewer details that were later contradicted by the child, whereas suggestive utterances elicited more initial details that were later contradicted. One limitation of this study was the very small sample size; researchers reviewed 24 interviews of seven children. Korkman and colleagues (2008) conducted a similar study in Finland using 43 subjects. The results of this study show that when interviewers used fewer open-ended questions, opting instead for option-posing and directive questions, the child’s responses tended to be shorter and less detailed. While these studies utilized real interviews to gather information (as opposed to manipulated situations in the laboratory), I did not have access to the veracity of the child’s statement. In response to this issue, Lamb, Orbach, Hershkowitz, Horowitz and Abbott (2007) interviewed both the victim and the suspect. They interviewed 43 victims and 52 alleged suspects using the structured protocol NICHD for victims and an adjusted NICHD protocol for suspects, using the same coding system of interviewer utterances described above. The results showed that overall there was a low percentage of details provided by the victim that the suspect also identified (33%). However, of those commonly shared details, 70.5% of the child’s details were also confirmed by the suspect when using open-ended questions. These studies continue to show that open-ended questions generate the most reliable and accurate information.

While the literature provides support for the use of open-ended questions, unfortunately, forensic interviewers do not consistently use them and instead rely on option-posing and directive questions (Lamb & Fauchier, 2001). In the study conducted by Thorensen, Lonnum,
Melinder and Magnussen (2009), researchers analyzed a total of 195 interviews conducted by forensic interviewers from 1990-2002. They compared the use of different question types over three time periods. They concluded that while the interviewers rely on closed questions, there were changes in the number of open-ended questions used in the more recent interviews. One limitation to this study is that Is were not able to explain why the change occurred over time. Even though the use of open-ended questions consistently yields better outcomes, forensic interviewers continue to struggle with using them regularly and instead revert to questions that provide less accurate, less detailed information by the child. Regardless, the behavior of the interviewer clearly affects the child’s responses.

**Interviewer bias.**

Confirmatory bias exists when interviewers are influenced by information that they receive prior to conducting a forensic interview (Bruck & Ceci, 1999; Panghorn, 2009). This can occur when an interviewer gathers information that specifically focuses on what they think occurred and avoids asking about other information that might negate existent evidence or information provided by other investigators (Bruck & Ceci, 1999). It can also happen when the interviewer uses information from a previous experience and makes assumptions that this interview will be similar to another one (Bruck, Ceci, & Hembrooke, 2001). Either of these situations could result in the interviewer attempting to simply confirm what he/she believes rather than exhausting all possibilities (Bruck, et al., 2001). This behavior shifts the focus of the interview from eliciting the child’s narrative to only getting what is needed to prove the case. Obviously, the outcome of the interview could be significantly influenced by the interviewer’s behavior. In addition, interviewers can communicate their bias through subtle verbal and
nonverbal cues that can potentially having an impact on the direction of the investigation (Bruck & Ceci, 1999).

Another potential bias originates with the lack of knowledge about children with disabilities among people involved in the investigation of child sexual abuse, including forensic interviewers. Mansell, Sobsey and Moskal (1998) report that interviewers could manifest a professional bias toward children with disability by attributing behavior to the child’s disability that would be viewed as potential indicators of sexual abuse in a typically developing child. Forensic interviewers may also possess inaccurate information about children with a disability. For example, Faller (2007) and Hewitt (2007) reported that some interviewers believe that children with a disability are not traumatized by sexual abuse because they do not have the same mental capacity as children without a disability. Cederborg and Lamb (2006) found that children with a disability in Sweden often did not get a comprehensive evaluation for sexual abuse because abuse was not considered in the differential diagnosis. They further report that when the assessments were conducted, the team did not have anyone who had significant knowledge about developmental disabilities in children. Milne and Bull (2006) acknowledge that few forensic interviewers have the necessary knowledge to interview children with a disability. Children with a disability are exposed to bias about their potential victimization early in the process based on bias and lack of knowledge by professionals in several fields. Given that forensic interview professionals possess limited and inaccurate knowledge about children with disabilities, and that lack of knowledge and exposure places people at higher risk for having bias, forensic interviewers are likely to have implicit bias toward people with disabilities.
General Biases about People with Disabilities

Biases about people with disabilities can be seen in all aspects of life, including in school, at the work place, and in the courts. This section will review the research regarding societal bias about people with disabilities.

Larson (2009) states that negative attitudes and beliefs about people with disabilities is the strongest socially constructed bias of all. “The so-called essential qualities of persons with disabilities are recognized as the reason why they should be treated differently” (Murphy, 2005, p. 154). Negative attitudes toward people with disabilities can appear in two forms -- social rejection and/or maintaining greater social distance from people with disabilities (White, Jackson & Gordon, 2006). These negative attitudes can cause children with intellectual disabilities to feel devalued and dehumanized, and can lead to marginalization (Gaertner & Dovidio, 2000). Even more insidious, implicit negative bias can lead to the denial of services to a person with a disability, including equal and appropriate education, employment and legal representation.

According to Levin (2011), negative perceptions about disabilities begin early; children between the ages of three and six are able to recognize and negatively characterize individuals with physical disabilities. As previously mentioned Nabors (1997) showed able-bodied preschoolers pictures of people with and without disabilities and asked the children with whom they would prefer to play; the preschool children showed an overwhelming preference toward the able-bodied playmates. According to this study, these biases can transform into prejudice and hate if not identified and redirected (Levin, 2011). McCaughey and Stroehmer (2005) found that college students in an introductory psychology class had simplistic, basically negative attitudes about people with disabilities, that they focused primarily on differences rather than commonalities, and that they did not use person-centered language when describing this group.
In a study conducted by Copeland, Chan, Bezyak and Fraser (2010) on attitudes toward people with disabilities in the workplace, it was found that, while many employers supported the principle that people with disabilities should be employed, they were less likely to recommend hiring or promoting a person with a disability. Their results also demonstrated that the biggest problem for employment of people with disabilities is employer and non-disabled employee attitudes.

White, Jackson, & Gordon (2006) looked at explicit and implicit bias toward athletes with disabilities among able-bodied college student athletes. They found that implicit attitudes were consistently negative and explicit attitudes were mixed. This supports the notion that people repress negative attitudes toward people with disabilities rather than express them.

Negative beliefs and prejudices toward people with disabilities have been studied nationally and internationally. Lau and Cheung (1999) conducted a study in Hong Kong using random sampling from a telephone book. They found that people discriminated against people with both intellectual disabilities and mental illness, and that the participants were most concerned about having people with intellectual disabilities live in their neighborhoods. Yet, if people had interacted with a person with a disability with the past six months, they reported less discriminatory feelings about people with intellectual disabilities. In Sweden, Cederborg and Lamb (2006) examined the legal system’s response to people with disabilities. Their qualitative study showed that judges deemed children with disabilities to be less credible than those without disabilities; still, they expected children with disabilities to provide the same clear characteristics in their disclosures as children without learning difficulties. Cederborg and Lamb (2006) also found that these judges were relying on objective measures, such as Statement Reality Analysis and the Criterion-based Content Analysis (CBCA), to determine the credibility of children’s
statements, even though these measures have not been tested on children in general or on children with learning problems. Lamb stated that these measures were too imprecise to be used in a forensic setting (Cederborg & Lamb, 2006). In another study looking at biases in the legal system in the United States, 39 prosecutors and defense attorneys were surveyed concerning their beliefs about children with mental retardation, and their credibility as eyewitnesses (Nathanson & Platt, 2005). The results show that an overwhelming majority of these attorneys believed that children with mental retardation were significantly less reliable as eyewitnesses than children without mental retardation. Specifically, 92% of the attorneys assumed that children with mental retardation could recall less or far less than children without mental retardation. 89% perceived children with mental retardation to be more or much more suggestible than children without mental retardation. 79% felt that child with mental retardation were less or much less sincere in describing their experiences and 68% felt that children with mental retardation have somewhat more or many more inconsistencies. Furthermore, the authors report that when children with mental retardation report sexual abuse, the attorneys believe that only 51% of the children could provide an accurate account; 17% of the attorneys believe the story would be completely inaccurate. Interestingly, over half of the attorneys had no experience with children with a disability. While the sample size is small, the authors contend that these attorneys make strong assumptions about children with a disability without any real experience. This suggests that there are strong biases toward children with disabilities among attorneys. Lam, Tsang, Chan and Corrigan (2006) found that Chinese students in Hong Kong and Taiwan had more positive attitudes toward people with physical disabilities than cognitive or developmental disabilities. They also found that American students had more positive attitudes toward people with disabilities in general than Chinese students.
Bias about children with disabilities also exists in the child welfare system. Manders and Stoneman (2009) found that child protective services (CPS) caseworkers responded differently to allegations of child abuse when the victim had a disability; caseworkers were less likely to investigate these allegations when there was a child with a disability. In addition, the authors found that CPS workers felt that children with disabilities may have been at least partly responsible for their abuse and that service provision was more directed at the child than parent compared to cases where the child did not have a disability.

The concept that positive exposure to people in other groups than one’s own can minimize negative beliefs about the “others” groups has been demonstrated with race (Stepanikova, Triplett, & Simpson, 2011) and sexual orientation (Oberle, Nagurney & Lee, 2011). Rimmerman, Hozmi and Duvdevany (2000) considered whether personal contact with a person with a disability changes students’ attitudes toward this group. These students were part of a special program at the University of Jerusalem who served as tutors; some of the students they tutored had disabilities while others did not. They found that students with prior exposure to people with disabilities had the most positive attitudes, and that time was an important factor in changing attitudes and developing realistic expectations toward people with disabilities. Eigenbroad and Retish (1988) suggest that contact alone may not be sufficient to mitigate negative beliefs about people with disabilities; instead, these experiences may need to be structured to provide a quality interaction. Rees, Spreen and Hamadek (1991) reported that these encounters must be meaningful for both parties. Chan, Lee Yuen and Chan (2002) compared student attitudes toward people with disabilities who were in programs for occupational therapy (OT) or business in Hong Kong. They found that both groups of students had similar attitudes at the beginning of their first year; however, by the end of the first year, OT students had more
positive attitudes after gaining knowledge and exposure to people with disabilities while the business students who had no exposure developed more negative attitudes.

Age is another factor affecting attitudes about people with disabilities. Yazback, McVilly, and Parmester (2004) conducted an international study using several standardized measures about attitudes toward people with disabilities. These self-report questionnaires were distributed to people in Australia, United States, Japan, Korea and Israel; participants included students, staff working with people with disabilities, and the general public. They found that younger people with higher levels of education and prior knowledge about disabilities had the most positive attitudes toward people with disabilities; this group was more likely to support community inclusion and less likely to believe in exclusionary policies. In conclusion only age could stand alone as a variable for supporting people with disabilities. This suggests that discrimination against people with disabilities is influenced by many subtle factors and is likely to be deeply rooted. This study also points out that social desirability, people responding to what they think is socially or politically correct, influences how people respond to questions about people with disabilities.

**Measuring Implicit Bias**

According to Larson (2009), behavior is driven by implicit bias, which is composed of implicit preferences (attitudes) and beliefs (stereotypes). But how do we measure what is implicit? The social unacceptability of negative beliefs about socially constructed phenomenon make it difficult. Yazback, McVilly, and Parmester (2004) explain that finding an instrument to measure implicit bias about disabilities has been even more challenging.

According to McCaughey and Strohmer (2005), attitudes about disabilities can be measured either directly or indirectly. In the direct method, participants are informed about what
is being measured in the surveys, interviews, adjective checklists and paired comparison scales. These instruments are used most often when trying to measure attitudes about disabilities (McCaughey & Strohmner, 2005). The drawback to direct measurement is accuracy – when participants know what is being measured, they may not reveal their true feelings, instead trying to confirm what is looking for, purposefully providing inaccurate information, or providing answers consistent with what is socially acceptable (McCaughey & Strohmner, 2005). The alternative is indirect measurement, where researchers do not reveal what attitudes are being studied. There are three variations of indirect measurement: respondents are either 1) completely unaware of what is being measured, 2) aware of observation but not that their attitudes are being assessed, or 3) participants are intentionally misled about purpose of the study (McCaughey & Strohmner, 2005).

Why is it so difficult to measure people’s attitudes about disabilities? First there is recognition that a person’s attitude about disabilities could negatively impact both the person with the disability as well as people without a disability (Antonake & Livneh, 2000; Beckwith & Matthews, 1995; Vilchinksy, Findler & Werner, 2010). Antonake and Livneh (2000) suggest that respondents’ attitudes could be conscious or unconscious and therefore the respondents may be unaware of their behavior. In addition, when dealing with socially sensitive situations, including attitudes about disabilities, participants may alter their responses. Furthermore, these latent psychosocial processes may not emerge until they are triggered by a specific event, experience or situation. In an attempt to counteract participants’ socially desirable responses, Antonake and Livneh (2000) paired direct question surveys with the use of vignettes. By using both methods, the authors anticipate that they would get more realistic and truthful cognitive, behavioral and affective responses. Others raised questions about their use of self-report
questionnaires because it introduced potential for inaccurate reporting by the responder.

There have been several attempts to develop scales to measure attitudes about people with disabilities; however, none have demonstrated reliability or validity. For example, the Interaction with Disabled Person’s Scale (IDP) developed by Gething in 1991 has been tested both nationally and internationally with the results being a lack of validity. Loo (2001) attempted to measure attitudes toward people with disabilities using the most recent revision of the IDP scale in Canada. This revised scale consisted of 20 statements and covered 6 possible factors that might influence attitudes including discomfort, coping/succumbing, information, vulnerability, coping factor and vulnerability factor. Loo hypothesized that these six factors would show what influenced people’s perceptions and beliefs about people with disabilities. Unfortunately, Loo’s results demonstrated poor reliability with low alpha scores in almost all categories (Loo, 2001). Another scale that emerged around this time was the Scale of Attitudes Toward Disabled Persons (SADP), by Beckwith and Matthews. In the study conducted by Beckwith and Matthews (1995), the SADP and several other measures were administered to students enrolled in a program to train people to work with people with disabilities. These measures were given to students in the beginning of the program (first year) and end of the program (third year). The results were disappointing, with the scale being both unreliable and showing poor sensitivity for measuring distinct variables. Overall, Beckwith and Matthews (1995) concluded that the SADP could not adequately measure the properties of attitudes toward people with disabilities. The authors suggested that because this measure was developed for use with community samples, it didn’t work well with the specialized population they chose. These studies are important, however, because they at least demonstrate an attempt to distinguish possible themes/categories that make up a person’s bias toward people with disabilities.
In the 1940’s, Yuker developed The Attitudes Toward Disabled Peoples scale (ATDP). This instrument measures explicit attitudes about people with disabilities; it was considered psychometrically sound and was widely used (Pruett & Chan, 2006). It was popular until the 1990’s when researchers became concerned that the use of explicit measures did not provide the most accurate reflection of people’s true attitude.

Another self-report questionnaire the Multidimensional Attitudes Scale Toward People with Disabilities (MAS), was created to resolve some of the problems identified in the previous scales (Findler, Vilchinsky & Werner, 2007). Using a multidimensional approach, Is identified three components to define “attitude:” affect, cognition, and behavior and created subscales to measure each component. They then administered the MAS to Israeli college students and used component analysis, a more rigorous method than traditional factor analysis. While the results showed the measure to be both reliable and valid, the authors noted the small sample size. The MAS offered a new approach to measuring attitudes about people with disabilities by focusing on a multi-dimensional scale rather than a unilateral one.

The indirect method is also utilized when researching sensitive subjects. The types of instruments used to indirectly measure attitudes are 1) error-choice methods, which employs multiple choice options and participant chooses answers among incorrect ones, 2) randomized response level -- a strong choice when studying sensitive issues because the answers cannot be traced back to participant, and 3) Implicit Association Test (IAT), which is a computerized instrument (McCaughey & Strohmer, 2005). The IAT will be discussed in more detail below.

The Implicit Association Test (IAT) created in 1998 by Greenwald, Nosek and Banaji and in 2001 incorporated a not for profit named Project Implicit to disseminate the application of implicit social cognition (Project Implicit). This web-based test measures automatic group-
valence (implicit attitudes) and group traits (implicit stereotypes) and their associations (Larson, 2009). A paper and pencil version has also been developed (Pruett & Chan, 2006). This measure was first used in assessing racism, but Pruett and Chan (2006) adapted the IAT to measure attitudes about people with disabilities, dubbing it the Disability Attitudes Implicit Association Test, DA-IAT. One adaptation was to substitute symbols for words to represent disabilities (for example, a picture of a person in a wheelchair is used instead of using words to describe a person with a physical handicap). In testing DA-IAT for reliability and validity, Pruett and Chan (2006) found that, similar to the IAT, negatively associated words were matched more often with the symbols of disability and positive words were matched with non-disabled signs. When they compared the Attitudes Toward Disabled People scale, a commonly used explicit measure to the DA-IAT, they found no relationship (Pruett & Chan, 2006). This result was not surprising because explicit measures of attitude rarely have a relationship to implicit measures. Critics of the IAT suggest that it does not control for spurious explanations such people’s feelings of shame and discomfort (Larson, 2009).

**Summary of the Literature Review**

There are a number of trends in the field of forensic interviewing of children with and without disabilities about child sexual abuse. Some are child related; others are interviewer related. In both cases, the goal is to conduct a forensic interview during a sexual abuse investigation so that the information provided by the child is accurate, detailed and uncontaminated.

Concerns about exploitation of children have existed for many years; however, the issue gained prominence during the women’s and civil rights movements beginning in the 1970’s. At the same time, a movement toward de-institutionalization and normalization of people with
disabilities strengthened. With the recognition that children with and without disabilities are victims of child sexual abuse, and the reporting of several highly publicized cases, professionals in the field began to focus on proper ways to investigate these incidents. Professional organizations such as the American Professional Society on the Abuse of Children, the American Academy of Child and Adolescent Psychiatrists and National Institute of Child Health began developing systematic ways to interview children. Structured protocols and guidelines for forensic interviewers were created; the goal was to increase the amount of information a child provides while reducing a child’s suggestibility. All these protocols were developed for typically developing children. As noted in the literature review, most of the child issues regarding forensic interviews focus on the memory, suggestibility and response patterns of children without disabilities. Traditionally, children with disabilities were believed to make poor witnesses, yet the (limited) research does not bear this out. In fact, there are techniques described in the literature, such as Narrative Elaboration Technique (NET) that seems to deliver more effective interviews with children with disabilities (Saywitz & Snyder, 1996). Nonetheless, these techniques are not taught in the forensic interview trainings. This reduces the likelihood that children with disabilities will receive equal access to forensically sound, objective interviews.

While there has been research into the needs and deficits of children with disabilities and its impact on the child’s ability to make a disclosure, there has been limited study of the influence of the interviewer and his/her own perceptions of the situation. Disability theory shows how the general population reacts to people with disabilities, and how their conscious and/or unconscious biases may affect their interactions with people with disabilities. Yet in the field of forensic interviewing, where children with a disability are more likely to be interviewed,
there has been no research about the impact of implicit bias on forensic interviewers. The literature does suggest that providing people with greater knowledge about disabilities can reduce personal bias, but this depends on those interactions being positive. Unfortunately, people’s attitudes and beliefs about people with disabilities are likely to be unconscious and automatic, so the forensic interviewer may not be aware of their beliefs and feelings.

Child sexual abuse investigations often depend on the outcome of the forensic interview, since there is rarely medical or forensic evidence and/or corroborating witnesses. The credibility of the child often hinges on the opinion of the forensic interviewer. As presented in the literature review, credulity is often determined by the child’s trustworthiness and competence. Azar and Goff (2007) showed that subtle forms of bias can interfere with professional decision-making and the application of social information. Schemas that serve as templates for memory may contain biased or inaccurate content. This can lead to rigid thinking, biased data gathering, premature closure of the decision-making processes, and/or misinterpretation of one’s own responses. Azar and Goff (2007) also report that while professional training and knowledge help mitigate these factors, people tend to hold onto their schemas, which are derived from personal experience and socialized views.

There are a few important issues with the research specific to the child. For example, most research considers children with disabilities as a homogeneous group. As pointed out in the literature, even with similar diagnoses, children have a wide range of functioning. It is therefore important that the research discuss more clearly the cognitive, social and behavioral needs of the children; without this clarity, children are likely to continue to be oppressed by a system that already sees them as marginalized. Another problem is the methodology used in much of the research about children with disabilities. According to Henry and Gudjonsson (2007), children
with disabilities’ testimony may not be considered reliable. This is partly because many studies that compare children with and without cognitive impairments match subjects based on chronological rather than mental age. Their skill level, as demonstrated by mental age, is far more accurate depiction of their capabilities than their age in years.

While there is limited research about children with a disability and forensic interviewing, there is even less study of the behavior of the forensic interviewer. Most of the literature on forensic interviewers deals with question styles and supportive versus objective approaches. The literature does acknowledge that interviewers may have their own biases; however, there is little investigation of how this might affect the outcome of the interview. Panghorn (2009) and Bruck and Ceci (1999) report that forensic interviewers can demonstrate confirmatory bias that leads a child to substantiate the interviewer’s expectations, but may prevent the interviewer from asking about alternative explanations. Bruck and Ceci (1991) further elaborate that the interviewer may even communicate to the child some of their own biases both verbally and non-verbally. While the focus of Bruck and Ceci’s study is the interviewer’s tone and implicit or explicit threats, isn’t it possible that other manifestations of interviewer’s bias could affect the interview?

The literature clearly documents that society holds biases about people with disabilities. Studies have shown that negative perceptions about people with disabilities exist in all facets of life, including school, work and even in the courts. These attitudes and beliefs are often repressed and unconscious to the person, or they attempt to appear socially acceptable and politically correct. According to Dovidio and Gaertner (2010), personal denial of prejudice can co-exist with unconscious and negative feelings and beliefs. These subtle, unintentional forms of discrimination may appear as nonverbal behavior and negative decision-making choices in complex situations (Penner et al., 2010).
Interviewers make momentous decisions about the child’s credibility, which influence the outcome of the child sexual abuse investigation. Is it possible that interviewers hold implicit or confirmatory biases regarding children with disabilities? Do these biases influence what questions they ask, what questions they don’t ask and whether they find a child believable? As seen in the literature, children with a disability are more vulnerable to abuse than their typically developing peers. Yet there is little information guiding how interviewers deal with CWDs. We also know that society holds stereotypic beliefs about people with disabilities -- could these biases appear during forensic interviews with CWDs? This raises several questions: do children with a disability have access to the same high quality interviews as children without a disability? Are the decisions about disabled children’s credibility impacted by implicit bias about their disabilities?
CHAPTER III: METHODOLOGY

Introduction

This study sought to explore the potential relationship between implicit bias about disabilities and forensic interviewers conducting child sexual abuse investigations. Further if this phenomenon exists, it explores the effect of the decision-making regarding the child’s credibility? To explore these questions many choices about the design of the study were required. Prior to presenting the findings of the study, these design choices will be highlighted.

Design Decisions

This study utilized a quantitative exploratory approach to these foregoing research questions. In the literature, there is research that demonstrates the existence of implicit bias in general and about disabilities specifically, as well as how this bias can influence how a nondisabled person interacts with a person with a disability. However, little is known about implicit bias about disabilities and forensic interviewers. Implementing an exploratory study allowed I to explore the constructs of bias, forensic interviewers and child credibility, their nature, distribution and relationship to other constructs. To design this study there were many critical decisions for I to contend with; these will be discussed below.

Methodological choices.

As indicated earlier, when studying issues around child abuse, methodology can be particularly challenging. In the past, research about child sexual abuse issues such as eyewitness accounts, credibility and suggestibility of children with disabilities have relied upon the use of simulated experiences that are generally not considered threatening to the child. The child would witness a pretend event, and would then be questioned about their experience. Obviously, a researcher cannot ethically put participants into intentionally harmful situations; however, this
research has also been criticized for the lack of reality in the scenarios. In addition, some studies about forensic interviews related to memory, suggestibility and patterns of response have used actual videotapes of real interviews. Most of those studies have been from other countries such as Israel (Orbach, et al, 2000), Sweden (Cederborg & Lamb, 2006) and Finland (Thorensen, et. al., 2009); however, in the United States, digitally recorded images of real forensic interviews are considered evidence in criminal and civil court cases, therefore, access to these is severely limited.

Based on these important concerns I chose to create vignettes. Vignettes offer real life situations, such as child abuse or medical emergencies without having an actual real victim. Vignettes are created to give the participant a case study to read and respond to questions regarding that situation. This approach has proven positive in determining credibility and believability of a victim. The literature supports the use of vignettes as an alternative to reviewing actual interviews (Bottoms, Nysse-Carris, Harris & Tyda, 2003; Parsons, Elkins & Sigafoos, 2000; Peled, Iarocci & Connolly, 2004; Pruett & Chan, 2006). For this study, I composed four vignettes that represented a “typical” case of child sexual abuse. These vignettes were modeled after similar ones used in a study by Rogers, Titterington and Davis (2009). See Appendix A to view the vignettes. The children described in the vignettes were matched for chronological age with disability as well as functional age and disability. Two of the children were identified, as having a disability while the other two had no reported disability. All of the vignettes used female children as the alleged victim to control for a confounding variable of gender. The participants were randomly assigned to one of the vignettes. After reading the vignette, three of the four groups were asked to rate the child’s credibility based on predetermined questions.
How one gathers the data is another important consideration; what are the issues for the use of self-report questionnaires? As Rubin and Babbie (2008) discuss, self-report questionnaires are convenient and can be administered in a uniform manner. But, participants may respond to these instruments with an eye toward social desirability, skewing their true feelings. This risk is especially concerning when measuring emotionally charged variables. Using an indirect technique to measure the independent variable, implicit bias about disabilities, could reduce the chance of this type of responding pattern.

In the implementation of this project, data gathering was another important methodological consideration. I chose to use an online survey. This approach provided anonymity for participants since no identifying information was gathered and increased participant accessibility and a larger sample size. After researching a couple of different online survey website options, I decided to utilize Survey Monkey. This online survey service offered the largest selection of options for managing the survey as well as providing the greatest amount of technical support to I.

**Measuring the variables.**

Determining how variables will be measured is another important decision every researcher must make. Utilizing previously standardized measures helps ensure there is reliability and validity of the results and reduces the likelihood of researcher bias. For this research project, the two key variables that needed to be assessed, bias and credibility.

Two possible techniques were identified to study attitudes about disabilities; direct (explicit) and indirect (implicit) methods. Many of the early studies about perceptions of people with disabilities employed direct measures, in which participants were informed about the variable being quantified prior to completing the surveys (McCaughey & Strohman, 2005;
These instruments presume that attitudes about people with disabilities will differ depending on the responder’s assessment of how similar or dissimilar he/she is to the person with a disability (McCaughey & Strohman, 2005). Critics of this approach believe that people will respond more positively than they actually feel because of social desirability (McCaughey & Strohman, 2005; Yazbak, McVilly & Parmester, 2004); i.e., respondents are likely to answer inaccurately to make themselves look or feel better about their answers. One way to manage the concern for social desirability is to use an implicit measure that limits the participants’ awareness of what attitudes are being studied (McCaughey & Strohman, 2005). Critics of this approach point out that it can be very expensive, and that there can be ethical issues related to participant consent and deception. Based on the above discussion, I chose to use an implicit measure and chose the Disability Attitude Implicit Association Test, DA-IAT by Pruett and Chan (2006). Details about this measure will be discussed later in this chapter.

To determine the credibility of the child, I attempted to adapt standardized credibility questionnaire utilized in other child credibility studies for my study purposes. I then contacted via email a couple of authors of child credibility studies for permission to use their questionnaire (Dr. David Ross and Dr. Victoria Talwar). While both researchers responded, they separately indicated that they did not use formal measures and created their own questions for their particular studies. Based on their responses, I modeled the questions items measuring on credibility on those from both Ross (2003) and Talwar’s (2006) instruments. I also reviewed a survey developed by Davies and Rogers (2009) that evaluated credibility using the child attributes, truthful, accurate, competent, dependable and believable. For this study, I then divided credibility questions into child and interviewer attributes.
**Sampling decisions.**

Another important question that must be thought about in any research study involves sampling. The generalizability of a study is determined by how accurately the participants represent the general population (Drake & Jonson-Reid, 2008). This is most often achieved through the use of random sampling, in which participants are selected randomly until the desired sample size is achieved (Grinnell, 1997). For this study however, a non-probability sample was used, since the target population is a specifically identified group, namely forensic interviewers. While this type of sampling style provides weaker generalizability (Drake & Jonson-Reid, 2008), it was necessary to achieve the desired sample size. Recruitment of participants will be discussed later in this chapter.

**Construction of the survey decisions.**

The order in which participants respond to the questions can have an impact on the results. Accordingly I chose to measure bias utilizing an indirect method to mitigate the concern about social desirability, and respondents’ discomfort or lack of consciousness about their true feelings about people with a disability. Knowing how sensitive forensic interviewers are regarding other issues of bias, I was concerned that participants might be particularly reluctant to truthfully acknowledge or consider a bias regarding disability. Therefore I chose to have participants complete the DA-IAT after reading vignettes and answering the questions about credibility.

When participants initially entered the survey site, they were asked to complete some background information questions about their forensic interviewing experiences. All participants were then randomly assigned to receive one of four vignettes. Three of the four groups were then presented with questions regarding the child’s credibility. The fourth group did not
complete this section and instead was routed to the implicit bias questions. The purpose of this strategy was to insure that reading the vignette did not influence the participants’ responses to the implicit bias questions. All participants then responded to the questions from the Disability Association Implicit Bias Test (DA-IAT) that measures implicit bias about disabilities.

Based on these decisions, the study was designed as follows. Using an exploratory study design, I developed an online survey comprised of three sections. First the participants were asked questions about their professional background and experience in forensic interviewing. Next each participant was randomly assigned to read one of four vignettes and then three of the four groups were directed to respond to questions regarding the believability of the child. Finally, all participants completed a set of questions related to bias about disabilities. The rest of this chapter will elaborate on each of the above-mentioned topics.

Target Population

As mentioned earlier, this study utilized a non-probability purposive sampling strategy. This approach relies upon the use of participants that are picked for a specific reason, such as their skill sets (Drake & Jonson-Reid, 2008; Grinnell, 1997). Given that the target population is forensic interviewers, it made sense to choose a place where access to this group will yield both breadth and numbers. With forensic interviewers coming from various backgrounds, including law enforcement, child protection, legal and social work, it could be challenging to gather an appropriate sample that reflected this diversity. Utilizing one of the two national training facilities for forensic interviewers would provide access to large pools of potential participants. Both of these organizations, National Child Advocacy Center (NCAC) and CornerHouse provide forensic interviewer training and both have a commitment to support educational endeavors that will advance knowledge about best practice; According to NCAC’s Executive Director, one of
their goals is to promote educational endeavors that raise awareness of and increase knowledge about child abuse (personal communiqué with Executive Director, January, 8 2013). While both training facilities attract the target population, NCAC was chosen because it is larger and better known within the forensic interviewer community.

With current literature and research substantiating that children with a disability are more vulnerable to abuse, there is a focus on advancing knowledge in this area. By having access to NCAC’s database of trainees, participants came from diverse backgrounds, both demographically and by occupation. NCAC’s mailing list includes approximately 16,000 people. According to the person who produces and edits the newsletter and oversees mailing list, there is no available breakdown regarding who is on this list; the mailing list is based upon participation in one of a diverse number of trainings, including forensic interviewing, registration for NCAC’s annual national conference and others who contact NCAC through the Internet (personal communiqué September 2013). One potential challenge of using this resource for the target population was the possibility that many of those who respond will be those trained by NCAC as opposed to other forensic interview protocols. This could introduce potential implicit bias around who chooses to be trained at NCAC rather than other places. For example is it possible that certain disciplines prefer the NCAC training as opposed to other training models? However, since this study is exploratory, it is important to gain general knowledge about the concept of implicit bias about disabilities in the target population. Based on the results of this study, it will be necessary to consider this potential bias in the study design.

According to Drake and Jonson-Reid (2008), operationalizing the population to be studied is important. Accordingly, I then developed criteria for inclusion in the study that would eliminate forensic interviewers who had not been trained in one of the identified national
standardized protocols. Initially, I chose four specific protocols as criteria; however, the Executive Director of NCAC recommended two additional protocols based on knowledge of where forensic interviewers report being trained (personal communiqué April 2013). Therefore, the eligibility criteria for participation in this study required that a person be over the age of 18, conducts forensic interviews, and who was trained in one of the following protocols: National Children’s Advocacy Center (NCAC), CornerHouse, National Child Protection Training Center (RATAC) National Institute for Child and Human Development (NICHD), American Professional Society of Child Abuse (APSAC) and a state forensic interview protocol.

As a consequence, forensic interviewers included in this sample came from the following backgrounds: law enforcement, child protection, prosecution (criminal and/or family), and social work/mental health. It did not include medical professionals since they do not conduct forensic interviews; instead, they use their interviewing skills to establish medical histories for children.

Participants were recruited through a notice in NCAC’s monthly newsletter, dated June 2013. Because of the large number of items in that edition, readers could not easily locate the recruitment letter, so in addition the editor suggested sending out an individual email blast to the entire list. NCAC’s regulations concerning the frequency of emails blasts postponed the follow up email blast until the second week of July.

**Sampling Strategy**

The sampling strategy used for this study was reviewed by the Hunter College Institutional Review Board (IRB) to insure the protection of human subjects. Prior to launch, I met with Executive Director C. Newlin of National Children’s Advocacy Center (personal communication, January 8, 2013,). In this early conversation, he offered support for the study and provided suggestions for recruiting participants. According to NCAC’s Executive Director,
their newsletter has a circulation of approximately 16,000 individuals, many of whom are forensic interviewers but some who are not. One suggestion to achieve maximum saturation was to conduct recruitment in the April newsletter, since this is National Child Abuse Awareness month. Unfortunately, this deadline was missed due to changes requested by C. Newlin after IRB approval (personal communication, April 26, 2013). During that conversation, C. Newlin suggested changing which protocols could be used to screen in potential subjects to increase the pool of participants. His recommendation was based on two factors, one, to reflect the most up to date organizations providing formal training and second data that NCAC had recently gathered regarding which protocols people are using in their practice. The list of approved protocols was increased to six as opposed to the original four. With this change, I submitted an adjustment to the original IRB application, which was approved in May 2013.

Forensic interviewers who completed either of two levels of training, basic and advanced, were eligible to participate. Including graduates from the advanced training in the sample allowed me to determine if more experience or training had an affect on either of the variables. The forensic interviewer participants needed access to a computer in order to complete an online survey. This could have limited participation by eliminating those who did not have computers. Another consideration was whether to allow recent graduates of the interviewer training to participate. There did not appear to be a reason to exclude them, so this subgroup was included.

Since I recruited potential participants by publishing a small introduction to the study with a link to a survey on Survey Monkey in the National Child Advocacy Center’s (NCAC) monthly newsletter entitled “In the Loop”, there was no direct contact with participants. Therefore obtaining informed consent with an online survey can be challenging. To achieve informed consent while maintaining anonymity, a consent letter was attached to the online
survey. This consent letter explained that the survey is anonymous and that none of the questions will be used to identify individual subjects. The consent letter appeared when the participant clicked on the link; it also explained that by proceeding past the consent letter, they were acknowledging their consent to participation. Participants were permitted to complete the survey at their convenience during the designated time frame; their responses were password protected.

To promote participation, a second sampling strategy was prepared as a backup. If there were an insufficient number of participants within an acceptable time frame, I would contact the National Children’s Alliance (NCA), a membership organization that accredits child advocacy centers nationwide. This organization is also committed to helping local communities respond to child abuse, including the implementation of developmentally appropriate, culturally sensitive and forensically sound interviews of child during child abuse investigations. NCA has access to over 700 child advocacy centers where most forensic interviews occur. This backup strategy would involve contacting NCA’s Executive Director about endorsing this study, with the expectation that they would send recruitment letter and the online survey link to their membership. In the past, NCA has supported similar research endeavors using this strategy; I is reasonably confident that NCA would respond similarly to this request. One consideration is the possibility of overlap in the membership of the two organizations. To address this, I would develop a second recruitment letter for NCA that would include a statement requesting that recipients only complete the survey once.

**Setting**

This research was performed using the online survey tool Survey Monkey. Survey Monkey provides a wide variety of design options, technical assistance (for a fee), collection of data on a secure password protected site where only I has access to the information, and data
analysis of the responses can be uploaded into SPSS. The use of this website allowed I to provide potential participants with a link to the survey and to obtain an informed consent prior to answering the questions. Each participant’s response was confidential and could only be seen by I through the use of password protection. This online survey site was chosen for its ease of use for participants, and because it offered the largest variety of options when posting questions. For example, among the sites contacted, only Survey Monkey was able to handle random assignment to the four different vignettes. Survey Monkey also offered 24/7 online assistance for me for an annual fee. This allowed me to maintain the data in a password-protected environment for one year. One limitation of Survey Monkey was its inability to convert a PDF file into a usable format for participants to respond to the questions on the DA-IAT. Instead, I was required to reformat the original DA-IAT from a PDF file to a jpg file and then individually load the pictures/words onto the survey and create response options for each question. This was an extremely time consuming and labor intensive task, which also increased the possibility of researcher error, which unfortunately occurred.

Instrumentation

This study considered two central predictors and one outcome variables: disability/no disability; implicit bias about disabilities; and child credibility. Disability/no disability and implicit bias are independent variables; child credibility is the dependent variable. Disability/no disability is a dichotomous variable as the child in the scenario either is identified as having a disability or not.

To measure the variables of implicit bias about disabilities and child credibility, the author wanted to use existing instruments rather than develop an entirely new one. For measuring implicit bias about disabilities, I chose to use the Disability Attitude Implicit
Association Test (DA-IAT), created by Pruett and Chan (2006) because this option initially to insure that the measure was rigorously statistically analyzed to avoid problems related to reliability and validity. See Appendix C to view copy of the DA-IAT. This instrument has been validated and tested for reliability by the measure’s authors Pruett and Chong (2006) and used by other researchers with similar positive results (Pruett, Flood & Bulgrin, 2011; Shaung Chen & Zhang, 2011). While there are other measures about attitudes about disabilities, the DA-IAT is an implicit measure in which the participant is unaware of what the instrument is measuring (Pruett & Chan, 2006). The DA-IAT is based on another standardized measure called the Implicit Association Test (IAT) created by Greenwald, McGhee and Schwartz (1998) which was a computer-based test developed to assess racial attitudes Nosek, Banaji and Greenwald (2002) also utilized this general design but created a paper-pencil format to determine attitudes about gender. Pruett and Chan (2006) adapted this paper-pencil format to create a measure of attitudes about disability. They made two significant changes in the original design: first, they chose the paper and pencil format to increase the use and accessibility of the measure; second, they used symbols for disabilities as opposed to the traditional words. Their rationale for using graphics rather than words was to simplify the descriptions of disability rather than attempt to illustrate disability with complex phrases. The use of symbols also eliminated confounding characteristics such as race, gender or age (Pruett & Chan, 2006).

As part of the procedure for using the DA-IAT, I contacted Pruett and Chan directly via email to request permission. Dr. Pruett forwarded I a PDF file for use in this study. The measure shows participants a symbol or a word and asks them to choose from two options: Disability/good or Nondisabled/bad for analytical purposes. A good word connected to a disability symbol is considered an incongruent response and a bad word connected to disability
symbol is congruent answer. In the instructions, participants are asked to complete the questions as quickly as possible. The original DA-IAT had 88 questions for participants to respond to, with even numbers of congruent and incongruent questions. However, I was concerned about the length of time it would take for participants to complete this measure along with the other parts of the study, so she reduced the number of questions to 44, with 22 being incongruent and 22 being congruent.

When I attempted to upload the PDF format that Dr. Pruett sent, I discovered that this format needed to be revised to conform to Survey Monkey’s format. At that time I contacted other online survey providers, however the problem remained with every provider. As a result, each picture and word was converted into a jpg file and inserted into the questionnaire. I then typed the answers as either disability/good/nondisabled/bad or disability/bad/nondisabled/good. However, during this process, I inadvertently made an error with the number of congruent and incongruent statements, resulting in an uneven distribution of incongruent vs. congruent statements. As will be described in the following section some incongruent statements had to be statistically eliminated thus creating an even number of congruent and incongruent questions.

For the purpose of this study, I used an online survey to reach as many possible participants as possible however one of the limitations of the online survey host was the inability to track response time as a way to measure bias. Instead I chose to implement the algorithm developed by Pruett and Chan for the paper and pencil format to arrive at a bias score. The bias score was determined by the participants’ “correct” categorizations of pictures/words to either a congruent or incongruent phrase. This analysis will be discussed in Chapter Four.

To measure the outcome variable child credibility, initially I hoped to use a standardized measure. Recall that in the literature review, I identified several possible measures from studies
of child credibility. As mentioned earlier in this chapter, I contacted the authors of two different studies, Dr. David Ross and Dr. Victoria Talwar. In his 1990 study and again in 2003, Dr. Ross used self-administered items to indicate factors that might influence child credibility (Ross, Jurden, Lindsay & Keeney, 2003). In this study the factors deemed important regarding the believability of a child were cognitive ability and honesty. These two dimensions are also significant for studying children with a disability, because people may perceive intellectual limitations. There is also a belief among many that a child with a disability cannot lie. Based on this study and the potential for a standardized means to assess credibility, I contacted Dr. Ross to obtain a copy of his measure. Upon speaking with Dr. Ross (personal communication, March 2, 2013), however, he explained that he had used questions that he created and that he was not sure if there was a formal assessment tool.

I then contacted Dr. Talwar (personal communication, March 3, 2013) who looked at adults’ perspectives on child credibility. In her study, Dr. Talwar et al., described a tool used called the Child Witness Credibility Questionnaire which focused on factors such as believability, child competence, ability to report accurately and truthfully, child’s ability to resist suggestion, reliability of memory and consistency of the story and the child’s demeanor. In an email exchange Dr. Talwar also reported that her study used questions based on her experience and was not a formal research instrument. Based on these two conversations, I decided to develop my own original questions patterned after the ones used by Drs. Ross and Talwar. Dr. Ross then reviewed my items for consistency, clarity and face validity. Incorporating the concepts addressed above, I developed the following: 17 questions related to credibility: ten questions concerning child characteristics, and seven questions about the forensic interviewer. Of the 10 child characteristic questions, eight utilized Likert rating scales and two used yes/no
responses. The Likert scale ratings ranged from 1-4, with 1 reflecting the least of a construct and 4 reflecting the most. The other seven questions related to the role of the interviewer, including types of questions asked, developmental appropriateness of the questions, leading nature of questions the interviewer posed, comfort level of interviewing child with a disability, and preparation for conducting this type of interview. The questions about comfort, developmental appropriateness and leading nature of questions, as well as proper preparation for the interview used a Likert scale with 1 being the least and 5 being the most. In addition, space was provided for participants to write in comments about what could have been done to improve the situation. The format for the final two questions was open-ended and asked participants if there was something that stood out for forensic interviewer about interviewing children with a disability; After all the questions were developed, I consulted with Dr. Ross as an expert in the field of child credibility regarding the types of questions included and whether the questions tapped into the important constructs that make up child credibility. Dr. Ross commented that the questions were clear and covered the relevant aspects of child credibility. He also suggested adding an open-ended final question regarding ways to improve interviews of children with a disability (personal communication, March 5-6, 2013). While this requires a different type of data analysis, the responses can offer ideas that may make training of interviewers more germane

**Procedures**

The steps of this study included review by the Institutional Review Board, recruitment of participants, launch of the survey, collection of data and analysis and interpretation of the findings. This section will consider each of these components.

**Institutional Review Board /implementation plan.**

The first step was to obtain Hunter College Institutional Review Board (IRB) approval.
The IRB protects the rights and wellbeing of participants in research activities by reviewing each research project and its proposed methodology (www.hunter.cuny.edu/irb). To ensure that this project met those standards, I consulted with an IRB representative. This research was considered suitable for an expedited review, given the target population and the format (survey) of the study.

The IRB application required various documents in addition to the application itself. Prior to submission, a researcher must complete the Collaborative Institutional Training Initiative (CITI) training modules; I renewed my certificate. As recommended by the IRB representative, I registered on the IRBNet website. The IRB package included a literature review and proposed methodology, as well as informed consent guidelines, a letter/script to recruit potential participants, a letter of organizational cooperation from NCAC and copies of the measures to be used in the research. The recruitment letter, (Appendix C), the informed consent, (Appendix D), and the letter of organizational cooperation (Appendix E) are included in the appendices of this document.

Unfortunately, there were a few missteps during this process. One related to the recruitment letter. Prior to submitting the IRB application, I contacted the Executive Director of NCAC regarding the content of the recruitment flyer, which he agreed to read once the IRB approved it. Upon his review, the Executive Director expressed concern about the language regarding the specific identified forensic interview protocols and asked that it be changed to reflect the most current names of the protocols. The author agreed with this adjustment, so the changes were made and resubmitted to the IRB. This led to a delay in the publishing of the recruitment information; rather than appearing in the April 2013 newsletter, it was published in the June 2013 newsletter when many readers are planning their summer vacations.
Another issue related to the amount of time that the survey was accessible to potential participants. In the original IRB application, it was stated that access to the survey would be three weeks. 16,000 newsletter emails were sent to readers with a description of the study and a link to the online survey. However, due to the timing of its publication and the amount of material covered in that issue, the recruitment notice was not easy for readers to locate. As a result, the initial response rate was very low (N=12), so the editor of the newsletter suggested to an individual email blast that was sent to all the people on the email list. Unfortunately, due to the limits that NCAC has about how many email blasts can be sent out in a week, this email blast was not sent out until July 9, 2013. Access to the online survey was therefore extended until July 30, 2013.

Informed consent is a critical aspect of the IRB process. As discussed with the IRB representative, given that this study is anonymous, informed consent will be acknowledged by participants choosing to enter the survey website and completing the survey. The informed consent letter was the first item that a potential participant saw when they clicked on the link to the survey. At the end of the letter, potential participants were offered the option to continue by responding yes/no. Participants were only allowed to go forward if they responded “yes.” This helped ensure that only those wishing to take part in the survey were able to proceed.

Another document required by the IRB was a letter of organizational cooperation from NCAC, stating that NCAC would publish a recruitment notice in their monthly newsletter informing their membership about the study and publishing the link to the online survey.

**Human subjects protection.**

When using human subjects in research, it is critical to takes steps to protect the participants from harm, both emotional and physical. There were no known risks associated with
participation in this study, other than those experienced in everyday life. However, some subjects might have been uncomfortable completing the instrument, or completing the questionnaire could have triggered some emotional response. Participants were advised that their participation was voluntary and that if any questions made them feel uncomfortable, they did not have to respond to it. I provided readings for all subjects in the event they felt they required more information, including Internet links to sites about children with disabilities. These links were included in the informed consent document.

I protected the confidentiality and anonymity of the participants using the following procedures. This was a voluntary, confidential study; I did not know the potential participants. The only identifying information concerned one’s discipline, which is insufficient to reveal identity. In the informed consent, participants were advised that responding to this question might tend to identify them, and they do not have to answer any question that made them uncomfortable.

Another way to safeguard confidentiality of participants is by ensuring that participants have access to their responses only. Survey Monkey protects data by allowing access to I only, by use of a password. Once the response period is over, I entered data into the statistical analysis program SPSS; this data set was also password protected. In addition I purchased a contract with Survey Monkey to maintain the data for one year at which time it will be discarded in accordance with the IRB guidelines. A final report of the findings will be made available to the National Child Advocacy Center.

This study offered no direct benefits to individual subjects for participating in this study, although it may help advance knowledge in the field of forensic interviewing in child sexual abuse cases.
Data Collection

When deciding upon data collection methodologies, a researcher must consider a number of factors, including who should do the measuring, the sources of the data and reliability, and validity of the measures (Rubin & Babbie, 2008). Objectivity is an important component of quantitative research. To reduce the chances that participants might respond less than honestly in the presence of a researcher, this study employed an online survey. When measuring emotionally and socially sensitive variables such as bias and credibility, depersonalizing the interactions between the participants and the researcher helps ensure the most objective responses. While it is impossible to completely reduce researcher bias, this approach will minimize the potential for biased responses as described earlier. As mentioned earlier, another consideration was choosing a standardized measure that utilized an implicit approach as opposed to an explicit approach.

In all studies, there are possible limitations. The first potential limitation for this study was obtaining an appropriate sample. While I believed that I would gain access to interviewers trained at one of the six forensic interview protocols, the contact was through email and not in person. While this approach reduces the potential for participant bias, it might also limit potential participants’ willingness to complete the online surveys. Another consideration was the amount of time it would take for participants to complete the survey. Being conscious of participants’ time had to be balanced with making sure that all variables are measured in the best possible way. It was anticipated that the completion of the whole survey would take 30 minutes, which is a significant amount of time for individuals. This is especially true when people completing the surveys have no connection to the study nor is an incentive being offered. Reducing the number of questions used on the DA-IAT was a result of my concern that
participants might not complete the survey if all 88 questions of the DA-IAT were included. The third limitation was the use of the DA-IAT an adapted measure of the IAT. This adapted measure has been used successfully in earlier studies, but there is limited evidence about its reliability or validity. Davies and Rogers (2006) report reliability and validity in their study; however they also report that further evaluation of the components is necessary. Chen, Ma and Zhang (2011) also used the DA-IAT in their study when comparing implicit and explicit attitudes about people with disabilities and reported reliability with this measure. Given the DA-IAT’s previous use, I felt confident to use it in this study.

Data Storage and management

The data collection continued for five weeks rather than the anticipated three weeks, in order to benefit from the individual email blast sent out by NCAC newsletter editor. Once the email blast was sent, the number of participants rose dramatically from an N=12 to an N=263. During the data collection phase of the study, participants’ responses were stored with Survey Monkey under the title Implicit bias and children with disabilities. This title was only visible to the author and not to the participants. Survey Monkey collated the data into aggregate data and this was stored in a password-protected file on their site. After the close of the data collection period, the data was imported into a SPSS data set, which also was password protected.

Data Analysis

Data analysis is an important aspect of any research project. The purpose of data analysis is to uncover meaning from “raw” data. Descriptive statistical analysis depicts the data one variable at a time as well as analyzing through the use of specific statistical tests relationship between and predictability of the variables (Mertler & Vanatta, 2010; Rubin & Babbie, 2008). These statistic calculations provide information about each variable and their relationship to each
other. There are various types of descriptive analysis, and each serves a difference function. In this study, I used univariate and bivariate processes. Univariate analysis describes the characteristics of one variable while bivariate analysis considers the relationship between variables, and whether the relationship is predictive (Bannon, 2012).

In this study, I began by reviewing the univariate data for each variable, and then applied the appropriate bivariate statistical tests to determine whether there were any associations between the variables.

In this study, I used relied entirely on quantitative data analysis with the statistical analysis program SPSS. The goal of this analysis is to first statistically describe each variable’s distribution and psychometrics and second to determine whether there is a relationship between sets of variables, in this case, implicit bias about disability and the child’s credibility. Further analysis was also performed to determine if any of the demographic variables such as occupation, training or experience could predict implicit bias. Since this study was exploratory the data analysis plan was intended to quantifiably describe the phenomenon implicit bias and whether it influences forensic interviewers’ decisions about child credibility.

This section will also describe the preparation of the data prior to scrutiny. Prior to following the plan for data analysis, there were several steps involved in organizing or cleaning the data for quantitative analysis. The purpose of these steps is to ensure that the responses entered into the database accurately reflect the participants’ answers (Bannon, 2013). These steps will be discussed in this section.

The first step to organizing the data entered into SPSS is to create the data file from the collated data from Survey Monkey. Each question is assigned a column and each participant is given a case number. Each question was then given a variable name to provide identifying labels
for each question response. Initially there were 72 variables however during the data analysis process some of the variables were recoded, or recalculated and therefore the final number of variables was 86. This initial step was conducted with the assistance of a research assistant from another university. I then reviewed the data set to make sure that all of the information was properly categorized and represented in the data set.

The next step involved managing missing data. As described earlier, the original responses numbered N = 263, but due to incomplete questionnaires only N=229 were analyzed. According to Green and Mallery (2009) there are options for dealing with the missing values. Due to the small sample size in this study, I decided to utilize a Listwise approach. This strategy allowed I to use participants’ responses when the values were present but not include the responses in the calculations where the values were missing (Green & Mallery, 2009).

The description of the specific data analysis will be divided according to three categories, the demographic information about the participants, the independent variable implicit bias about disability and the dependent variable child credibility. In the survey, questions 2-11 related to participants’ demographic information, questions 13-29 were focused on the credibility of the child and questions 30-72 were connected to the implicit bias about disabilities variable from the DA-IAT standardized measure. The quantitative analysis of each category will be considered individually.

**Data analysis of the demographic variables.**

Information describing participant characteristics will be named demographic variables; those responses related to discipline, level of training, experience conducting interviews with both children with and without a disability and length of time conducting interviews; their analyses are included in this section. Descriptive or univariate statistics were used to analyze
participant responses including frequencies, central tendencies and dispersion. These statistics provide information about the distribution of the participants into these demographic categories. The demographic variables were categorical and continuous.

The first calculation completed related to the actual number of respondents in the sample; a frequency distribution was run to provide a total number of respondents (N= 263). This distribution also identified the number of participants with missing or incomplete responses. A Listwise pairing was calculated to determine who if anyone should be eliminated because of missing information; the sample size was then reduced to N=229. This return (14%) quite disappointing, though it was not clear how many actual forensic interviewers were on the NCAC mailing list; the editor of In the Loop explained that the list is comprised of anyone who attended one of the various trainings they offer as well as other individuals that hear about the newsletter who may not be forensic interviewers.

I then reviewed the data to describe the 229 participants in terms of their background information. To understand the make up of the sample of forensic interviewers, frequency distributions, dispersion (standard deviations) and central tendency (modes and means) were calculated. As noted all of the 229 people were forensic interviewers; the largest discipline represented was independent interviewers (39.3%), while the smallest group was attorneys, 3%. Approximately one fifth of the responders were either child protective services caseworkers or other, and a smaller percentage of participants identified as law enforcement personnel.

Recoding variables into new variables is a statistical technique that is used to make data more manageable (Bannon, 2013). I noted from the frequency distribution of the Discipline variable (Disc) that there was an uneven distribution of the cell sizes the attorney variable was very small while the independent interviewer was much larger. Based on these results I decided
to recode the discipline variable into a dichotomous variable allowing it to have potentially more
power when bivariate analyses were conducted. The new variable called RevDisc condensed
prosecutors, child protective service workers and police into legal and independent and other
disciplines were identified as other. This new variable allowed me to compare the groups of
forensic interviewers with more power and increase the potential for statistical significance. I
then ran frequencies, central tendency and dispersion on the new variable (Revdisc).

Another variable that was also recoded was the level of training of the interviewer. I
decided to change this variable to be dichotomous rather than continuous because most of the
participants’ responses fell into one of three categories either basic or advanced training. This
variable was recoded and named Highestevel1. Similar descriptive analysis was performed on the
other demographic variables.

The variable related to the model the participants were trained in was recoded into
TrainMod. This change allowed I to have one variable for all the training models rather than
having six models separately.

**Data analysis of implicit bias about disability variable.**

The variable implicit bias about disability was analyzed next. As indicated earlier, the
standardized instrument used for measuring this variable was the DA-IAT. This tool consisted
of participants looking at either a picture, some images were disability specific, such as a crutch
and while other pictures were ability specific such as a person running or a word that was
unrelated to disability/non disability and then choosing between two statements, one that was
congruent and the other being incongruent. Calculating the number of correct
congruent/incongruent responses and then applying an algorithm to obtain a bias score obtained
a bias score. This variable was labeled DAIAT.
To apply the algorithm designed by Pruett and Chan (2006) using these scores there needed to be an equal number of congruent and incongruent questions/responses. However, when I uploaded the questions into the online survey I realized that there were more incongruent questions than congruent ones. Consequently, I sought a statistical method to eliminate some of the incongruent questions and make the number of questions equal. To do this I ran a Cronbach’s Alpha to look at internal consistency among all of the questions and obtained a score of .878 suggesting that the questions were reliably measuring the variable implicit bias about disabilities.

Since I was able to demonstrate reliability of the measure the next step was to determine validity of the measure. One strategy for measuring validity is an Exploratory Factor Analysis (EFA). See Appendix F. An EFA can be used for a variety of reasons, first to reduce the number of variables, second to examine the association between the two variables and third to establish construct validity (Williams, Brown & Onsman, 2012). This approach allows a researcher to explore the nature of a model and its constructs (Williams, Brown & Onsman, 2012). In this case I wanted to determine what the factors of the two response types (congruent and incongruent) were in the DA-IAT. Once this was determined then a statistical rationalization for the elimination of questions could be established. I conducted an EFA for all of the questions (N=44) in the DA-IAT variable. The results showed that both the congruent and incongruent questions fell primarily into factors one and two out of a total of nine identified factors. Interestingly, more congruent questions had high scores in factor 2 while more incongruent questions had high scores in factor 1. Incongruent questions that had scores below .4 were excluded leaving N=14 and all of the congruent questions had scores equal to or above .4, therefore they were all included, N=14. I now had equal numbers of congruent/incongruent scores and the algorithm could be used.
To insure that the new DA-IAT measure remained reliable, I ran Cronbach’s alphas on both the incongruent and congruent questions and achieved scores of .905 and .795 respectively. These numbers demonstrate reliability of the specific questions, so another Cronbach’s Alpha was run using all the questions (N=28) and a score of .776 was achieved. This score indicated that there is consistency across all questions. Using a Likewise deletion analysis, I ran frequencies to assess for missing data and to determine a final number of total participant responses for this variable; N=146. Using the algorithm created by Pruett and Chan (2006) and shown below, I obtained bias scores on this sample (N=146).

\[
\frac{\pm \text{max value}(A,B)}{\text{min value}(A,B)} \times \sqrt{(A - B)}
\]

To obtain a bias score for each participant, my assistant and I performed the above calculations and entered each score into SPSS file variable named DAIAT score. The assistant and I compared their results and found that they were the same. I again used univariate analysis to look at the distribution, central tendency and dispersion of implicit bias about disability. A histogram was created to reflect the results of the DAIAT score variable. This distribution chart showed three distinct groups as opposed to the two (bias/no bias) that were described by the original authors, Pruett and Chan (2006). I recoded this variable to reflect the three distinct categories based on the scores observed in the histogram and called the new variable DAIAT3CAT. The bias scores were then renamed as high bias/low bias/no bias. Univariate analysis using distributions were then conducted with the DAIAT3CAT variable. Given the significance of a third category within the DA-IAT bias score a more in depth analysis of this result will be discussed in he Results Chapter of this document.
Once the individual analyses of the variable DAIAT3CAT were completed I wanted to determine any possible relationships or predictability between the DAIAT3CAT and any of the demographic and credibility variables. This was done using bivariate analyses; Chi-squares and One Way ANOVAs were calculated to compare these variables. Chi-Squares are used when there are two categorical variables while ANOVAs are implemented when one of the variables has three or more categories and the other variable is continuous. In this case Chi-Squares were used to compare the DAIAT3CAT (high bias/low bias/no bias) with the new discipline variable RevDisc, the Highestlev1 recoded level of training and the individual forensic interview training models. DAIAT3CAT Scores were also compared to the scenario the participant read using Chi-Square.

The results of the Chi-square assessment of bias and the scenario read showed no statistical significance but there was an interesting and potentially meaningful percentage differences. The participants who read Scenario D, the 5-year old child with a disability, percentage wise showed significantly different bias responses (38%) compared to those who read Scenarios A,B, and C, where the responses were evenly distributed (16%, 16% and 23% respectively). I wanted to examine this difference in more depth therefore I created a new variable Scenariod. Scenariod was recoded into a dichotomous variable Scenario D= 1 and Scenarios A,B,, and C = 0. Frequencies were run on the new variable and then a new Chi-square test was completed to see if there was a significant relationship between Scenario D and bias scores.

To consider relationships between the DAIAT3CAT and the continuous variables, ANOVAs were calculated. I then used this statistical test for comparing the bias score with variable FITNum (forensic interviews conducted with a child without a disability in the last
two years) and FITDisNum (the number of forensic interviews conducted with a child with a disability in the last two years).

**Data analysis of child credibility variable.**

The dependent variable that was analyzed and the control to the study was child credibility. Child behavior questions (13-18 and 21-23) were rated using a Likert scale making them continuous variables. Interviewer behavior questions used both categorical and continuous responses. Univariate descriptive statistics were conducted for each of both the child and interviewer variables. This included distribution, dispersion and central tendency functions.

Given the low numbers of responses in each of the cells, I decided to transform the individual child variables to increase the cell sizes and make the data more conducive to the appropriate statistical analysis (Bannon, 2013). One way to transform is to create a new variable by consolidating two similar variables. To do this, I created a revised memory variable (revmem) by combining memory and accuracy. Another approach to recoding data is to create dummy variables by converting the continuous variables in new dichotomous variable using yes/no options (Bannon, 2013). I used this process to convert all of the child variables (credible, revmem consistency, honesty, disclosed, suggestible, understand and believable) into dichotomous variables. These were then labeled reccred, recaccur, remem, recconsist, rechonest, recdisclose, recsuggest, recunderstand and recbelieve. In addition, it was necessary to use a reverse recoding for the recsugg because a high score has an inverse meaning therefore it was recoded to reflect this difference. Following appropriate statistical procedures, frequency distributions were run on each of these new variables.
In order to consider what variables might have an association, I realized that it would be appropriate to create two new variables; one that reflected all factors related to the child and one that was only about the interviewer’s behavior. I then transformed the variable by adding the following variables child’s memory (Recmem), child’s ability to be consistent (Recconsist), child’s believability (Reccred), child’s truthfulness (Rechonesty), and child’s suggestibility (Recsugg) and creating a new variable called Childvar2. A similar process was performed with all interviewer behaviors, whether the interviewer asked leading questions (Leading), questions were understandable (Understand), interviewer’s comfort level (Comfort), properly trained for interview (Adqtrain). Descriptive statistics using distribution, dispersion and central tendency were run on both of these new variables.

Bivariate statistics were computed with the Childvar2 and Intvar1 to consider any associations with the DAIAT3CAT, Scenario (the scenario participants read) or Revdisc. According to Bannon (2013) one way ANOVAs are used when one of the variables is categorical (Childvar2 or Intvar1) and the other variable is continuous (DAIAT3CAT, Scenario). Childvar4 was created to combine the dichotomized recoded 5 child items (revmem, recsugg, reccred, recconsist and rechonest) and an ANOVA was also calculated.

Finally, the two open-ended questions were organized according to themes and then described using direct quotes as examples of these themes.

The purpose of this study was to explore whether the independent variable implicit bias about disability existed in the target population of forensic interviewers and if it did was there a relationship between this independent variable and the dependent variable of child credibility? This data analysis plan systematically reviewed each variable using univariate analysis and then
using bivariate analysis considered associations/relationships between the variables. The results of this synthesis will be discussed in the next chapter.
CHAPTER IV: RESULTS

Before we discuss the findings of the study, we will first review what we already knew. This will allow us to put our results into context, and provide insight on how our results can add to the field of forensic interviewing and children with disabilities.

Children with disabilities are 1.8-3.4 times more likely to be victims of child sexual abuse (Sullivan & Knutson, 2000). Investigations into allegations of sexual abuse generally rely on a forensic interview conducted by specially trained professionals to determine the merit of the allegations. The believability of a child’s statements is heavily influenced by the forensic interview. It is crucial to properly train the interviewers to obtain the purest and most accurate statement from a child (Faller, 2007). Yet are children with disabilities gaining access to the same quality interview as children without a disability? Is it possible that forensic interviewers either knowingly or unknowingly hold biases about children with disabilities? If so, could this influence how they conduct and evaluate the interview?

As described earlier in this paper, implicit bias is defined as a set of ambivalent beliefs about a person or a group of people that exist across different ethnic groups including race, religion, sexual orientation, physical disorders and disabilities (Lam, Tsang, Chan, & Corrigan, 2006). According to Dovidio and Gaertner (2010), personal denial of prejudice may co-exist with unconscious and negative feelings and beliefs. These subtle, unintentional forms of discrimination may appear as nonverbal behavior and negative decision-making choices in complex situations (Penner et al., 2010). In general society, implicit bias about disabilities has been shown to exist in all facets of life, including school, work and even in the courts.

The literature also acknowledges that interviewers may have their own biases; however, there is little evidence of how this might affect the outcome of the interview. Panghorn (2009)
and Bruck and Ceci (1999) report that forensic interviewers can demonstrate confirmatory bias that leads a child to substantiate the interviewer’s expectations; the same effect may prevent the interviewer from asking about alternative explanations. Other researchers demonstrated that forensic interviewers have the potential to hold biases toward children with disabilities for various reasons (Mansell et al., 1998, Cederborg & Lamb, 2006, Milne & Bull, 2006), though no one has specifically considered whether forensic interviews actually hold such a bias. Is it possible that forensic interviewers might be susceptible to unconscious feelings or beliefs about children with disabilities? This study seeks to determine whether forensic interviewers are subject to these implicit thoughts.

Another important question is whether implicit bias could influence decision making about the child’s credibility. According to Azar and Goff (2007), subtle forms of bias can interfere with professional decision-making. As stated earlier, factors that can influence credibility decisions can involve both child characteristics and interviewer characteristics. This research considered both factors, examining if it correlates to potential implicit bias about disabilities.

These questions are rooted in disability theory. Siebers (2010) explained that disability is a socially constructed concept that aims to limit access to services to specific individuals. This theory further highlights the notions of societal injustice and oppression as well as lack of access to services for people with disabilities.

Measuring bias about disability can be challenging, in part because of social desirability; people do not wish to be associated with negative beliefs considered unacceptable. As discussed in the literature review, there have been multiple attempts to develop a sensitive, reliable and valid assessment tool to measure this phenomenon, though with limited success. Pruett and
Chan (2006) created an implicit standardized measure called the Disability Attitude Implicit Association Test (DA-IAT). As mentioned previously, the DA-IAT was an adaptation from another implicit bias measure called the Implicit Association Test developed by Greenwald, McGhee and Schwartz, (1998). I chose the DA-IAT because of its ability to tap unconscious beliefs about disability without social desirability concerns; the DA-IAT has also previously been established as having reliability and validity.

Given the limited information available on forensic interviewers in child sexual abuse investigations, this exploratory study was undertaken to determine whether forensic interviewers held implicit biases about disabilities; and if they did, whether it could influence their decision-making about the believability of a child. These concepts were studied using a quantitative methodology that also included descriptive data analysis. Specially trained forensic interviewers completed an online survey; they were asked to read one scenario and respond to questions about the believability of the child. They were then asked to complete an adapted standardized measure about implicit bias about disabilities. The results of the survey will be presented in this chapter.

The results will indicate whether and how the three variables impact each other: the demographic information describing the target population; the implicit bias about disability variable; and the child credibility variable. The demographic information about the participants included the professional background of the interviewer (discipline), the length of time participants have conducted forensic interviews and the protocol and level they were trained in their experience interviewing children with disabilities. Implicit bias about disabilities was measured using a standardized measure call the Disability Attitude Implication Association Test (DA-IAT) established by Pruett and Chan (2006). Finally, the credibility of a child was measured by responses to questions about the different components that define child credibility.
including child characteristics and interviewer behavior. The univariate analysis of each variable will be presented first, followed by the bi-variate analysis of each of the variables.

**Demographic Variables**

Using descriptive data analysis, the forensic interviewer population initially had an N=263. However, once the missing data was removed, the sample size became n=229. Overall, the sample included participants who were well trained, appeared to be seasoned forensic interviewers of children and had worked in their respective field for a significant amount of time. A summary of the sample’s make-up is shown on below.

The professional background of the forensic interviewer was initially divided into six categories: independent interviewer; child protective services workers; police detectives; prosecutors (criminal court); prosecutor (family court); and other. See the breakdown in Figure 1. The largest group of interviewers identified themselves as Independent interviewers (39.3%; n=90), suggesting that they are likely forensic interviewers not connected to another investigative body such as child protection or law enforcement. The smallest groups represented were prosecutors from both Family and Criminal court, accounting for .4% (n=1) and 2.6% (n=6) respectively. Child Protection workers and other each accounted for approximately one fifth of the target population and police represented 13% (n=30). While all of the disciplines were represented in the sample, some of the cells were so small that I chose to dichotomize this variable into two distinct disciplines; those connected to the court and those not. Court personnel were considered all of the disciplines except for independent interviewers and others. Child Protective Services was included in the court personnel because of their investigative role during the forensic evaluation process. The result of this new variable (Revdisc) is shown below in Figure 2.
The participants were asked about their own experience in interviewing children in child sexual abuse investigations in the past two years. Table 1 shows these results. Thirty percent
(n=67) of the participants reported that they conducted 200+ forensic interviews with children without a disability, while sixty nine percent (n=153) reported 1-25 interviews of children with a disability -- only 1% reported doing 200+ interviews. This suggests that, while the forensic interviewers were experienced interviews, they had significantly less experience interviewing children with a disability.

Table 1

<table>
<thead>
<tr>
<th>Descriptive Analysis Forensic Interview (FI)s Done with Children with and without Disabilities</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of FI’s with children with no disability (N=222)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 25</td>
<td>55</td>
<td>25.5</td>
</tr>
<tr>
<td>26 – 100</td>
<td>59</td>
<td>27.3</td>
</tr>
<tr>
<td>101 – 200</td>
<td>35</td>
<td>16.2</td>
</tr>
<tr>
<td>200+</td>
<td>67</td>
<td>31.0</td>
</tr>
<tr>
<td>Number of FI’s with children with disability (N=213)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 25</td>
<td>153</td>
<td>71.8</td>
</tr>
<tr>
<td>26 – 100</td>
<td>52</td>
<td>24.4</td>
</tr>
<tr>
<td>101 – 200</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>200+</td>
<td>2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Forty seven percent of the respondents reported conducting interviews for over five years while thirteen percent of the interviewers reported less than one year. See Table 3.
The interviewers’ highest level of training was almost evenly distributed with forty six percent completing the basic interviewer training and forty nine percent obtaining advanced training. See Table 2. This indicates that the forensic interviewers in this sample were adequately trained regarding interviewing practices in general yet when referring to interviews with children with
disabilities their experience declined. This is concerning since children with disabilities are more likely to be victims of child sexual abuse. The participants were also asked where they received their training. Six different protocols are identified Figure 3 demonstrates this breakdown. It is not surprising that the largest group was trained at NCAC since participants were recruited from NCAC’s mailing list. The other training organizations were fairly evenly represented with the exception of APSAC and NICHD, which account for five percent it total. Once this variable was dichotomized into basic and advanced training, the distribution was close to even: 46% were trained in the basic level and 48% were trained in advanced interviewing skills. The other 5% represented missing data.

Figure 3: Forensic Interview Model Training Among Sample Population

I also analyzed the data to determine if any relationship(s) existed between the demographic variables and the independent (implicit bias) and dependent variables (child credibility). These will be discussed in the following section.
Implicit Bias about Disability Variable

As described earlier, the DA-IAT instrument was utilized to evaluate and categorize levels of bias about disabilities. A bias score is obtained by calculating the correct responses to congruent and incongruent statements using an algorithm designed by the authors (Pruett & Chan, 2006). In order to achieve this bias score, there must be an equal number of congruent and incongruent questions. Due to researcher error as presented earlier in this paper, this did not occur. Therefore I had to apply a statistical correction, which involved computing a Factor Analysis of each of the questions on the DA-IAT. A Component Matrix was developed statistically extracting nine factors, with most of the DA-IAT questions falling into the first two factors. The questions were then loaded into only these two factors and questions with scores >.4 were eliminated. This process produced 14 congruent and 14 incongruent questions creating the Adapted DA-IAT. To test reliability of this new measure, Cronbach’s Alphas were run on both the congruent and incongruent questions as well as on each question if it was deleted. See Table 4. Congruent and incongruent questions were considered reliable with Cronbach’s Alpha scores of .907 and .795 respectively. In addition, the complete Adapted DA-IAT showed reliability with a score of .776; therefore the Adapted DA-IAT is considered a reliable measure of the implicit bias about disability variable. These results are shown in Table 4. Once this was accomplished a bias score could be obtained for each participant.
Using Pruett and Chan’s algorithm described earlier, bias scores were calculated, entered into SPSS and labeled. Frequencies, central tendencies and distributions of bias scores were then run for all participants (n=146). Once missing data was eliminated, n=146. The mean score was 6.387 with a SD of 4.6. A histogram shows the distribution using a normal distribution curve. As one can see from this diagram, the peak of the distribution curve is empty and there are three distinct categories of responses with one group on each side of the peak and a third cluster that is not homogenous to either of the other two groups in the middle. This result differs from Pruett and Chan, whose results demonstrated bi-modal results, bias or no bias. My results suggest that there is a tri-modal finding, with three distinct and separate categories. This led I to consider whether implicit bias about disability can better conceptualized on a continuum, rather than the “bias/no bias” scale that Pruett and Chan described in their 2006 study. Based on this new approach, I recoded the bias scores into three categories and labeled the new variable DAIAT3CAT. Three categories were then created using the following breakdown: Category 1 (high bias)-8.40-1.76; Category 2 (low bias) 2.0-7.84; and Category 3 (no bias) 8.4-15.5. The High, Low and No bias groups were defined as roughly one standard deviation from the mean score. In other words, the Low Bias group was individuals that were roughly one standard

<table>
<thead>
<tr>
<th>Adapted DA-IAT Questions</th>
<th>n</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incongruent Questions</td>
<td>14</td>
<td>.907</td>
</tr>
<tr>
<td>Congruent Questions</td>
<td>14</td>
<td>.795</td>
</tr>
<tr>
<td>Congruent + Incongruent</td>
<td>28</td>
<td>.776</td>
</tr>
</tbody>
</table>
deviation from the mean score, the No Bias were those that were more than one standard deviation above the mean and High bias group were those that were more than one standard deviation below the mean. Frequencies and distributions were then performed on the new variable DAIAT3CAT. In the trichotomized variable, the breakdown was as follows: While the High bias (DAIAT3CAT) category was similar to Bias (DAIAT) with the $n=18$, the differences between the other two categories was significant with Low bias having $n=60$ and No bias having $n=68$, compared to $n=128$ in the No bias group on the DAIAT. Figures 4 and 5 show these distributions using a Histogram format.

![Histogram of DAIAT scores](image)

Figure 4: Distribution of the DAIAT scores
After completing the univariate analysis of the DAIAT3CAT variable, bivariate analysis was performed to evaluate possible associations between the DAIAT3CAT and the demographic variables.

Tables 5, 6 and 7 present the chi-square analyses. Chi-square was used in evaluating the relationships between DAIAT3CAT and Revised discipline variable (RevDis), model trained (Numtrain) and level of training (HighestlevRec). See Table 3. While there were no significant results regarding most of the variables, the revised discipline variable showed a trend that is
noteworthy with a significance of .053. These results demonstrate that in the least bias category (Cat 3), seventy six percent of those participants identified themselves as non-legal interviewers compared to only twenty four percent in the legal group. This suggests that the legal system interviewers are the least represented in the no bias category. In the literature, bias about disabilities has been previously demonstrated in the legal arena (Cederborg & Lamb, 2006; Nathanson & Platt, 2005) as well as in child protection (Manders & Stoneman, 2009); both Child Protective workers and attorneys are represented in the current study’s legal group. These professionals demonstrated a trend toward bias in their roles as forensic interviewers. This finding lends additional credence to the notion that some level of bias about children with disabilities exists for some forensic interviewers.

Table 5

*Chi-Square Analysis of Revised Discipline by Bias Score (N = 146)*

<table>
<thead>
<tr>
<th>Revised Discipline</th>
<th>High Bias (n = 18)</th>
<th>Low Bias (n = 60)</th>
<th>No Bias (n = 68)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Court Pers. (n = 49) Row</td>
<td>14.3%</td>
<td>53%</td>
<td>32.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Other (n = 97) Row</td>
<td>11.3%</td>
<td>35.1%</td>
<td>53.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Note.* $\chi^2 (2, N = 146) = 5.68, p = .053.$

123
Table 6

Chi-Square Analysis of Training Model and Bias Score (N = 146)

<table>
<thead>
<tr>
<th>Training Model</th>
<th>DA-IAT Bias Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Bias (n = 18)</td>
</tr>
<tr>
<td>NCAC (n = 99)</td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>13.1%</td>
</tr>
<tr>
<td>Column</td>
<td>72.2%</td>
</tr>
<tr>
<td>CornerHouse (n = 29)</td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>10.4%</td>
</tr>
<tr>
<td>Column</td>
<td>16.7%</td>
</tr>
<tr>
<td>NCPTC (n = 5)</td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>0%</td>
</tr>
<tr>
<td>Column</td>
<td>0%</td>
</tr>
<tr>
<td>State Protocol (n = 7)</td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>0%</td>
</tr>
<tr>
<td>Column</td>
<td>0%</td>
</tr>
<tr>
<td>Other (n = 6)</td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>16.7%</td>
</tr>
<tr>
<td>Column</td>
<td>5.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note. $\chi^2(8, N = 146) = 1.829, p = .986.$
Table 7

*Chi-Square Analysis of Training Level by Bias Score (N = 140)*

<table>
<thead>
<tr>
<th>Training Model</th>
<th>DA-IAT Bias Score</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Bias (n = 18)</td>
<td>Low Bias (n = 60)</td>
</tr>
<tr>
<td>Basic (n = 68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>13.2%</td>
<td>33.8%</td>
</tr>
<tr>
<td>Column</td>
<td>50%</td>
<td>38.3%</td>
</tr>
<tr>
<td>Advanced (n = 72)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>12.5%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Column</td>
<td>50%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note. $\chi^2 (2, N = 140) = 3.371, p = .185.*

One Way Analysis of Variance (ANOVAs) was used to examine potentially significant relationships between implicit bias about disabilities and the demographic variables. Next, One way Analysis of Variance (ANOVAs) was performed to determine associations between DAIAT3CAT (used as categorical and continuous in this section) and the continuous demographic variables, the number of interviews conducted with children without a disability (FITNum), number of interviews conducted with a disability (FITDisNum), and the length of time conducting forensic interviews (FITime). See Tables 8 and 9. The results indicated that there was not a statistically significant mean score among the three categories of bias, and therefore no relationship between any of these variables. However, the breakdown of those in each DAIAT3CAT groupings High Bias, Low Bias and No Bias was similar across these specific variables. This supports the concept that this third category, Low Bias exists and has separate characteristics from the other two bias categories, Bias and No Bias. I chose to look
more in depth at the High Bias group and found that those participants in the High Bias group who conducted the fewest number of interviews with children with disabilities (1-25) had the largest number of participants representing seventy-two of the total in the High Bias group.

Table 8

_Bivariate Analysis of Variance of Bias Scores and Forensic Interviews Children with and without Disability_

<table>
<thead>
<tr>
<th>Variable</th>
<th>$n$</th>
<th>$M(SD)$</th>
<th>$t/F(df)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of FIs with CWDs</td>
<td>144</td>
<td>1.45(.640)</td>
<td>.136 (2, 141)</td>
<td>.873</td>
</tr>
<tr>
<td>Number of FIs Child without Disability</td>
<td>146</td>
<td>2.43(1.17)</td>
<td>1.28 (2, 142)</td>
<td>.281</td>
</tr>
</tbody>
</table>

Table 9

_Bivariate Analysis of Variance Length of Time Conducting Forensic Interviews and Bias Scores (N=145)_

<table>
<thead>
<tr>
<th>Length of Time Conducting FIs</th>
<th>$n$</th>
<th>$M(SD)$</th>
<th>$t/F(df)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>22</td>
<td>2.27(.767)</td>
<td>.214 (2, 142)</td>
<td>.787</td>
</tr>
<tr>
<td>13 months-5 year</td>
<td>53</td>
<td>2.33(.677)</td>
<td></td>
<td>.</td>
</tr>
<tr>
<td>Over 5 year</td>
<td>70</td>
<td>2.38(665)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Bias scores (DAIAT3CATS) were also compared with each of the scenarios read by the participants. It is important to remember that participants were randomly assigned to a scenario and that the scenarios were paired by age but not by disability; there were two scenarios with children 5 and 10 years old where one of the pairs had an identified disability and the other
had no disability. When Chi-Square tests were conducted, the results showed no statistically significant differences amongst scenarios. However, there were large percentage differences, specifically in Scenarios C and D. Both Scenarios C and D had a 5-year old child; however the child in Scenario D had an identified disability and the child in C did not. Scenario D (child with disability) had the largest number of participants in the High Bias category (39%) compared to Scenario A, B and C who had 17%, 17% and 28% respectively. Scenario B and C are homogeneous, limiting the ability to show statistical differences because of the small numbers in each cell. I wanted to dissect this further and decided to isolate Scenario D. I created a new compressed variable called Scenariod and compared this to the DAIAT3CAT variable using the Chi-square test. See Table 10. A statistically significant score was found, suggesting that when an interviewer is aware of a child’s disability, implicit biases about disabilities may be present. One must consider why this did not occur in the older child with a disability (Scenario A) and whether the young age of the child also had an impact on the bias score. Based on this notion, I chose to look at the age factor using Scenario C, which described a young child (age 5) without a disability. See Table 11. Using a similar method, Chi-square tests were conducted with Scenarioc and DAIAT3CAT; no significant differences were found. This suggests that the age factor was not responsible for the significant finding in Scenariod, implying that it was the identification of the disability rather than age that affected the bias score. This information is consistent with findings in the literature about confirmatory interviewer bias by Panghorn (2009) and Bruck & Ceci, (1999), and demonstrates that when children with disabilities are identified, forensic interviewers can show some level of implicit bias. There seemed to be a significantly higher proportion of participants who read Scenario D and were in the High Bias group. There
was a significantly lower proportion of people who read Scenario D in low bias category. See Table 12.

Table 10

*Chi-Square Analysis of Scenario D by Bias Score (N = 146)*

<table>
<thead>
<tr>
<th>Revised Discipline</th>
<th>High Bias (n = 18)</th>
<th>Low Bias (n = 60)</th>
<th>No Bias (n = 68)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Scenario D (n = 99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>11.1%</td>
<td>48.5%</td>
<td>40.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Column</td>
<td>61.1%</td>
<td>80%</td>
<td>58.8%</td>
<td></td>
</tr>
<tr>
<td>Scenario D (n = 47)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row</td>
<td>14.9%</td>
<td>25.5%</td>
<td>59.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Column</td>
<td>38.9%</td>
<td>20%</td>
<td>41.2%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* $\chi^2 (2, N = 146) = 6.97, p = .031.$

**Child Credibility Variable**

During a forensic interview, the interviewer needs to determine whether the child’s statements about the allegations of child sexual abuse are believable. There are a variety of factors that can influence this decision. Some are related to child characteristics, while others pertain to the interview itself. Child characteristics refer specifically to what the child says and how they behave in the interview. These can include cognitive ability and honesty, memory, suggestibility, consistency of the responses (Connolly et al., 2007) and others’ perception of the child’s trustworthiness (Bottoms, Nysee-Carris, Harris, & Tyda, 2003).
Table 1

**Chi-Square Analysis of Bias Scores and Scenario C (N = 146)**

<table>
<thead>
<tr>
<th>Bias Score</th>
<th>Not included (n = 126)</th>
<th>Included (n = 18)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Bias</td>
<td>13</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>% within Bias Score</td>
<td>72.2%</td>
<td>27.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Low Bias</td>
<td>43</td>
<td>17</td>
<td>60</td>
</tr>
<tr>
<td>% within Bias Group</td>
<td>71.1%</td>
<td>28.3%</td>
<td>100%</td>
</tr>
<tr>
<td>No Bias</td>
<td>58</td>
<td>10</td>
<td>68</td>
</tr>
<tr>
<td>% within Bias Group</td>
<td>85.3%</td>
<td>14.7%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Note: $\chi^2(2, N=146)=3.871, p=.144$*

Table 12

**Bivariate Analysis of Variance Forensic Interviews with Child with Disability and the High Bias Category (N=144)**

<table>
<thead>
<tr>
<th>Number of FIs CWDs</th>
<th>n</th>
<th>$M(SD)$</th>
<th>$t/F(df)$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-25</td>
<td>103</td>
<td>.126(.333)</td>
<td>1.39 (3, 140)</td>
<td>.248</td>
</tr>
<tr>
<td>26-100</td>
<td>34</td>
<td>.088(.287)</td>
<td></td>
<td>.248</td>
</tr>
<tr>
<td>101-200</td>
<td>5</td>
<td>.044(547)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200+</td>
<td>2</td>
<td>.000(.000)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other factors focus on the quality and style of the interview and individual characteristics of the interviewer: question type, knowledge about disabilities, and the role of the interviewer and their potential bias. These child and interviewer/interview dynamics were described in detail in Chapter 2. From the literature, we know that both child and interviewer characteristics can influence the believability of the child. For this study, I focused on the type of question used by the interviewer, the comfort level of the interviewer, training of the interviewer and their knowledge about child development/disability.

Studying questions around child maltreatment can offer methodological challenges due to the sensitive nature of the issue itself as well as potential risks posed to a child. Vignettes offer an alternative. Vignettes offer real life situations, such as child abuse or medical emergencies without having an actual real victim. Vignettes have been used positively in determining credibility and believability of a victim, and have been used to study the impact of a child’s disability and credibility and blame (Podell, Kastner & Kastner, 1996; Rogers, Titterington & Davies, 2009). There are also studies that assess mock jurors’ beliefs about credibility (Bottoms, Nysee-Carris, Harris, & Tyda, 2007; Davies & Rogers, 2009; Peled, Iarocci, & Connolly, 2004). Identifying unconscious racist behaviors is another example when vignettes have proved useful (Dovidio & Gaertner, 2002; Penner, Dovidio, West Gaertner, Albrecht, Daily & Markova, 2010).

Based on the above information, I chose to use vignettes. There were four vignettes in the study and the participants were randomly referred to one of the vignettes. This section will provide the results; specifically, did any of the child and/or interview variables that influenced the dependent variable, child credibility?

Participants were asked whether they believed the allegation of sexual abuse. The results showed that 100% of the participants believed the child’s statements regardless of age or
disability. This result was surprising since each of the four scenarios was different. However, I analyzed the child characteristics and interviewer dynamics individually and then in combination. Finally these variables were then compared to the bias scores.

Descriptive analysis was conducted on each of the child characteristics; Believability, Accuracy, Credibility, Memory, Consistency, Truthfulness, Misunderstood, Lying, and Suggestible including frequencies, distribution and dispersion. I chose to recode each of these continuous variables into dichotomous ones (yes/no), and ran frequencies and distributions. None of the child related variables showed a relationship with the bias score or scenario (disability/no disability). Based on this result, I opted to combine the five factors identified in the literature that pertain to credibility, memory, consistency honesty, suggestibility and believability and create a new variable: categorical level of child believability in the interview (the variable was computed by dichotomizing and summing the score). The second variable was the continuous level of child believability (measured as the summing of the Likert scores for each item). Using both a categorical and continuous measure of child believability allowed me to determine if there was any relationship between the levels of child believability and the bias scores. ANOVAs were computed to determine if there was a relationship between the child variables and the scenario read. The results showed that there was no significance with the dichotomized level of child believability (Childvar4). However, using the continuous level of child believability variable (Childvar5), there was a significant result. Refer to Tables 13 and 14. The outcome of this ANOVA yields information about how the forensic interviewer understood the child in the scenario. First, the mean scores for all the scenarios was close to the middle of the scale, implying that overall the forensic interviewers found the child to be believable. In addition, the mean score for Scenario B and C showed significant differences, with the score for
Scenario C being higher than Scenario B; there was no significant difference between Scenarios A and B and C. It is important to remember that Scenario A had the child with the disability and neither Scenario B or C had a child with a disability. Participants who read Scenario D, with the five-year old child with the disability did not have the choice to respond to these questions.

Table 13

Bivariate Analysis of Variance Continuous Child Variable and Scenario Read (N=131)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M(SD)</th>
<th>t/F(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>39</td>
<td>8.0(1.85)</td>
<td>3.11(2, 128)</td>
<td>.048</td>
</tr>
<tr>
<td>Scenario B</td>
<td>45</td>
<td>7.33(1.72)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario C</td>
<td>47</td>
<td>8.27(1.94)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14

Bivariate Analysis of Variance Dichotomous Child Variable and Scenario Read (N=126)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>n</th>
<th>M(SD)</th>
<th>t/F(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>38</td>
<td>3.6 (.718)</td>
<td>.32(2,124)</td>
<td>.968</td>
</tr>
<tr>
<td>Scenario B</td>
<td>44</td>
<td>3.58(723)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario C</td>
<td>44</td>
<td>3.57(.586)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These results suggest that a child’s age may also influence a forensic interviewers’ decision-making about the child’s believability. In the literature, the age of the child has not consistently been viewed as a factor influencing the child’s credibility. For example, Goodman
(1987) found that jurors were less likely to convict a person when the testimony was from a 6-
year old child as opposed to a 10-year old, and Nightingale (1993) found that older children’s
testimony more often produced guilty verdicts. On the other hand, Castilli, Goodman and Ghetti
(2005) found that mock jurors in a child sexual abuse trial were not influenced solely by the age
of the child.

The literature shows that factors such as interview environment, interviewer style and
interviewer characteristics affect the people’s perception of the child’s believability in child
abuse investigations (Catelli, Goodman & Ghetti, 2005; Saywitz, Goodman & Lyon, 2002). The
interactions between the interviewer and the child as well as the way the interview is conducted
play an important role in how the child is viewed by others. To consider questions about the
impact of the interview style and interviewer characteristics, I conducted descriptive statistical
analysis on the four interview and interviewer characteristics, type of questions asked,
developmentally appropriate questions, comfort level of the interviewer, and proper preparation
for the interview.

Descriptive analysis was conducted on the four interview variables. See Table 15. For all
interview related factors \( n=136-138 \), depending on the specific question. It is important to
remember that as part of the study design, participants assigned to Scenario D did not have the
option to respond to these questions, so 25\% of the total sample was eliminated. Respondents
were asked whether interviewer led the child (possible answers: yes/no/other). For this question
\( n=138 \). The results showed that 80\% of the responders did not feel the interviewer led the child,
7\% felt that the interviewer did lead the child, and 13\% answered Other. Participants were able
to add comments following this question and \( N=19 \). Of those answers given, 63\% thought that
the format of the scenario limited their decision making about leading since the complete
interview was not provided, 17% commented specifically about how a particular question was asked by the interviewer and two responders indicated they did not feel the interview was leading. The mean score for this factor was 2.07 in a range of 1-3. This suggests that, overall participants did not believe the interviewer was leading the child.

The second interview factor concerned the developmental appropriateness of the questions posed by the interviewer for the child in the scenario they read. For this question, participants were asked to rank the developmental accuracy of the question from 1 (most developmentally inappropriate) to 4 (most developmentally appropriate). Sixty two percent of the responders felt that the questions were somewhat appropriate for the child’s developmental level, 26% felt they were developmentally appropriate for the child described in the scenario and 11% felt that the questions were somewhat inappropriate for the child’s developmental level. The Mean score was 1.86 with a Standard Deviation of .623. This score suggests that the participants felt that the interviewer’s questions were developmentally appropriate.

As for interviewer comfort level, participants were asked to rate their own comfort level interviewing a child with a disability with 5 being most comfortable and 1 being least comfortable. On this self-rating scale, almost half of the respondents reported being comfortable/somewhat comfortable, 10% very comfortable and 5% reporting being uncomfortable. The mean was 3.66 and the standard deviation was .853. This suggests that the interviewer felt quite comfortable interviewing children with disabilities.
Table 15

*Descriptive Analysis of Forensic Interviewer Characteristics*

<table>
<thead>
<tr>
<th>Forensic Interviewer Led the child (N=138)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10</td>
<td>4.5</td>
</tr>
<tr>
<td>No</td>
<td>108</td>
<td>48.6</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>9.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forensic Interviewer’s questions developmentally appropriate (N=136)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly developmentally appropriate</td>
<td>36</td>
<td>26.5</td>
</tr>
<tr>
<td>Somewhat developmentally appropriate</td>
<td>84</td>
<td>37.8</td>
</tr>
<tr>
<td>Somewhat developmentally inappropriate</td>
<td>15</td>
<td>6.8</td>
</tr>
<tr>
<td>Clearly developmentally inappropriate</td>
<td>1</td>
<td>.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forensic Interviewer’s Comfort Level interviewing a child with a disability (N=137)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Least comfortable</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>4.1</td>
</tr>
<tr>
<td>3</td>
<td>48</td>
<td>21.6</td>
</tr>
<tr>
<td>4</td>
<td>57</td>
<td>25.7</td>
</tr>
<tr>
<td>5 Most comfortable</td>
<td>22</td>
<td>9.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forensic Interviewer adequately trained to conduct interviews with children with disability (N=136)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>67</td>
<td>30.2</td>
</tr>
<tr>
<td>No</td>
<td>69</td>
<td>31.1</td>
</tr>
</tbody>
</table>

Finally training level was reviewed using an $n=136$. In this question, participants were asked whether they felt adequately trained to conduct interviews with children with disabilities; the choices were yes/no and then a section for comments. The results showed that half the
sample felt adequately prepared and half did not. I was surprised by the large number of participants who did not feeling properly prepared for this type of interview given that most of the participants endorsed feeling comfortable conducting interviews with CWDs. The comments were organized according to themes and the N=121, which meant that almost everyone added a comment about what they thought would improve their skill level for conducting these interviews. Forty three percent of the comments related to additional training, 26% to desire for additional experience/practice, 13% to the need for additional knowledge about disabilities, 13% wanted more information about the specific disability in the vignette before the interview and 1% commented that they were comfortable interviewing CWD. These results support the importance of providing not only information about how to conduct interviews with CWD but also opportunities to practice these skills and understand the specific issues for various disabilities.

I then conducted bivariate analysis to consider whether there was an association between the scenario read and the level of believability of the child. An ANOVA was performed to examine that relationship. The results showed a significant relationship between the interviewer variables and scenario read. See Table 16. To be sure that this result was a true finding and not related to outliers, I conducted tests of normality. These scores were significant at the .000 level indicating that this was a normal distribution and therefore a true finding. This suggests that the interviewer is affected by information about a child’s age and disability. However, since Scenario A is about a 10-year old child with a disability and Scenarios B and C are about children without a disability of differing ages, this further suggests that disability influences the interviewer of a child with a disability. The literature describes that forensic interviewers can be influenced by information obtained prior to an interview (Ceci & Bruck, 1994; Milne & Bull,
2006; Panghorn, 2009), but has not specifically addressed a child’s developmental ability before the current study.

Table 16

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M(SD)</th>
<th>t/F(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario A</td>
<td>40</td>
<td>9.35(1.14)</td>
<td>12.6(2,132)</td>
<td>.000</td>
</tr>
<tr>
<td>Scenario B</td>
<td>47</td>
<td>8.42(1.09)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario C</td>
<td>48</td>
<td>9.50(1.11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>9.08(1.20)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I wondered whether this influence might be related to the interviewer’s comfort level interviewing CWD. To test this possibility, I conducted an ANOVA to compare Comfort level and bias scores and found no relationship. See Table 17. This result may be related to the fact the participants rated their own level of comfort based on only one question and that this could be dissected further with a more sensitive measure of comfort.

Table 17

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M(SD)</th>
<th>t/F(df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Bias</td>
<td>11</td>
<td>83.82(.874)</td>
<td>.830(2, 96)</td>
<td>.439</td>
</tr>
<tr>
<td>Low Bias</td>
<td>48</td>
<td>3.71(.771)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Bias</td>
<td>40</td>
<td>3.53(.847)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary of Results

To summarize, this exploratory study found five significant findings related to implicit bias, forensic interviewers and the believability of a child. First, there was data to support the notion that implicit bias does exist in the sample population. The instrument used to measure implicit bias, DA-IAT, had previously been considered a dichotomous measure; people either had bias or no bias. The results of this study demonstrated that implicit bias should be viewed as on a continuum with participants falling into three identified categories (High Bias/Low Bias/No Bias). The three groups, especially the Low Bias group appears to have separate and distinct characteristics than the other two categories, High Bias and No Bias. The second finding supported other studies related to implicit bias and disabilities. This study noted a trend that forensic interviewers with legal/investigative backgrounds were more likely to be in the High bias category than those who identified themselves as independent/other interviewers. The third finding was that while none of the child characteristics assumed to be associated with credibility showed any significance, interviewer attributes did show a significant relationship to credibility. To further explore this I attempted to identify whether a forensic interviewer’s comfort level specifically influenced the decision-making regarding child believability; this relationship was not substantiated. I opted to consider comfort level because the literature identified it as a potential factor that influenced bias about disabilities but my findings did not support this assumption. Finally, the results of this study showed a significant relationship between the identification of a child’s disability and the interviewer’s bias score. With advanced knowledge about a child’s disability status, implicit bias about disabilities asserts itself. Further research is needed to see if this finding stands up to additional scrutiny and whether this bias may impact the decision-making process about child credibility. The final study finding concerned the open-
ended responses about whether forensic interviewers felt adequately trained to interview children with disabilities and what would increase their preparation. Their comments were reviewed and organized according to themes. The majority of the participants desired more opportunity for practicing these skills and additional training around interviewing children with disabilities. One interesting response to this question was that the participants generally wanted more knowledge about these interviews coupled with the opportunity to practice these skills as opposed to simply needing more general information about the specific disabilities.
CHAPTER V: DISCUSSION

Summary of This Research Project

This research project considered two potentially intersecting phenomenon regarding forensic interviewers: implicit bias about disabilities and decision-making about the credibility of a child. Do forensic interviewers hold implicit biases toward people with disabilities? If so, could this influence whether a forensic interviewer finds a child with a disability believable? Although bias about disabilities has been studied in various populations, it has never been considered among forensic interviewers. The results of this study have significant relevance for the field of child abuse in general and forensic interviewing in particular, since children with disabilities are at higher risk for child sexual abuse and the investigations of these allegations frequently depend on forensic interviews. Researchers have studied how to make forensic interviews neutral and objective, minimize the potential for suggestibility, understand the developmental and cultural needs of the children and elicit the most accurate child’s narrative. Furthermore research regarding interviewer confirmatory bias has also been conducted, yet to date no one has considered whether forensic interviewers hold bias about disabilities. Determining whether this phenomenon exists could have implications for the way children are interviewed and the specialized training offered to forensic interviewers.

Investigations of child sexual abuse are challenging for any forensic interviewer, but particularly when the allegations involve a child with a disability. In most situations, the investigators are dependent upon a child’s disclosure of abuse since there is rarely any physical evidence. As discussed in this paper previously, the forensic interview is a critical investigative tool used in the analysis and determination of child abuse cases. The goals of the interview are to reduce the potential influences to a child’s memory, increase the accuracy of the child’s
information while responding to the child’s developmental level and to reduce the potential for coercive or leading questioning (Persona, et. al, 2006).

Forensic interviews can be affected by many dynamics. Previous research has established the impact of many child-based factors upon a forensic interview; however, less attention has been devoted to interviewer attributes. Panghorn (2009) and Bruck and Ceci (1999) have recognized that interviewers hold biases about cases that can change the outcome of a forensic interview. The focus of those studies has related to a priori information provided to the interviewer about the nature of the case. In these situations, the information provided to the forensic interviewer before the interview begins can impact the questions asked by the interviewer and the hypotheses the interviewer considers during the interview resulting in the outcome of the interview. Is it possible then that forensic interviewers can be influenced by other preconceived notions such as beliefs and attitudes about children with disabilities?

It has been well documented that in general society holds negative beliefs about people with disabilities. Research discussed earlier in this paper has shown that these attitudes are present in particular groups of people that interface with child sexual abuse investigations, including attorneys and child protection workers. To date, no one has studied if those professionals in their role as forensic interviewers in these investigations may also hold these biases. While forensic interviewers are conscious that some elements might affect an interview outcome, such as question type and rapport building, are they aware of their own potential for implicit bias about disabilities? Furthermore, are they given the opportunity during the training to consider their beliefs or attitudes toward this population?

To examine the two research questions described above, I undertook a quantitative exploratory study. Prior to commencing the study, in accordance with Silberman School of
Social Work and the Graduate Center of City University of New York (CUNY), I obtained Institutional Review Board (IRB) approval. I then developed an online survey that combined use of vignettes, a standardized measure and questions related to child credibility. Specifically, on the survey participants were asked to provide some demographic information about their background and training, read a scenario about a child’s disclosure of child sexual abuse, and respond to questions about the believability of the child; I created these questions based on other research on child credibility. All participants then completed an adapted version of the Disability Attitude Implicit Association Test (DA-IAT) that measures implicit bias about disabilities. I chose Survey Monkey to publish this query as it provided the most flexibility around the question types and options. For example, of all the online survey sites, only Survey Monkey was able to randomly assign participants to one of four possible scenarios. The survey was available to potential participants for five weeks beginning in June 2013 until the end of July 2013.

Participants were recruited from the electronic mailing list of the National Children’s Advocacy Center (NCAC) in Huntsville Alabama. This organization is a prominent training site for many professionals involved in child abuse investigations, including forensic interviewer training. NCAC published a link to this study in their monthly newsletter In the Loop, and then sent out an individual email blast to its membership. Participants had to meet minimum criterion to participate: they had to conduct forensic interviews in child abuse investigations, had to be trained in one of six possible interview models, and have access to the Internet to complete the survey. Informed consent was obtained electronically by having potential participants read a detailed letter on the survey site regarding the study and explaining what their participation involved. Participants who chose to continue clicked on the yes response button that brought
Participants were shown one of four vignettes about children who disclose sexual abuse; two involved children with a disability, and two identified the children as typically developing. After reading the vignette, three of the four groups (Scenarios A, B and C) were asked to rate the child’s credibility based on predetermined questions. The fourth group did not complete this section and instead was routed directly to the implicit bias questions. This strategy was designed to ensure that reading the vignette did not influence the participants’ responses to the implicit bias questions. This approach was chosen to minimize the social desirability factor and achieve a more accurate response about these sensitive and socially charged beliefs about disabilities. By having one group go directly to the bias questions and not focus on the credibility questions, a comparison group is created to ensure that the measure is not picking up on another response pattern. All participants then responded to the questions from the adapted DA-IAT.

The results of the study yielded four significant findings regarding implicit bias about disabilities in child abuse investigations and its relationship to the believability of a child. First, there was evidence to suggest that implicit bias about disabilities does exist in the forensic interviewer population. While the DA-IAT instrument created by Pruett and Chan (2006) reported that people either had or did not have bias, the results of the current study suggest that bias about disabilities exists on a continuum and not in a binary representation. The descriptive statistical analysis of the data identified three distinct groups: High Bias, Low Bias and No Bias. Based on Pruett and Chan’s studies, the presence of the High Bias and No Bias groups were expected; however, the existence of this third group was not anticipated. This Low Bias group represented a significant portion (33%) of the total sample. While this is different than what Pruett and Chan found, the idea that bias should be viewed, as a continuum is logical, given the
complexity of the concept of bias. This study identified three categories of bias, but is it possible that there are more?

The second finding describes what characteristics might predict representation in the three bias groups. Of all the interviewer characteristics considered, only professional discipline demonstrated any predictive features. Using the revised discipline variable, a noteworthy trend was identified; in the No Bias category, 76% of those participants identified themselves as non-legal interviewers compared to only 24% in the legal group. This implies that the legal system interviewers are least represented in the No Bias category. Additionally, these forensic interviewers were more likely to be associated with some degree of bias about disabilities. In the literature, bias about disabilities has been previously demonstrated in the legal arena (Cederborg & Lamb, 2006; Nathanson & Platt, 2005) as well in child protection (Manders & Stoneman, 2009); in this study, the legal group consisted of both Child Protective workers and prosecutors, indicating that this finding is consistent with previous literature. Given that in this study, these professionals demonstrated a trend toward bias in their roles as forensic interviewers, I wondered whether the interviewer’s comfort level with children with disabilities was linked to their bias score. This linkage has been discussed in the literature, but this current study did not find a relationship between the two. One possible explanation for this result might be that comfort level was determined solely by participants’ self-rating with a single question. Since the literature suggests that comfort level with people with disabilities is an important factor in implicit bias, it is possible that other factors may have slanted this result. Participant concern about social desirability or an inflated sense of their own comfort could have influenced how participants answered this question.

The third conclusion was that, although none of the child characteristics associated with
credibility showed any significance with regard to bias, the interviewer attributes did show a significant relationship. The characteristics mirrored those in the literature and included training of the interviewer, comfort level, ability to ask non-leading questions and the interviewer asking developmentally appropriate questions. Based on findings in the literature on bias about disabilities, I attempted to identify whether a forensic interviewer’s comfort level specifically influenced decision-making regarding child believability; this relationship was not substantiated. In previous research high comfort levels have been associated with lower levels of bias. Flushing out the role that personal comfort level may have as it relates to bias and decision-making could be posed to study participants by asking more questions about participants experience with a child with a disability. This will be discussed a little later in this chapter.

The fourth finding focused on bias when a child was identified as having a disability. Initially, I did not find a statistically significant result when comparing bias scores to the scenario the participants read. However, there was enough difference between Scenario C and D for me to analyze this result in more depth. Both Scenarios C and D had a 5-year old child; however the child in Scenario D had an identified disability and the child in C did not. Scenario D (child with disability) had the largest number of participants in the High Bias category (39%) compared to Scenario A, B and C who had 17%, 17% and 28% respectively. Further data analysis revealed that, when an interviewer is aware of a child’s disability, implicit biases about disabilities might be present. One must consider why this did not occur in the older child with a disability (Scenario A) and whether the young age of the child also had an impact on the bias score. I evaluated whether age of the child was also a factor but found no significant difference. This suggests that the age factor was not responsible for the significant finding in Scenario D and therefore the identification of the disability, not the age, was what affected the bias score.
information is consistent with findings in the literature about confirmatory interviewer bias about information presented *a priori* by Panghorn (2009) and (Bruck & Ceci, 1999), indicating that when children with disabilities are identified in advance of the interview, forensic interviewers can show some level of implicit bias.

Finally the results of the open ended questions showed that participants were looking for opportunities to practice more with children with disabilities and become more comfortable conducting these types of forensic interviews.

**Interpretation**

This research provided several valuable insights regarding implicit bias about disabilities, forensic interviewers and decision-making about child credibility. Since the literature shows that children with disabilities are at higher risk for abuse, it is important to consider whether forensic interviewers possess some implicit bias about disabilities. The results of the current study suggest that particular disciplines within the forensic interviewer population are more likely to hold these biases. Specifically, independent interviewers were less likely to demonstrate bias compared with their counterparts in the legal arena (child protection, police and prosecutors). One potential explanation for this discrepancy may involve their professional training. Independent interviewers are often from human services and clinical backgrounds; their training frequently emphasizes the importance of self-reflection and the need to explore personal attitudes and values about people that we work with as well as our own life experiences. This is not the case with professions such as law enforcement, child protection or prosecutors. Identifying one’s own implicit bias is not something that forensic interviewers are asked about nor are they given the opportunity, either in training or peer review, to consider whether he/she possesses unconscious feelings/beliefs about a child with a disability. This is particular important in a field
that involves forensic investigation since significant effort has been placed in making forensic interviewers as bias free as possible. After all, forensic interviewers’ preconceived ideas can and do influence the interviewer’s process during the interview. This research was not able to establish a direct linkage showing which specific interviewer attributes lead to bias. However, in the open-ended questions, respondents indicate that they need more opportunity to practice interviewing children with disabilities as well as more exposure to children with disabilities. At present, most of the training curricula focus on providing basic materials about the disability itself.

Another result of this research related to the instrumentation of measuring implicit bias about disabilities. I chose the DA-IAT because of its unique ability to assess for bias without concern for social desirability issues. From this study, there is evidence that bias should be measured in degrees as opposed to a binary scale (present or not present). The discovery that bias was a trichotomized variable (rather than a dichotomized one) implies that the phenomenon of bias falls into a continuum and therefore is not likely to be a binary answer. This unexpected finding raises more questions about whether there may be additional bias categories. More research using this instrument is necessary to further dissect whether there are even more categories of bias than shown is this study.

Finally, state of the art interviewing practice informs forensic interviewers that it is important to know whether a child has a disability prior to beginning an interview in order to be developmentally sensitive to that child’s specialized needs. However, based on this research, this foreknowledge may trigger unconscious bias regarding that child. This is not to imply that interviewers should not be informed of the child’s disability. Instead, they must be aware of the possibility that their awareness could influence the outcome; they must recognize their bias and
develop strategies for managing it. The literature suggests that increased exposure to positive experiences with people with disabilities may reduce unconscious bias toward this group. Increasing an interviewer’s comfort level with this population should help guarantee that children with or without a disability will receive developmentally sensitive, forensically sound interviews.

**Limitations**

This study had a few limitations. Although the survey link was sent out to 16,000 people, the response rate was low: N=263. Recruitment of participants for research studies is often a challenge, especially when the solicitation is via email vs. personal contact. I weighed this dilemma and decided that having a larger potential pool of participants outweighed the expected low response rate. However, perhaps the next research project should use face-to-face recruitment. Another issue regarding recruitment was that NCAC’s emailing list did not specify professional association, making it difficult to determine the percentage on the list actually eligible for participation. A third factor in the small sample size could be related to the specificity of the topic itself, and whether there was interest in this area within the desired population. This might be addressed by the use of more personal recruitment strategies in future research.

To make more generalized statements about the results of the current study, a larger sample size is necessary. Given the current sample size, these findings must be considered with caution. However, since they do suggest that forensic interviewers might possess an unconscious bias about children with disabilities during child sexual abuse investigations, further investigation is warranted to determine if these findings can be replicated.

A second limitation to this study was the use of an adapted version of the DA-IAT. Due
to my error when loading the questions into the survey, some of the questions had to be statistically eliminated. Pruett and Chan’s algorithm requires an equal number of congruent and incongruent responses in order to calculate each participant’s bias score. Therefore I needed to eliminate some of the questions in a statistically sound approach. By having fewer questions that measured bias, the individual bias scores could potentially be lower than they might have been if all of the questions were used in the analysis. However, even with these lower scores, the statistics indicate the existence of bias within the forensic interviewer population likely is real.

**Implications**

The results of this exploratory study suggest that forensic interviewers might hold preconceived notions about children with disabilities and that they are measurable. Moreover, bias can impact decision-making about child credibility. This section will discuss two specific practice implications for the field of forensic investigations of child sexual abuse when it involves a child with a disability: equal access to the services for CWD; and effective training of forensic interviewers.

Both legally and morally, children with a disability ought to have access to the same quality of service provision as typically developing children. In a new research project through the Vera Institute of Justice and Ms. Foundation, researchers identified problems with access to services for children with disabilities who have been sexually abused, including the forensic interview (Smith & Harrell, 2013). According to this report, the forensic interview is prone to poor communication with and biased attitudes toward children with disabilities.

This current research project focused specifically on the attitudes and beliefs about children with disabilities. There are specific challenges that arise when interviewing a child with a disability, including possible difficulties with language, intellectual skills and behavior. In
addition, interviewers’ conscious or unconscious beliefs and attitudes about children with disabilities can affect the quality of the interview. This study showed that forensic interviewers themselves identified not feeling as prepared for interviewing children with disabilities as they do with children without disabilities. This was true for both newly trained and more experienced interviewers, with the majority of interviewers reporting having conducted many fewer interviews with children with disabilities (just 1-25) compared to interviews with typically developing children. In their comments, participants expressed the desire to increase their competence in this area through exposure and practice interviewing this population. It is interesting to note that while this theme came across in the open-ended questions, participants nonetheless rated their comfort level with this population as “generally comfortable.” It is unclear whether this is an actual reflection of their belief or if social desirability played a role in this result. Regardless, the interviewers reported that they need more experience working with this population. What is clear is that in order for children with a disability who has also been sexually abused to, access to the same quality of forensic interview that typically developing children receive; training is key to this change. The responsibility for those organizations that train forensic interviewers is to provide opportunities for further learning regarding interviewing children with disabilities as well as potential exposure to this population.

This study also has significant implications for the training of professionals who are becoming forensic interviewers as well as for those who have already been taught interviewing skills. That a forensic interviewer can hold implicit bias about children with disabilities, and that it might impact their decision-making about the believability of a child’s statement, suggests that the training of interviewers about disabilities needs to address this issue. Currently, forensic interviewers are trained only on the specific nature and manifestations of a disability, and not
about beliefs that people hold about this population. While these facts are very important, the results of this study suggest that understanding one’s beliefs and attitudes regarding disabilities are equally important, because it has the potential to change the outcome of an interview. This is particularly true since many forensic interviewers come from backgrounds that do not promote self-reflection and self-awareness. Based on the participants’ comments regarding increasing their competence and skill development for meeting the needs of this population, a different training model may be appropriate. A new approach might help interviewers recognize their own conscious or unconscious beliefs about individuals with disabilities. It should also include opportunities for exposure to and practice with individuals with disabilities. In the literature, there is evidence that these types of positive experiences can reduce people’s fears and change attitudes about people with a disability; it could significantly change the way forensic interviews are managed and increase the likelihood of equal access to professional, unbiased interviews during child sexual abuse investigations.

Moving forward, I would recommend that additional research be conducted using the DA-IAT to look at implicit bias about disabilities. This project should use the full paper/pencil DA-IAT rather than the adapted one I utilized, and could consider methodologies that would increase sample size. Such a study could eliminate some of the limitations identified in the current study and retest the current finding that implicit bias exists on a continuum as opposed to binary model. Gaining access to a large number of forensic interviewers is always a challenge; however, the annual child abuse conferences might be a perfect venue to implement this research. In addition, this proposed study would provide an opportunity to test whether implicit bias about disabilities is truly a continuum rather than a binary model.
Investigating child sexual abuse in itself is a difficult and emotionally challenging occupation under the best of circumstances. But it is made more difficult when it involves children with a disability. Recognizing implicit bias and understanding its ramifications in the forensic arena could significantly change the way that interviews are conducted and decisions are made in investigations involving a child with a disability. It could also have a profound impact on the access of this group of children to quality interviews.

Dissemination and publication of this study may raise awareness of this problem and encourage support for further research. I plan to provide the results of this study to NCAC for their consideration; this was part of the agreement made when they published the recruitment flyer. I’m also planning to present this study at one or two of the large national conferences in 2015.

As a next step, I am interested in conducting another study similar to this one that would reduce some of the limitations. For example, a follow up study where the recruitment of forensic interviewers could happen in person, perhaps at one of the national conferences. This strategy might recruit more participants and provide a larger sample size thus increasing the potential generalizibility. I am interested in utilizing the paper and pencil version of the DA-IAT that makes it possible to use both response time as well as participants’ responses to the congruent and incongruent pictures and words.

**Significance to the Field of Social Work**

Social workers are responsible for considering issues around social justice particularly for vulnerable people; children with disabilities are entitled to the same comprehensive, well-orchestrated forensic interview as children without disabilities. While there is research on what skills CWDs may have or lack, this is the first research project to consider to how or whether the
interviewer’s beliefs about children with disabilities may contaminate an interview. This is especially troubling when so much emphasis has been placed on conducting best practice interviews for children without disabilities. There are several nationally recognized forensic interviewer trainings such as those sponsored by CornerHouse, National Child Advocacy Center and the National Institute of Child Health and Human Development that provide training on forensic interviewing and proper protocol. These curricula focus on the techniques used for interviewing typically developing children, though some courses do provide limited general information about disabilities. However, none of these programs provide information about how to adjust, adapt or change the interview techniques for children with disabilities. In addition, there is no discussion on people’s beliefs about children with disabilities and how these attitudes and beliefs might impact their view of the child’s credibility.

Given the important role of the forensic interviewer in the investigative process, we must consider whether (and how) their own knowledge of, and level of comfort with, children with disabilities may influence the CWD’s ability to make a disclosure. Few studies that review videotapes of forensic interviews were conducted in the United States, because these tapes are considered evidence in criminal and civil prosecutions. Therefore, an alternative method for assessing this information must be created, such as a self-report questionnaire. The literature has demonstrated that both knowledge and comfort level/bias/attitude can impact the outcome of a forensic interview in general, but not its specific impact with CWDs. At the same time, the literature does consider how to measure bias/attitude about people with disabilities, but not specifically in the case of children, and certainly not when professionals are interviewing children about a highly sensitive matter such as child sexual abuse.

The importance of objective, non-leading, structured forensic interviews as part of child
sexual abuse investigations is indicated throughout the literature. Research has studied methods and techniques that increase the likelihood that these interviews are forensically sound, developmentally and culturally sensitive and result in the prosecution of offenders. Guidelines for conducting these interviews have been created for children without disabilities. There is significantly more information available about interviewing children who are typically developing than there is about children with disabilities; however more recently there have been studies to consider best practices for interviewing children with disabilities.

Still, the literature has focused primarily on the needs of the children, and much less so on the interviewer’s influence. Researchers have looked at issues like the interviewer’s approach, supportive versus objective interactions with the child, and confirmatory bias, but nobody has considered whether the interviewer may have implicit biases, either in general or specifically about disabilities that could impact the outcome of the interview. This is particularly relevant since there is documented evidence that children with disabilities are more likely to be victims of abuse in general and sexual abuse specifically.

As discussed earlier in this paper, implicit bias about socially constructed issues such as race, gender identification and ability status occurs in many different part of our daily living. The research has shown that these biases can have a significant impact on the ways people interact within groups as well as outside their identified group. This is true for people who work with individuals who have a disability. Studies have shown people have strong feelings and hold stereotypic views about people with disabilities, which are often repressed, due to the social undesirability of these thoughts, beliefs, attitudes and feelings.

These biases have been explored in a variety of people in our society, including students, trainees, and court-related personnel such as judges, attorneys and employers. To date, no one
has considered whether forensic interviewers may also hold these implicit biases toward
disabilities. Given that many biases are unconscious and are part of an automatic process, is it
possible that these same biases may also be present in forensic interviewers who are conducting
interviews on children on a regular basis? With so much emphasis placed on neutral, non-
biased and objective interviews, it is important to consider whether forensic interviewers may
come to the investigation with these unconscious beliefs and if they do have them, how do they
influence the outcome or decisions about the credibility of the child?

**Conclusion**

The results of this exploratory study raise the question of how implicit bias about
disabilities held by forensic interviewers can change the course of an interview. The significance
of the low response rate opens up the question as to whether forensic interviewers’ feelings and
beliefs regarding people with disabilities are so uncomfortable, that they did not participate in the
study. In other words, was the mere suggestion about bias, forensic interviewers and children
with disability as a topic of investigation enough to steer potential responders away from
participating? Did individual forensic interviewers own discomfort regarding this topic
unconsciously or consciously deter interviewers from participating? While I attempted to
minimize this concern by describing the study in general terms, it is possible that this topic
created high levels of discomfort for potential subjects that they simply did not participate.

Using the study findings as a starting point, continuing the research on this topic is
critical to forensic interview best practice. The training of these specialized practitioners needs
to move beyond simply providing basic information about disabilities and begin to explore
interviewers’ beliefs, attitudes and values about people with disabilities. Forensic interview
training should ask questions about people’s experience with children with disabilities and
possibly provide the interviewer with experiential exposure to children and adults with disabilities. Introducing this into the training curriculum allows interviewers to recognize and unpack their own potential biases, rather than maintaining a possible blind spot about this issue. This will move the field of forensic interviewing one step closer to equal access to quality interviews for children with disabilities.
APPENDIX
Appendix A

Case Vignettes
Scenario A

Caroline is a 10-year old girl in regular 5th grade class. According to her mother she wasn’t talking by 2 and couldn’t follow directions. She was referred to early intervention and received speech/ language and special education services. She received these when she began public school. Currently she is in a special education class with 12 other children. The school stopped speech therapy in 4th grade. Caroline was diagnosed as learning disabled with cognitive limitations. Her teacher reported she learns just at a slower pace than other children; she also has difficulties expressing herself though she can understand if the listener is patient. Caroline is in a singing youth group and attends a special summer camp. Caroline’s parents work so they hired Bill to watch her after school. Caroline reported that she liked Bill, that he was fun, and that he made fun snacks and played games with her. During winter vacation, her parents hired Bill to babysit for 2 full days (8 AM-6PM). Caroline was excited. At the end of day one, her parents noticed she was quiet and not herself. When her mother asked what was wrong, she said nothing. During dinner she hardly ate and announced she didn’t want Bill to come again. When her parents asked why she said, “he’s not nice and does mean things.” Her parents what she meant and she said “he comes in the bathroom with me and tries to pee on me.” The parents called the police that night, but Caroline did not say anything. The police set up an appointment for a forensic interview at the child advocacy center. During the interview, Caroline was friendly and answered questions about home and school. She provided the following account: She reported liking school and having friends. They liked to sing, talk, and listen to music. She watches Nickelodeon and Disney channels. She described her last birthday as having friends over, they sang “Happy birthday” and gave her presents; her favorite one was Nick Jr. characters, Caroline identified the boy and girl pictures based on their hairstyles. She labeled all the body parts,
though she giggled and hesitated to name the private parts. The interviewer asked her who Bill was and she reported, “Bill was my friend, we played games together, but I don’t like him anymore.” When asked why she said “he is gross and plays mean games.” When the interviewer asked for clarification she said “I don’t know, but then he makes cookies, they are good.” The interviewer asked where the mean games happened and she reported in the bathroom. When the interviewer asked which bathroom, she repeated “in the bathroom.” Caroline then got up from her seat and began moving around the room. The interviewer asked what happened in the bathroom and she answered “we pee in there.” The interviewer asked what she meant by “we” and she repeated her statement “we pee in there.” Several minutes later she stated “Bill pees in the toilet and on me and I help him pee.” The interviewer asked what she meant and she said “Bill tells me to hold his ‘thingy,’ Caroline began to run around the room. The interviewer asked where the pee goes and she answers “I don’t know.” She blurted out “after he pees we make cookies and watch a movie until mom comes home.” The interviewer asks why she doesn’t like Bill now and she answered “because he won’t let me out of the bathroom.” The interviewer asked her to explain and she replied “Bill says you have to pee in the bathroom.” The interviewer asked her about Bill’s “thingy” and what it touched and she said “me, everywhere.” The interviewer asked what she meant and she said, “it just does.” The interviewer asked if Bill ever says anything and she answered, “we are friends, but I don’t want to be his friend.” The interviewer asks for clarification and she replies “it feels nasty when he peed on me.” The interviewer asks what it felt like and she answered “like pee.” Caroline walked out of the room.
Scenario B

Caroline is a 10-year old girl in 5th grade in her local public school. According to her mother Caroline is a typically developing child. Her 5th teacher reported, Caroline is academically on level and a well adjusted child. She has friends and is seen by her classmates as a leader. Caroline’s teacher also reports that her language development is average. Her mother reported Caroline plays soccer, is learning the clarinet and is in Girl Scouts. Caroline’s parents work so they hired Bill to watch her after school. Caroline reported that she liked Bill, that he was fun, and that he made fun snacks and played games with her. During winter vacation, her parents hired Bill to babysit for 2 full days (8 AM-6PM). Caroline was excited. At the end of day one, her parents noticed she was quiet and not herself. When her mother asked her what was wrong, Caroline reported nothing. During dinner she hardly ate and announced she didn’t want Bill to come again. When her parents asked why she said, “he’s not nice and does mean things.” Her parents what she meant and she said “he comes in the bathroom with me and tries to pee on me.” The parents called the police that night, but Caroline did not say anything. The police set up an appointment for a forensic interview at the child advocacy center. During the interview, Caroline provided the following account Caroline was friendly and easily engaged with the interviewer. She answered questions and provided details about her life at school and home. She reported liking school and having friends. They like to sing, talk, and listen to music. She explained that in school they are allowed to play an instrument and she is learning the clarinet. Caroline also reported she watches Nickelodeon and Disney channels. She described her most recent birthday saying they went to a pottery-painting place and she made a unicorn. She reported her favorite presents was a CD by Taylor Swift. During the interview, Caroline identified the boy and girl based on their hairstyles. She labeled all the body parts clearly, using
the formal words for all the private parts. Caroline defined truth and lie; saying truth was “telling real things”, and a lie was “saying something is true when it isn’t.” When asked about good and bad touches, Caroline reported Bill had done bad things to her. She reported the following information: Bill was my babysitter, like when mom and dad go to work he would come over when I get home from school. The other day he was there all day. I thought he was my friend; we played games together. But after what happened I don’t like him anymore. When asked why not, Caroline answered, “he just is gross and plays mean games.” When the interviewer asked her to explain, she said “Bill came into the bathroom when I was in there and told me to touch his private part.” Caroline reported “Bill asked me to hold his private part when he was peeing. It was disgusting and I didn’t want to do it, but he said ‘it’s just a game, everybody does it.’” The interviewer asked her how often this happened and she reported that it only happened once when she was on vacation. Caroline said “Bill said after I hold his private we can bake my favorite cookies.” The interviewer asked about other types of touching and Caroline answered “no, just pee came out of his private part, and got on me.” The interviewer asked how it felt and she answered, “it was sticky.” The interviewer asked if Bill said it was ok to talk about and Caroline answered, “I don’t remember.” The interviewer asked Caroline about other touching by Bill and Caroline answered “no.” The interviewer asked if anyone told her what to say today and Caroline said, “My mom said I should tell everything and I have.” Caroline asked to go back to her parents and the interviewer said “yes.”
Scenario C

Caroline is a 5-year old girl who attends Kindergarten in her local public school. Her mother reported Caroline is a typically developing child. Her teacher reported Caroline adjusted well to school, has friends and seems to enjoy learning. Caroline’s teacher also reports that her language development is average and that she is able to express herself and be understood. Caroline plays soccer, and is a Daisy in Girl Scouts. Caroline’s parents work so they hired Bill to watch her after school. Caroline reported that she liked Bill, that he was fun, and that he made fun snacks and played games with her. During winter vacation, her parents hired Bill to babysit for 2 full days (8 AM-6PM). Caroline was excited. At the end of day one, her parents noticed she was quiet and not herself. When her mother asked her what was wrong, Caroline reported nothing. During dinner she hardly ate and announced she didn’t want Bill to come again. When her parents asked why she said, “he’s not nice and does mean things.” Her parents what she meant and she said “he comes in the bathroom with me and tries to pee on me.” The parents called the police that night, but Caroline did not say anything. The police set up an appointment for a forensic interview at the child advocacy center. During the interview, Caroline provided the following account: Caroline was friendly and reported liking school and having friends. She said they like to sing, talk, and listen to music. Caroline also reported watching Nickelodeon and Disney channels. She described her most recent birthday as having friends over singing “Happy birthday” and getting presents; her favorite one was Nick Jr. characters. Caroline identified the boy and girl pictures based on their hairstyles. She labeled all the body parts, though she giggled and hesitated to name the private parts. The interviewer asked her who Bill was and she reported: “Bill was my friend, we played games together, but I don’t like him anymore.” When asked why she said “he is gross and plays mean games.” When the interviewer asked for clarification she
said “I don’t know, but then he makes cookies, they are good.” The interviewer asked where the mean games happened and she reported in the bathroom. When the interviewer asked which bathroom, she repeated “in the bathroom.” Caroline then got up from her seat and began moving around the room. The interviewer asked what happened in the bathroom and she answered, “we pee in there.” The interviewer asked what she meant by “we” and she repeated her statement “we pee in there.” Several minutes later she stated, “Bill pees in the toilet and on me and I help him pee.” The interviewer asked what she meant and she said “Bill tells me to hold his ‘thingy,’ Caroline began to run around the room. The interviewer asked where the pee goes and she answers “I don’t know.” She blurted out “after he pees we make cookies and watch a movie until mom comes home.” The interviewer asks why she doesn’t like Bill now and she answered “because he won’t let me out of the bathroom.” The interviewer asked her to explain and she replied, “Bill says you have to pee in the bathroom.” The interviewer asked her about Bill’s “thingy” and what it touched and she said “me, everywhere.” The interviewer asked what she meant and she said, “it just does.” The interviewer asked if Bill ever says anything and she answered, “we are friends, but I don’t want to be his friend.” The interviewer asks for clarification and she replies “it feels nasty when he peed on me.” The interviewer asks what it felt like and she answered “like pee.” Caroline walked out of the room.
Scenario D

Caroline is a 5-year old girl who is in a special education Kindergarten class. According to her mother she wasn’t talking by 2 and couldn’t follow directions. She was referred to early intervention and received speech/language and special education services. She received these when she began public school. Currently she is in a special education class with 12 other children; she receives speech therapy. Caroline was diagnosed as learning disabled with cognitive limitations. Her teacher reported she learns just at a slower pace than other children; she also has difficulties expressing herself though she can understand if the listener is patient. Caroline is in a singing group at their church and her parents are thinking about karate lessons. Caroline’s parents work so they hired Bill to watch her after school. Caroline reported that she liked Bill, that he was fun, and that he made fun snacks and played games with her. During winter vacation, her parents hired Bill to babysit for 2 full days (8 AM-6PM). Caroline was excited. At the end of day one, her parents noticed she was quiet and not herself. When her mother asked what was wrong, she said nothing. During dinner she hardly ate and announced she didn’t want Bill to come again. When her parents asked why she said, “he’s not nice and does mean things.” Her parents what she meant and she said “he comes in the bathroom with me and tries to pee on me.” The parents called the police that night, but Caroline did not say anything. The police set up an appointment for a forensic interview at the child advocacy center. During the interview, Caroline provided the following account: Caroline was slightly reserved and quiet, but was able to print some of the letters in her name, knew she was 5 but did not know when her birthday was. She named the people in her house and class at school. Caroline said she has one friend at school and they like singing, dancing and watching Dora on TV. Caroline identified the boy and girl pictures based on their hairstyles. She labeled all the body parts,
though she giggled and hesitated to name the private parts. The interviewer asked her who Bill was and she reported: “Bill was my friend, we played games together, but I don’t like him anymore.” When asked why she said “he is bad and plays mean games.” When the interviewer asked for clarification she said “I don’t know, but then he makes cookies, they are good.” The interviewer asked where the mean games happened and she reported in the bathroom. When the interviewer asked which bathroom, she repeated “in the bathroom.” Caroline then got up from her seat and began moving around the room. The interviewer asked what happened in the bathroom and she answered, “we pee in there.” The interviewer asked what she meant by “we” and she repeated her statement “we pee in there.” Several minutes later she stated, “Bill pees in the toilet and on me and I help him pee.” The interviewer asked what she meant and she said “Bill tells me to hold his ‘thingy,’ Caroline began to run around the room. The interviewer asked where the pee goes and she answers “I don’t know.” She blurted out “after he pees we make cookies and watch a movie until mom comes home.” The interviewer asks why she doesn’t like Bill now and she answered “because he won’t let me out of the bathroom.” The interviewer asked her to explain and she replied, “Bill says you have to pee in the bathroom.” The interviewer asked her about Bill’s “thingy” and what it touched and she said “me, everywhere.” The interviewer asked what she meant and she said, “it just does.” The interviewer asked if Bill ever says anything and she answered, “we are friends, but I don’t want to be his friend.” The interviewer asks for clarification and she replies “it feels nasty when he peed on me.” The interviewer asks what it felt like and she answered “like pee.” Caroline walked out of the room.
APPENDIX B

DISABILITY ATTITUDE IMPLICIT ASSOCIATION TEST (DA-IAT)

Instructions

For this next task, your job is similar to the last one, you are to go down each column as quickly as possible and categorize each item by marking the appropriate circle to the left or right. The items will be symbols in this task. For example, for any disability related symbol, you should mark the circle under the category “disability”. For non-disabled symbols, you will mark the circle under the category “non-disabled”. You will do the same with words representing good (terrific, love, happy, joy, good), and bad (vomit, poison, hatred, evil, bad).

The disability related symbols are:

- Person using a Wheelchair
- Crutches
- Guide Dog
- Person with a visual impairment

The non-disabled symbols are:

- School crossing
- Running
- Walking
- X-county skiing

As before, you should be going down the list as fast as possible. It is okay to make some mistakes, but try not to make too many. However, if you do make a mistake, do not go back and change your answer, just keep going down the list. Remember, you are being timed.

You don’t have to fill in every circle. Simply strike a line through the appropriate circle to save time. As with the last task, you will have twenty seconds for each page. Begin by placing your pen in the box at the top of the page and wait for the experimenter’s signal to begin. When the experimenter says STOP, you should IMMEDIATELY LIFT YOUR PEN FROM THE PAGE. The experimenter will then ask you to circle the last item that you were looking at.

You might find some pages more difficult than others and might not get very far. This is common though, so don’t be discouraged.

Do you have any questions?
<table>
<thead>
<tr>
<th>Disability</th>
<th>Good</th>
<th>Non-Disabled</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>![image]</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>evil</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>bad</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>terrific</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>love</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>vomit</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>bad</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>evil</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>vomit</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>love</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>terrific</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>poison</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>evil</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>hatred</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>terrific</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>poison</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>joy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>happy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>joy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disability</td>
<td>Non-Disabled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad</td>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>joy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>terrific</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>vomit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>poison</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>terrific</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>vomit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>happy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>love</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>vomit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>joy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>bad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>happy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>hatred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hi, my name is Beth Reiman and I am Doctoral student at CUNY Graduate Center/Hunter College School of Social Work. I am conducting my dissertation research on beliefs about disabilities and decision-making about credibility during child sexual abuse investigations.

For my research project I am recruiting forensic interviewers who have been trained either at the National Child Advocacy Center (NCAC) or CornerHouse. Your participation consists of reading a case scenario about child sexual abuse and then completing 2 questionnaires. The total amount of time that this should take you is 30 minutes. This study will be anonymous and none of the questions will identify you individually.

The following criteria is necessary to participate in the research project:
1. You need to be 18 years or older
2. Conduct forensic interviews with children as part of a child abuse investigation
3. Be trained in either NCAC’s protocol or RATAC

If you meet these qualifications I invite you to click on the link below which will bring you to the online survey. To avoid duplication, I request that you complete the survey only once.

Thank you in advance for participating in my study. Once the data is collected and analyzed a written report will be made available.
Appendix D

Informed Consent Letter

Dear Forensic Interviewer:

CUNY UI - Institutional Review Board
Approval Date: May 28, 2013
Expiration Date: April 30, 2014
Coordinator Initials: SL

Beth Reiman is a PhD student at the Graduate Center of CUNY and the Silberman School of Social Work at Hunter College. You are invited to participate in a study about beliefs about disabilities and decision-making about child credibility during child sexual abuse investigations. You were considered for participation in this study because you are over 18, a forensic interviewer, and have completed forensic interview training in one of the following models:

- National Child Advocacy Center (NCAC)
- CornerHouse
- National Child Protection Training Center, Child First (RATAC)
- National Institute of Child Health and Human Development (NICHD)
- American Professional Society on Child Abuse (APSAC)
- Your state forensic interview protocol

Participation involves reading a case scenario about child sexual abuse and then completing 2 questionnaires. This is an online survey; if you choose to participate (click on the link on the email you received to access the survey). The survey should take you about 30 minutes to complete the entire process. Your participation in this study is voluntary; you can stop participating anytime and skip any questions you choose not to answer. This is an anonymous study and no one will know whether or not you chose to participate. None of the questions will tend to identify you as an individual. Since your URL will not be captured, no one will know whether or not you participated and all completed questionnaires will be pooled together.

Each questionnaire will be collated from the online survey site and the aggregate data will be entered by hand by the researcher and her assistant entered into an SPSS data file. The appropriate statistical analysis will be completed. All completed questionnaires will be encrypted and stored with the online server; the data will be password protected for a period of three years, after which time it will be destroyed.

There are no direct benefits for your participation in this study, other than possibly enhancing the understanding of forensic interviewing and children with disabilities. There are no known risks to you in participating in this study other than those experienced in everyday life. However, should any of the questions raise questions about your role as forensic interviewer or if you require more information about developmental disabilities, the researcher has included a list of resources and links to resources on the Internet that could answer your questions and direct you to more resources about forensic interviewing children with disabilities.

The researcher will use the data from this study to write her dissertation, professional conferences, or publication in peer review journals. Your consent to participate in this research project will be your clicking to the link to the online survey.
If you have questions about the study, you can contact the researcher, Beth Reiman at (914) 263-4225, or her dissertation committee chair Dr. Gary Mallon at (212) 396-7562. You can also contact the Hunter College Human Research Protection (HRPP) office at (212) 650-3053, if you have any questions regarding your rights as a research subject or if you feel you have experienced a research-related injury.

Again thank you for your participation in this study.
Beth Reiman, LCSW-R
PhD Candidate
Graduate Center of CUNY and the Silberman School of Social Work at Hunter College

City University of New York (CUNY) UI IRB- Hunter College approved from:
05/01/13- 04/30/14. Protocol #: 447471.

CUNY UI - Institutional Review Board
Approval Date: May 28, 2013
Expiration Date: April 30, 2014

Coordinator Initials: SL
Appendix E

NCAC Letter of Participation

The National Children's Advocacy Center
The NCAC models, promotes, and delivers excellence in child abuse response and prevention through service, education, and leadership.

March 27, 2013

Institutional Review Board
City University of New York
Silberman School of Social Work
1280 Third Avenue
New York, NY 10035

To Whom It May Concern:

As the Executive Director of the National Children’s Advocacy Center (NCAC), I have reviewed and discussed Ms. Beth Reiman’s dissertation proposal entitled Implicit Bias about Disabilities: Does it Exist for Forensic Interviewers and Could it Affect Child Credibility Decisions in Child Sexual Abuse Investigations? The NCAC will support this research project by agreeing to inform our membership about this study and providing a link to the online survey in one of our monthly newsletters which reaches more than 16,000 professionals working in the area of child abuse.

Based on this information provided by Ms. Reiman we have no objection to this commitment around the recruitment of potential subjects. We look forward to the time when you will be able to share results with us of your research.

Sincerely,

Chris Newlin, MS LPC
Executive Director
Appendix F

Comparison Matrix and Exploratory Factor Analysis

Table F1: Exploratory factor analysis of both congruent and incongruent DA-IAT questions

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30 INCON PIC ND</td>
<td>.559</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q31 INCON WORD</td>
<td></td>
<td>.604</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q32 INCON PIC ND</td>
<td>.456</td>
<td>.699</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q33 INCON Word</td>
<td>.627</td>
<td></td>
<td>.642</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q34 INCON PIC D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-472</td>
</tr>
<tr>
<td>Q35 INCON PIC ND</td>
<td>.486</td>
<td>.653</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q36 INCON Word</td>
<td>.793</td>
<td>.402</td>
<td>.627</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q37 INCON Word</td>
<td>.464</td>
<td>.616</td>
<td></td>
<td></td>
<td>.671</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q38 INCON PIC ND</td>
<td>.864</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.501</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q39 INCON Word</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q40 INCON PIC D</td>
<td></td>
<td>.624</td>
<td></td>
<td></td>
<td></td>
<td>.594</td>
<td>.633</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q41 INCON Word</td>
<td></td>
<td></td>
<td></td>
<td>.430</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q42 INCON PIC ND</td>
<td>.413</td>
<td>.486</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q43 INCON Word</td>
<td>.415</td>
<td>.549</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q44 INCON PIC ND</td>
<td>.415</td>
<td>.549</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q45 INCON PIC D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q46 INCON WORD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q47 INCON PIC D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q48 INCON WORD</td>
<td>.879</td>
<td>.430</td>
<td>.594</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q49 INCON PIC D</td>
<td>.645</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.624</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q50 INCON WORD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q51 CON PIC D</td>
<td></td>
<td></td>
<td></td>
<td>.560</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q52 CON WORD</td>
<td>.820</td>
<td></td>
<td></td>
<td></td>
<td>.455</td>
<td>.462</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q53 CON PIC ND</td>
<td>.776</td>
<td></td>
<td></td>
<td></td>
<td>.411</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q54 INCON WORD</td>
<td></td>
<td></td>
<td></td>
<td>.401</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q55 CON PIC D</td>
<td>.798</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.576</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q56 CON WORD</td>
<td>.797</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.489</td>
</tr>
<tr>
<td>Q57 CON PIC D</td>
<td>.797</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q58 CON WORD</td>
<td>.432</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q59 CON PIC D</td>
<td>.787</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q60 CON PIC D</td>
<td>.787</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q61 INCON WORD</td>
<td>.534</td>
<td>.566</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q62 CON WORD</td>
<td>.534</td>
<td>.566</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q63 CON PIC ND</td>
<td>.413</td>
<td>.499</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q64 CON WORD</td>
<td>.413</td>
<td>.499</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q65 INCON PIC D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q66 CON WORD</td>
<td></td>
<td>.489</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q67 INCON PIC D</td>
<td>.727</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q68 CON WORD</td>
<td>.727</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q69 INCON PIC ND</td>
<td>.482</td>
<td>.468</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q70 CON WORD</td>
<td>.482</td>
<td>.468</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q71 CON PIC D</td>
<td>.466</td>
<td>.434</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q72 CON WORD</td>
<td>.466</td>
<td>.434</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

a. 9 components extracted.
Table F2: Component loadings of all the DA-IAT questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Dimension 1</th>
<th>Dimension 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30 INCON PIC ND</td>
<td>.350</td>
<td>.624</td>
</tr>
<tr>
<td>Q31 INCON Word</td>
<td>.118</td>
<td>.352</td>
</tr>
<tr>
<td>Q32 INCON PIC ND</td>
<td>.402</td>
<td>.736</td>
</tr>
<tr>
<td>Q33 INCON Word</td>
<td>.834</td>
<td>-.277</td>
</tr>
<tr>
<td>Q34 INCON PIC D</td>
<td>-.086</td>
<td>-.256</td>
</tr>
<tr>
<td>Q35 INCON Word</td>
<td>.011</td>
<td>.344</td>
</tr>
<tr>
<td>Q36 INCON PIC ND</td>
<td>.440</td>
<td>.678</td>
</tr>
<tr>
<td>Q37 INCON Word</td>
<td>.833</td>
<td>-.321</td>
</tr>
<tr>
<td>Q38 INCON PIC ND</td>
<td>.439</td>
<td>.652</td>
</tr>
<tr>
<td>Q39 INCON Word</td>
<td>.894</td>
<td>-.288</td>
</tr>
<tr>
<td>Q40 INCON PIC D</td>
<td>.014</td>
<td>-.140</td>
</tr>
<tr>
<td>Q41 INCON Word</td>
<td>.079</td>
<td>.335</td>
</tr>
<tr>
<td>Q42 INCON PIC ND</td>
<td>.402</td>
<td>.534</td>
</tr>
<tr>
<td>Q43 INCON Word</td>
<td>.035</td>
<td>.370</td>
</tr>
<tr>
<td>Q44 INCON PIC ND</td>
<td>.392</td>
<td>.588</td>
</tr>
<tr>
<td>Q45 INCON PIC D</td>
<td>-.161</td>
<td>-.215</td>
</tr>
<tr>
<td>Q46 INCON Word</td>
<td>.150</td>
<td>.517</td>
</tr>
<tr>
<td>Q47 INCON PIC D</td>
<td>.034</td>
<td>-.086</td>
</tr>
<tr>
<td>Q48 INCON Word</td>
<td>.883</td>
<td>-.262</td>
</tr>
<tr>
<td>Q49 INCON PIC D</td>
<td>.196</td>
<td>-.214</td>
</tr>
<tr>
<td>Q50 INCON Word</td>
<td>.872</td>
<td>-.243</td>
</tr>
<tr>
<td>Q51 CON PIC D</td>
<td>-.301</td>
<td>-.606</td>
</tr>
<tr>
<td>Q52 CON Word</td>
<td>.134</td>
<td>.116</td>
</tr>
<tr>
<td>Q53 CON PIC ND</td>
<td>.028</td>
<td>.236</td>
</tr>
<tr>
<td>Q54 INCON Word</td>
<td>.849</td>
<td>-.272</td>
</tr>
<tr>
<td>Q55 CON PIC D</td>
<td>-.251</td>
<td>-.407</td>
</tr>
<tr>
<td>Q56 CON Word</td>
<td>.794</td>
<td>-.321</td>
</tr>
<tr>
<td>Q57 CON PIC D</td>
<td>-.078</td>
<td>-.606</td>
</tr>
<tr>
<td>Q58 CON Word</td>
<td>.795</td>
<td>-.262</td>
</tr>
<tr>
<td>Q59 CON PIC D</td>
<td>-.211</td>
<td>-.603</td>
</tr>
<tr>
<td>Q60 INCON Word</td>
<td>.811</td>
<td>-.325</td>
</tr>
<tr>
<td>Q61 INCON PIC ND</td>
<td>.387</td>
<td>.614</td>
</tr>
<tr>
<td>Q62 CON Word</td>
<td>.806</td>
<td>-.366</td>
</tr>
<tr>
<td>Q63 CON PIC ND</td>
<td>.135</td>
<td>.307</td>
</tr>
<tr>
<td>Q64 INCON Word</td>
<td>.014</td>
<td>.463</td>
</tr>
<tr>
<td>Q65 INCON PIC D</td>
<td>-.036</td>
<td>-.298</td>
</tr>
<tr>
<td>Q66 INCON Word</td>
<td>.112</td>
<td>.414</td>
</tr>
<tr>
<td>Q67 INCON PIC ND</td>
<td>.344</td>
<td>.565</td>
</tr>
<tr>
<td>Q68 CON Word</td>
<td>.753</td>
<td>-.425</td>
</tr>
<tr>
<td>Q69 INCON PIC ND</td>
<td>.429</td>
<td>.660</td>
</tr>
<tr>
<td>Q70 CON Word</td>
<td>.069</td>
<td>.439</td>
</tr>
<tr>
<td>Q71 CON PIC D</td>
<td>-.011</td>
<td>-.551</td>
</tr>
<tr>
<td>Q72 CON Word</td>
<td>.792</td>
<td>-.356</td>
</tr>
</tbody>
</table>

Variable Principal Normalization.
Table F3: Cronbach’s Alpha incongruent questions N=14

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.907</td>
<td>14</td>
</tr>
</tbody>
</table>

Table F4: Incongruent item-total statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30 INCON PIC ND</td>
<td>24.57</td>
<td>7.358</td>
<td>.668</td>
<td>.899</td>
</tr>
<tr>
<td>Q32 INCON PIC ND</td>
<td>24.60</td>
<td>6.999</td>
<td>.795</td>
<td>.893</td>
</tr>
<tr>
<td>Q35 INCON Word</td>
<td>24.49</td>
<td>8.291</td>
<td>.298</td>
<td>.910</td>
</tr>
<tr>
<td>Q36 INCON PIC ND</td>
<td>24.59</td>
<td>7.093</td>
<td>.773</td>
<td>.894</td>
</tr>
<tr>
<td>Q38 INCON PIC ND</td>
<td>24.60</td>
<td>7.105</td>
<td>.750</td>
<td>.895</td>
</tr>
<tr>
<td>Q42 INCON PIC ND</td>
<td>24.55</td>
<td>7.412</td>
<td>.690</td>
<td>.898</td>
</tr>
<tr>
<td>Q43 INCON Word</td>
<td>24.48</td>
<td>8.304</td>
<td>.314</td>
<td>.910</td>
</tr>
<tr>
<td>Q44 INCON PIC ND</td>
<td>24.55</td>
<td>7.426</td>
<td>.703</td>
<td>.897</td>
</tr>
<tr>
<td>Q46 INCON WORD</td>
<td>24.53</td>
<td>7.872</td>
<td>.475</td>
<td>.906</td>
</tr>
<tr>
<td>Q61 INCON PIC ND</td>
<td>24.60</td>
<td>7.249</td>
<td>.669</td>
<td>.899</td>
</tr>
<tr>
<td>Q64 INCON WORD</td>
<td>24.53</td>
<td>8.055</td>
<td>.354</td>
<td>.910</td>
</tr>
<tr>
<td>Q66 INCON WORD</td>
<td>24.49</td>
<td>8.095</td>
<td>.433</td>
<td>.907</td>
</tr>
<tr>
<td>Q67 INCON PIC ND</td>
<td>24.58</td>
<td>7.317</td>
<td>.675</td>
<td>.898</td>
</tr>
<tr>
<td>Q69 INCON PIC ND</td>
<td>24.59</td>
<td>7.106</td>
<td>.765</td>
<td>.894</td>
</tr>
</tbody>
</table>
Table F5: Congruent reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.795</td>
<td>14</td>
</tr>
</tbody>
</table>

Table F6: Congruent item-total statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q51 CON PIC D</td>
<td>19.08</td>
<td>7.148</td>
<td>.285</td>
<td>.792</td>
</tr>
<tr>
<td>Q52 CON WORD</td>
<td>18.30</td>
<td>7.528</td>
<td>.137</td>
<td>.800</td>
</tr>
<tr>
<td>Q53 CON PIC ND</td>
<td>18.24</td>
<td>7.708</td>
<td>.097</td>
<td>.799</td>
</tr>
<tr>
<td>Q55 CON PIC D</td>
<td>18.97</td>
<td>7.199</td>
<td>.177</td>
<td>.804</td>
</tr>
<tr>
<td>Q56 CON WORD</td>
<td>18.90</td>
<td>6.036</td>
<td>.672</td>
<td>.756</td>
</tr>
<tr>
<td>Q57 CON PIC D</td>
<td>19.04</td>
<td>6.675</td>
<td>.491</td>
<td>.776</td>
</tr>
<tr>
<td>Q58 CON WORD</td>
<td>18.96</td>
<td>6.172</td>
<td>.647</td>
<td>.760</td>
</tr>
<tr>
<td>Q59 CON PIC D</td>
<td>19.06</td>
<td>7.002</td>
<td>.340</td>
<td>.788</td>
</tr>
<tr>
<td>Q62 CON WORD</td>
<td>18.89</td>
<td>6.015</td>
<td>.678</td>
<td>.755</td>
</tr>
<tr>
<td>Q63 CON PIC ND</td>
<td>18.29</td>
<td>7.600</td>
<td>.104</td>
<td>.801</td>
</tr>
<tr>
<td>Q68 CON WORD</td>
<td>18.89</td>
<td>5.788</td>
<td>.786</td>
<td>.743</td>
</tr>
<tr>
<td>Q70 CON WORD</td>
<td>18.30</td>
<td>7.773</td>
<td>-.029</td>
<td>.809</td>
</tr>
<tr>
<td>Q71 CON PIC D</td>
<td>19.03</td>
<td>6.754</td>
<td>.433</td>
<td>.781</td>
</tr>
<tr>
<td>Q72 CON WORD</td>
<td>18.94</td>
<td>6.254</td>
<td>.590</td>
<td>.765</td>
</tr>
</tbody>
</table>

Table F7: Congruent and incongruent reliability statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.776</td>
<td>28</td>
</tr>
</tbody>
</table>
Table F8: Congruent and incongruent item-total statistics

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30 INCON PIC ND</td>
<td>44.91</td>
<td>12.330</td>
<td>.377</td>
<td>.765</td>
</tr>
<tr>
<td>Q32 INCON PIC ND</td>
<td>44.95</td>
<td>12.011</td>
<td>.461</td>
<td>.760</td>
</tr>
<tr>
<td>Q35 INCON Word</td>
<td>44.84</td>
<td>12.952</td>
<td>.204</td>
<td>.774</td>
</tr>
<tr>
<td>Q36 INCON PIC ND</td>
<td>44.93</td>
<td>12.119</td>
<td>.436</td>
<td>.762</td>
</tr>
<tr>
<td>Q38 INCON PIC ND</td>
<td>44.93</td>
<td>12.161</td>
<td>.419</td>
<td>.763</td>
</tr>
<tr>
<td>Q42 INCON PIC ND</td>
<td>44.88</td>
<td>12.393</td>
<td>.400</td>
<td>.765</td>
</tr>
<tr>
<td>Q43 INCON Word</td>
<td>44.83</td>
<td>12.943</td>
<td>.231</td>
<td>.773</td>
</tr>
<tr>
<td>Q44 INCON PIC ND</td>
<td>44.88</td>
<td>12.421</td>
<td>.387</td>
<td>.766</td>
</tr>
<tr>
<td>Q46 INCON WORD</td>
<td>44.87</td>
<td>12.514</td>
<td>.371</td>
<td>.767</td>
</tr>
<tr>
<td>Q61 INCON PIC ND</td>
<td>44.93</td>
<td>12.437</td>
<td>.303</td>
<td>.769</td>
</tr>
<tr>
<td>Q64 INCON WORD</td>
<td>44.88</td>
<td>12.785</td>
<td>.219</td>
<td>.773</td>
</tr>
<tr>
<td>Q66 INCON WORD</td>
<td>44.84</td>
<td>12.759</td>
<td>.332</td>
<td>.770</td>
</tr>
<tr>
<td>Q67 INCON PIC ND</td>
<td>44.91</td>
<td>12.247</td>
<td>.415</td>
<td>.764</td>
</tr>
<tr>
<td>Q69 INCON PIC ND</td>
<td>44.92</td>
<td>11.974</td>
<td>.511</td>
<td>.758</td>
</tr>
<tr>
<td>Q51 CON PIC D</td>
<td>45.64</td>
<td>13.707</td>
<td>-.198</td>
<td>.794</td>
</tr>
<tr>
<td>Q52 CON WORD</td>
<td>44.87</td>
<td>12.693</td>
<td>.277</td>
<td>.771</td>
</tr>
<tr>
<td>Q53 CON PIC ND</td>
<td>44.80</td>
<td>13.015</td>
<td>.338</td>
<td>.772</td>
</tr>
<tr>
<td>Q55 CON PIC D</td>
<td>45.53</td>
<td>13.575</td>
<td>-.140</td>
<td>.797</td>
</tr>
<tr>
<td>Q56 CON WORD</td>
<td>45.47</td>
<td>11.354</td>
<td>.551</td>
<td>.752</td>
</tr>
<tr>
<td>Q57 CON PIC D</td>
<td>45.61</td>
<td>13.219</td>
<td>-.019</td>
<td>.787</td>
</tr>
<tr>
<td>Q58 CON WORD</td>
<td>45.51</td>
<td>11.383</td>
<td>.573</td>
<td>.751</td>
</tr>
<tr>
<td>Q59 CON PIC D</td>
<td>45.62</td>
<td>13.630</td>
<td>-.166</td>
<td>.794</td>
</tr>
<tr>
<td>Q62 CON WORD</td>
<td>45.46</td>
<td>11.340</td>
<td>.552</td>
<td>.752</td>
</tr>
<tr>
<td>Q63 CON PIC ND</td>
<td>44.84</td>
<td>12.676</td>
<td>.387</td>
<td>.768</td>
</tr>
<tr>
<td>Q68 CON WORD</td>
<td>45.45</td>
<td>11.270</td>
<td>.572</td>
<td>.750</td>
</tr>
<tr>
<td>Q70 CON WORD</td>
<td>45.87</td>
<td>12.652</td>
<td>.299</td>
<td>.770</td>
</tr>
<tr>
<td>Q71 CON PIC D</td>
<td>45.60</td>
<td>13.236</td>
<td>-.027</td>
<td>.788</td>
</tr>
<tr>
<td>Q72 CON WORD</td>
<td>45.50</td>
<td>11.700</td>
<td>.453</td>
<td>.759</td>
</tr>
</tbody>
</table>
Appendix G

Institutional Review Board Approval Letters

DATE: May 28, 2013
TO: Elizabeth Reiman
FROM: Hunter College (CUNY) HRPP Office
PROJECT TITLE: [447471-2] Implicit Bias about Disabilities: Does it Exist for Forensic Interviewers and Could it Affect Child Credibility Decisions in Child Sexual Abuse Investigations
SUBMISSION TYPE: Amendment/Modification
ACTION: APPROVED
APPROVAL DATE: May 28, 2013
EXPIRATION DATE: April 30, 2014
RISK LEVEL: Minimal Risk
REVIEW TYPE: Expedited Review
REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of Amendment/Modification materials for this project. The University Integrated IRB has APPROVED the changes made to the recruitment summary, the consent form and the questionnaires, based on the new “protocols”. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission. Please update the approval date on the consent form from 05/01/13, to 05/28/13 before dissemination of new consent form.

Please remember that informed consent is a process beginning with a description of the project and assurance of the participant’s understanding, followed by a signed consent form(s). Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any modifications/changes to the approved materials must be approved by this IRB prior to implementation. Please use the appropriate modification submission form for this request.

All UNANTICIPATED PROBLEMS (UPS) involving risks to subjects or others, NON-COMPLIANCE issues, and SUBJECT COMPLAINTS must be reported promptly to this office. All sponsor reporting requirements must also be followed. Please use the appropriate submission form for this report.

This research must receive continuing review and final IRB approval before the expiration date of April 30, 2014. Your documentation for continuing review must be received with sufficient time for the IRB to conduct its review and obtain final IRB approval by that expiration date. Please use the appropriate continuation submission forms for this procedure. PLEASE NOTE: The regulations do not allow for any grace period or extension of approvals.

If you have any questions, please contact Sarah Leon at (212) 650-3053 or bleon@hunter.cuny.edu. Please include your project title and reference number in all correspondence with this committee.
This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within the City University of New York's records.
DATE: May 7, 2014
TO: Elizabeth Reiman
FROM: Hunter College (CUNY) HRPP Office
PROJECT TITLE: [447471-3] Implicit Bias about Disabilities: Does it Exist for Forensic Interviewers and Could it Affect Child Credibility Decisions in Child Sexual Abuse Investigations
SUBMISSION TYPE: Continuing Review/Progress Report
ACTION: APPROVED
APPROVAL DATE: May 7, 2014
EXPIRATION DATE: May 6, 2015
RISK LEVEL: Minimal Risk
REVIEW TYPE: Expedited Review
REVIEW CATEGORY: Expedited review category # 7

Thank you for your submission of Continuing Review/Progress Report materials for this project. The University Integrated IRB has APPROVED your research. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

Please note that any modifications/changes to the approved materials must be approved by this IRB prior to implementation. Please use the appropriate modification submission form for this request.

All UNANTICIPATED PROBLEMS (UPS) involving risks to subjects or others, NON-COMPLIANCE issues, and SUBJECT COMPLAINTS must be reported promptly to this office. All sponsor reporting requirements must also be followed. Please use the appropriate submission form for this report.

This research must receive continuing review and final IRB approval before the expiration date of May 6, 2015. Your documentation for continuing review must be received with sufficient time for the IRB to conduct its review and obtain final IRB approval by that expiration date. Please use the appropriate continuation submission forms for this procedure. PLEASE NOTE: The regulations do not allow for any grace period or extension of approvals.

If you have any questions, please contact Sarah Leon at (212) 650-3053 or bleon@hunter.cuny.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within the City University of New York's records.
REFERENCES


Allan Roher Institute, (1989), *Vulnerable: Sexual abuse and people with intellectual disabilities*. Ontario:


Baladerian, N.,(1991), Sexual abuse of people with disabilities, *Sexuality and Disability, 9*(4)

Bannon, W., (2013), The 7 Steps of Data Analysis, New York: Stats Whisperer


Bottoms, B., Nysse-Carris, K., Harris, T., and Tyda, K., (2003), Jurors’ perceptions of adolescent sexual assault victims who have intellectual disabilities, Law and Human Behavior, 27(2)


Administration on Children, Youth and Families, Administration for Children and Families, US Department of Health and Human Services


Dovidio, J., and Gaertner, S., (2002), Color blind or just plain blind?, The Nonprofit Quarterly, Summer

Dudley, J., (2000), Confronting stigma within the services system, Social Work, 45(5)


Eigenbroad, T., and Retish, P., (1988), Work experience employers attitudes regarding the employability of special education students, Career Development for Exceptional Individuals, 11, 15-25


Kalra, B., and Heath, W., (1997), Perceptions of a child as witness, *Psychological Reports, 80*, 979-986


Kendall-Tacket, K., Lyon, T., Taliaferro, G., and Little, L., (2005), Why child maltreatment researchers should include children’s disability status in their maltreatment studies, *Child Abuse and Neglect, 29*, 147-151


Krajewski, J., and Flaherty, T., (2000), Attitudes of high school students toward individuals with mental retardation, *Mental Retardation, 38*(2), 154-62


Lamb, M., (1998), Assessment of child’s credibility in forensic context, *Current Directions in Psychological Science*, 7(2)


Lyon, T., (1999), The new wave in children’s suggestibility research, *84 Cornell L. Rev., 1004*


McCLean, M., (2011), Getting to know you, *New Directions for Adult and Continuing Education, 132*


Munro, E., (1999), Common error of reasoning in child protection work, *Child Abuse and Neglect*, 23(8)


Murphy, J., (2005), Social norms and their implications for disability, *Journal of Social Work in Disability and Rehabilitation*, 4(1-2)


Nabors, L., (1997), Playmate preferences of children who are typically developing for their classmates with special needs, *Mental Retardation*, 35, 107-113


North Carolina Division of Social Services, (2002). Conducting forensic interviews. Practice Notes, 8(1)

Nugent, W., (2008), Assessment and data collection in Sowers, K., Rowe, W., & Rapp-Paglicci (Eds.), Comprehensive Handbook of Social Work and Social Welfare, Hoboken: John Wiley and Son


Rees, L. Spreen, O., and Hamadek, M., (1991), Do attitudes towards persons with handicaps really shift over time?, *Mental Retardation, 29*, 81-86


Sjoberg, R., & Lindblad, F., (2002), Limited disclosure of sexual abuse in children who experiences were documented by videotaped, American Journal of Psychiatry, 59

Sobsey, D., & Doe, T.,(1991), Patterns of sexual abuse and assault, Sexuality and Disability, 9(3)


Sternberg, K., Lamb, M., Orbach, Y., and Esplin, P., (2001), Use of structured investigative protocol enhances young children’s responses to free recall prompts in the course of forensic interviews, Applied Cognitive Psychology, 86(5)


Tharninger, D., Horton, C., and Millea, S., (1990), Sexual abuse and exploitation of child and adults with mental retardation, *Child Abuse and Neglect, 14*


Tufan, I., (2008), Prejudices against and social responsibility towards the disabled, *Social Behavior and Personality, 36*(1)


Young, K., Powell, M., and Dudgeon, M., (2003), Individual differences in children's suggestibility, *Personality and Individual Differences, 35*