This study examined the quantity and quality of narratives and graphics concerned with disability in children's magazines prior to and after Public Law 94-142, the Education of All Handicapped Children Act, enacted in 1975. Content analysis was conducted on "Highlights for Children," selected for its longevity and wide circulation and "Sesame Street," seen as a trend-setter and opinion maker due to its connections with many aspects of child-oriented mass media. "Highlights" issues from 1961 through 1990 were reviewed; "Sesame Street" was reviewed from 1976 through 1999. "Highlights" articles were categorized as either "traditional" or "progressive." Statistical analysis showed a tendency toward more disability stories of the "traditional" type in "Highlights" prior to P.L. 94-142 and more "progressive" articles thereafter. Analysis of disability graphics in "Sesame Street" showed more "token" disability illustrations after 1990 but more "significant" disability photos before 1990. Contrary to expectations, "Highlights" published slightly more disability-related stories before the law than after, suggesting that the magazine's agenda-setting did not change as a result of the law, whereas "Sesame Street" showed the expected pattern of more attention to disability immediately following the law with diminishing attention as time progressed. (Contains 125 references.) (DB)
Disability Narratives and Images in Children's Magazines pre- and post-PL 94-142

A Thesis
Presented to
The Faculty of the School of Journalism and Mass Communications
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Sciences

by
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May 2001
Abstract

This study addresses quantity and quality of children's magazine's disability narratives and graphics pre- and post-Public Law 94-142 1975 mainstreaming of disabled public school children K-12. Research questions are: did Highlights for Children change quality and quantities of disability narratives and graphics post-1975, and after Public Law 94-142 did Sesame Street Magazine agenda-setting vis-à-vis publication of disability graphics change?

Chi square goodness of fit showed a tendency of increased Highlight's disability stories pre-PL 94-142. Fisher's Exact test yielded strong evidence of more "traditional" disability articles before 1975 and more "progressive" articles thereafter. Associations between number of disability graphics and date weren't found, however post-1975, photographs outnumbered illustrations.

One sample t-test found the mean of Sesame Street disability graphics, post-1990, greater than zero. T-test showed more "token" disability illustrations after 1990 but more "significant" disability photos before 1990; findings were moderately significant.
Acknowledgments

I would like to acknowledge my primary advisor Professor Tillinghast for his patience and wisdom which made this thesis possible. Thanks go as well to my secondary advisors, Professors Baldwin and Gotliffe, for their prompt input and their responsiveness to my thesis. A special thanks is reserved for my family who, despite personal losses, never wavered in affording me their unremitting love, support, and encouragement. Lastly, I’d also like to acknowledge my mother who urged me on and consistently reaffirmed the importance of this my research for both the disabled and able-bodied population.
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I. Introduction and Rationale

A. Statement of the Problem

Prior to 1975, the majority of the 5.8 million disabled children living in the United States were not permitted to enroll in public schools. Disabled children were warehoused in state-run institutions, educated at home, or not educated at all. Those admitted to public schools were not provided with adaptive equipment, their disabilities were frequently misdiagnosed, and many were placed in inappropriate educational settings that did not meet their educational needs (IDEA, 1999).

A dramatic shift occurred in 1975 when President Gerald Ford signed the Education of the Handicapped Act (Public Law 94-142), also known as the Individuals with Disabilities Education Act of 1975 (IDEA) 1975. It established the right of all disabled children to gain access to a free and appropriate public education. Passage of Technology Related Assistance for Individuals with Disabilities Act (Tech Act. PL. 100-407) was passed shortly after. It authorized provision of appropriate adaptive equipment for all disabled children (USF, 1999).

Individuals with Disabilities Education Act (PL 101-476) was passed in 1990. This bill stipulated that states receive federal monies to pay the cost of educating disabled children. The amendment authorized educational services to at risk children and children ages three through five, thus allowing preschool and kindergarten disabled children to attend public school (Advocacy, 1999, 1). Furthermore, PL 101-476 established transition services and access to adaptive technology for disabled students who wanted to attend post-secondary schools and obtain jobs (USF, 1999).

In 1997, Congress passed the IDEA Improvement Act (PL 105-17). This version of the original bill added new features such as implementation of the
Individual Education Plan (IEP), early intervention programs for the disabled, and school safety measures (USF, 1999). The IDEA Improvement Act of 1997 also set established definitive definitions for terms developmental delay, serious emotional disturbance, related services, supplemental aids and supports. This was done to better identify disability and provide services which were appropriate for those children (Summary, 1999).

Because of PL 94-142 and subsequent bills, preschool through twelfth-grade children who have Down's Syndrome, hearing impairments, speech or language impairments, visual impairments, severe emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities were placed in mainstreamed primary and secondary school classrooms. In addition, children, ages three through nine, who had developmental delays in physical, cognitive, communication, social or emotional, or adaptive development were also mainstreamed (IDEA, 1999).

Federal programs for the disabled that were created with the passage of PL 94-142 have served, and continue to serve, millions of disabled children. The Digest of Educational Statistics 1999 reported that in 1976-1977, 8 percent of disabled children ages birth to 18 were served by federally funded programs; in 1980-1981, 10.13 percent were served. Ten years later, from 1990-1991, 11.5 percent were served, and in 1995-1996, 12.43 percent were placed in federally-funded public school programs (Digest, 1999).

The Digest reported that in 1997-1998, 12.8 percent of disabled children were being educated in federally-funded public school programs. Thus, 5.6 million disabled children ages birth to 18 were being educated in public schools. The trend suggests that the number of children served by federal
programs is growing at a faster rate that the total number of students enrolled in public schools (Digest, 1999).

The Digest of Educational Statistics 1999 reported in 1996 to 1997, 46.5 percent of disabled children placed in public schools were schooled in general, mainstreamed classrooms, and 26.5 percent were educated separately in resource rooms. During the same academic year, 22.4 percent of disabled children placed in public schools were educated in separate class rooms, and 1.1 percent were in private separate school facilities. Only 4 percent of disabled children were educated in public residential facilities; 0.2 percent attended school in private residential facilities; and .07 percent were in homebound, or hospital environments. Thus most disabled children were, and continue to be, educated along side able-bodied children in general classrooms (Digest, 1999, Table 56).

Mainstreaming disabled students increases their opportunity for educational advancement and eventual employment. The IDEA 1997 report noted that, from 1982 to 1999, high school graduation rates of disabled mainstreamed students increased 10 percent (IDEA, 1997). The Stanford Research Institute, which tracked the progress made by disabled students who were enrolled in mainstream classes from 1985-1986, and graduated by 1987, reported that two years after graduating from high school, 69 percent of the disabled youths were employed. Three to five years post-graduation, 59 percent were still employed (Closing, 1999).

Additional findings of the Stanford Research Institute’s longitudinal study of employment rates of mainstreamed disabled youths reported that three to five years post-high school, students with learning disabilities and speech impairments were employed at the same rate as their able-bodied peers (Closing, 1999). In addition, post-passage of PL 94-142, the majority of
disabled children, ages birth to 21, are enrolled in federally funded mainstream programs and allowed to attend public schools. Since PL 94-142 was implemented there have been increases in the percent of disabled students graduating from high school, as well as the percent enrolling in post secondary school education, and securing employment. Primary, secondary, and post-secondary educational institutions in the United States have radically changed their policy towards disability, and the future outlook for disabled persons has improved because of Public Law 94-142.

B. Media Framing and Agenda-Setting

Through agenda-setting mass media organizations, like children’s serial publications, can regulate the public’s awareness of a group of people, as well as a specific cause or singular event. The agenda-setting paradigm was first described by McCombs and Shaw (1977) who summed up this phenomena by stating that it gives the press the power to “affect cognitive changes among individuals to structure their thinking” (Mick, 1996, 6).

As defined by McCombs and Shaw (1977), agenda-setting means mass media controls the flow of information received by the public. In doing so the media tells the public what issues to think about, and in so doing, media shapes public opinion.

Mick’s (1996) research addressed media agenda-setting and disability modeling, post-pro-disability legislative mandates. Her research attempted to determine if the Americans with Disability Act 1990 (ADA), which has been heralded as the civil rights act for disabled people, had any influence on the agenda-setting practices of the New York Times and the Los Angeles Times.

Her findings were that post-passage of the ADA 1990, the press did, for a time, place disability on their agenda, and they did employ a "progressive"
disability model. Subsequent to the ADA, more disability-related articles were published, and disability models became more "progressive" as opposed to stereotyped and "traditional." Her conclusion was that legislative action, such as the ADA 1990, had an influence on media's agenda-setting and framing decisions (Mick, 1996).

In addition to agenda-setting, the media have other ways to shape how the public understands and reacts to an issue. They accomplish this by framing the event, or individual, in a specified way. As defined by theorists Stocking and Gross (1989) and Goffman (1974), framing is the categorization or packaging of events by the media to reflect reality (Mick, 1996).

Framing, organization of events, and categorization is done in mass media to facilitate the flow of information to the public. However framing can lead to creation of facile and easily recognizable stereotypes. It can hinder true understanding of a social or economic segment of our society, and it can serve to perpetuate the status quo. When journalists, authors, and commentators confine their framing of disability to stock stereotypes, they limit the public's ability to attain a true understanding of disabilities.

C. Traditional and Progressive Disability Models in Children's Literature

Rubin and Watson (1987) found that, historically, authors of children's books have used a circumscribed number of frames to represent persons with disabilities. One common frame used is the pity frame. Wheelchair user, Clara, in the book Heidi, epitomizes this. She evokes a sympathetic response, and her weakness elicits pity and sympathy. Tiny Tim, the "crippled" boy in Charles Dickens's Christmas Carol, also relies on a pity/sympathy frame.

Other frames include the "ill adjusted" frame, such as Captain Hook in Peter Pan. The lack of a limb turned him into a mean and evil pirate. The
character of Laura in *Glass Menagerie* embodies the "ill adjusted" frame. Laura's limp does not make her mean and evil, like Captain Hook, but is identified as the reason that she is unable to participate in life. Because of her disability, Laura is ill adjusted, emotionally fragile, lonely, isolated, uneducated, and unemployed.

The inspirational frame is often used to portray the disabled. Social activist Helen Keller; inventor Alexander Graham Bell; President Franklin Delano Roosevelt; and inventor of Braille, Louis Braille's lives are recounted in order to inspire others. This traditional frame offers a limiting perspective that tacitly submits a disabled person is of note only if they accomplish something extraordinary.

The superhuman frame is used as well to portray disabled. Athletes like pitcher Jim Abbot who was born without his left arm, and Olympic runners Althea Gibson and Jessie Owens, who had minor disabling conditions, fall under the rubric of superhuman disability frame. The frame is "traditional" and counterproductive in creating understanding and inclusion of persons with disabilities. It allows the media to hold up a precious few number of examples of disabled persons while summarily ignoring the majority who have not performed record-breaking, athletic feats.

For the purposes of this thesis, these cited media frames e.g., sympathy, pity, ill adjusted, inspirational, super human, which have a long history of usage by the media, will be referred to as "traditional." This term "traditional" was generated by Clogston (1990) who documented frequently-used newspapers' disability frames pre-and post-passage of the Americans with Disabilities Act (ADA) 1990.

In the course of his research, Clogston (1990) formulated an alternative to the "traditional" model, which he called "progressive." This model is
applicable to literature which features disabled persons who are socially integrated, engaged in normal activities, equal to able-bodied in employment, education, income independent, healthy e.g., not chronically sick, or bedridden. Clogston’s (1990) progressive model includes medical frames where medical aspects of a disabling condition are explained, and accurate medical terminology is applied when describing the disabled individual e.g., "paraplegic" instead of "crippled," and "wheelchair user" instead of "confined to a wheelchair."

These polar disability models, "traditional" and "progressive," provide a meaningful framework which can be used to assess how monthly children’s magazines frame issues that apply to disability. These disability models, "traditional" and "progressive," can also be used in comparing disability models before and after Public Law 94-142.

D. Prior Research on Media Disability Models and Frames Used by the Mass Media

Following the passage of PL 94-142, inclusion and integration of disabled children became the law of the land but, did other societal institutions including the press, follow suit and adopt an inclusive attitude towards disabled persons? As schools mainstreamed disabled children, did media institutions begin “mainstreaming” narratives about persons with disabilities into children’s serial publications? Did children’s monthly literature publications’ depictions of disabled persons reflect the equal status that disabled children now share with able-bodied children?

Prior content analysis regarding similar, yet not exact, research questions have been addressed. Harrill and others (1993) compared disability frames in 15 children’s books published before PL 94-142, with 30 children’s books published after the legislation. The researchers found that post-1978,
more books had disabled characters, a greater variety of disability frames were used, and disabilities were described with more appropriate medical terminology.

Ayala (1999) addressed the relative accuracy of disability models in five books for children. He found they accurately portrayed a diversity of disabilities, but they did not portray other societal diversities including linguistic and cultural. Soloski (1985) surveyed the content of children's realistic fiction from the years 1970 to 1974 and 1978 to 1982 which addressed disability. She concluded that there were more disability portrayals in children's realistic fiction after passage of PL 94-142, but self esteem scale $t$ scores, which she used to measure qualitative aspects of disability portrayal, revealed no change in portrayal had occurred.

Mason (1985) surveyed disability portrayals in British and American fantasy and fiction children's novels pre-and post-PL 94-142. Her findings were that post-PL 94-142, both British and American children's fantasy and fiction authors:

... succeeded in communicating to young readers the desire consciously or indirectly felt by disabled persons—a desire for respect and acceptance as individuals (Mason, 1985, 56).

Moore's (1984) research focused on misconceptions and prejudices towards disability issues and she generated a list of reading materials which represented disabled in realistic ways. Hopkins 's (1982) research compared the frequency of disability portrayals in basal readers and children's literature. She found that basal readers had less portrayals of disabled individuals than did children's literature.

There are research precedents regarding disability models and framing used in newspapers pre-and post-passage of the American with Disabilities Act (ADA) 1990. Mick's (1996) study focused on framing and agenda-setting of
disability pre-and post-ADA as seen in two major US newspapers, the *New York Times* and the *Los Angeles Times* (Mick, 1996). Her research results suggest that favorable changes in agenda-setting and framing of disabilities occurred post-ADA 1990. However these changes occurred for a limited amount of time, specifically, the immediate years following passage of the ADA 1990.

Catlett and others' (1993) content analysis of two years of disability frames in the *Houston Post* and the *Los Angeles Times* found that in the 227 articles reviewed, most had logical fallacies and used either the pity or superhuman frame when addressing disabled persons (Catlett, 1993). Haller's (1992) findings were that from 1986 to 1990, the *Washington Post* and *New York Times*, covered issues relevant to the deaf community most frequently when this community was engaged in civil protest. Haller's (1992) submits that the "progressive" frame predominated, and deaf individuals were presented as a legitimate minority group. Yet, during the same time period, news about the deaf community falling under the rubric of general news and features adhered to the "traditional" model and emphasized their medical "defects" and economic cost to society (Haller, 1992).

Haller's (1997) research reviewed local newspapers’ coverage of disability issues which were published in the late 1980s. She concluded that during this time, the disabled community was described in accurate medical terms, and the "consumer" frame was applied to disabled persons. This later frame underscored their equal status as consumers and contributors to the economic community in the United States. The "business" frame later came to dominate; this "traditional" frame focused on the federal costs of supporting individuals with disabilities as well as the costs disabled persons incurred to the American business community (Haller, 1997).
Prior research has been useful in understanding the historic portrayals of disability in children's novels and newspapers. Comparisons of disability models in children's novels and newspapers pre-and post-disability legislation, e.g., PL 94-142 and ADA 1990, have also resulted in important insights into the interplay of mass media and legislation. However, to date, content analysis comparing disability frames and models in children's serial literature pre-and post-PL 94-142 has not been undertaken.

E. Value and Purpose of the Study

This study is the first to document disability frames and models published in children's monthly magazines pre- and post-the 1975 federal mainstreaming mandate, PL 94-142, and its 1990 amendment, PL 101-476. The purpose is to increase available information about how media organizations, which publish children's serial literature, respond to changes in disability laws, e.g., do frames and agenda-setting regarding disability change subsequent to pro-disability legislation?

The purpose of the study, too, is to document disability frames and disability models that are published in children's serial magazines. This can enhance awareness of the kinds of images of disability children are exposed to via the mass media. Additionally, documentation of prevailing disability models and frames in children's serial literature can serve as a guide that leads to publication of narratives that portray disabilities in a realistic, informative, and equitable manner which promote inclusion, tolerance, and understanding of disability.

Those who would benefit from this study are those who are interested in pursuing research on the effects of PL 94-142 and PL 101-476 on the disability content in serial children's magazines. Additionally, persons
interested in gaining historical perspectives on disability models and frames published in children's serial publications would benefit from this research. By laying a framework by which other magazines' content could be analyzed, this project leaves the door open for further investigation of the PL 94-142 and its impact on agenda-setting and disability framing in children's serial publications.
II. Literature Review

A. Children's Attitudes toward Disability

The PL 94-142 and PL 101-476 mandates to mainstream disabled children into the public school system increased the chances that these children will achieve educational and employment parity with their able-bodied peers. However, for disabled persons to become full partners in all aspects of society, the pervasive social stigma that they are "different," "strange," or "separate," from able-bodied persons must be overcome.

This stigma is evidenced in preschool children as well as older children's feelings toward disabled persons. Several research projects have documented that children notice differences that may exist between able-bodied and disabled persons. They also form negative attitudes towards disabled persons who move, think, behave, speak, communicate, or learn in different ways.

Based on responses to a standard picture ranking task to assess able-bodied preschoolers attitudes to disabled persons, Cohen and others (1994) recorded children's responses to standard picture ranking task and found that, within the selected study group, able-bodied preschoolers preferred able-bodied persons.

The research of Cohen, Nabors, and Pierce (1994), Nabors and Morgan (1993), and Nabors, Cohen and Morgan (1993) regarding young able-bodied children's attitudes toward disability occurring in adults concluded that able-bodied preschool children favored able-bodied adults as opposed to orthopedically disabled adults (Trepanier-Street & Romatowski, 1996). Cohen and others (1994) found that non-disabled persons had more inclusive styles
of play with able-bodied children as opposed to disabled children (Cohen & others, 1994).

According to Nabors (1997) preschool children with special needs had fewer positive playmate preference nominations than able-bodied children (Nabors, 1997). When able-bodied preschool children were shown pictures of disabled persons and asked to rate them in terms of who they wanted to be friends with, the able-bodied preschoolers showed a marked preference for able-bodied playmates (Nabors, 1997).

Bickett and Milich (1990) investigated able-bodied elementary school children's impressions of boys with Learning Disabilities (LD) and Attention Deficit Disorders (ADD). The data indicated that boys with LD or ADD were devalued in terms of popularity (Bickett & Milich, 1990). Conderman (1995) found that among 1,053 sixth- and seventh-grade students, those with learning disabilities had more negative ratings than able-bodied children (Conderman, 1995).

Stone and La Greca (1990) concluded that mainstreamed Learning Disabled children were often rejected and neglected by able-bodied children. In the same study it was determined that disabled children were less likely to be categorized as popular than were able-bodied children (Stone & La Greca, 1990). Hall (1991) investigated the attitude of 348 fourth and sixth-grade students towards peers with mild articulatory disorders. There were more negative attitudes towards the students with speech disorders than towards peers without speech disorders (Hall, 1991).
B. Value of Literature in Formation of Children's Attitudes

Research suggests that some children may have biases against disabled persons; however, research also suggests that certain kinds of literature can reshape and change these biases. The potential of children's literature to alter thinking patterns and promote non-biased, moral development was summed up by researchers Somers and Worthington (1979):

Literature offers children more opportunities than any other area of the curriculum to consider ideas, values, and ethical questions (Carr, 1990, abstract).

In 1974 the Carnegie Corporation issued a statement on the capability of literature to influence what children believed. Their declaration was as follows:

Books, perhaps children's books most of all, are powerful tools by which civilization perpetuates its values, both in its proudest achievements and its most crippling prejudices. In books, children find characters with whom they identify and whose aspirations and actions they might one day try to emulate: they discover, too, a way of perceiving those who are of a different color, who speak a different language, live a different life (Blaska & Lynch, 1998, 1).

Vitz (1990) submits that, in inculcating tolerance and respect among children, narratives are superior to verbal discussions of abstract moral dilemmas. Stories highlight empathy, caring, and personal character in ways lecture and maxims cannot; stories speak directly to the child. Literature engages a child's imagination and is both direct and deeply personal. Scientific thinking or abstract thought is neither direct or personal and does not impart values as readily as literature (Vitz, 1990).

Robinson and Hawpe (1986) contend that narratives teach children values more effectively than maxims or admonishments. Narratives mediate between specific and general human experiences. They can teach
children general principles about social order as well as allow children to assimilate these principles (Vitz, 1990).

Tulving (1983) submits that narratives are capable of communicating values by virtue of the fact they create semantic memories, rather than episodic ones. Episodic memories are based on personal recollections of an action taken by a child. Nevertheless, semantic memories come from acquired knowledge of the world and are independent of a person's identity and past (Vitz, 1990).

A child can read about a disabled person and semantic memories can be derived from that experience. If a child lacks episodic memories regarding disabilities, semantic memory, gleaned from narratives, can teach a child about the disabled (Vitz, 1990).

Vitz (1990) reminds the reader that the use of narratives to teach moral, prosocial behavior, such as tolerance for diversity, is world wide, and not strictly American. The Great Tradition, which Vitz (1990) identifies as teaching morality through narratives, existed throughout the educational history of the West. However, the Great Tradition can also be found in Classical/Renaissance/Enlightenment traditions and in Jewish/Catholic/Protestant traditions. While these groups may disagree over the substance of morality, empathy, and character development, they all adhere to the Great Tradition and the potency of the narrative (Vitz, 1990).

Monson and Shurtlett (1979) found able-bodied children, ages five to eight, adopted more positive responses to disability following an intervention program which included books about disability. The selected literature presented accurate portraits of disability, focused on positive interaction between able-bodied and disabled persons, and did not dwell solely on an individual's disability (Trepanier-Street & Romatowski, 1996).
Becker, Baskin, and Lennox (1982), spearheaded a study of able-children ages six through seven and their responses toward disability. Their findings suggest when books involving disabled characters were read to the students at story time, the able-bodied children began to forming positive associations about disabilities (Trepanier-Street & Romatowski, 1996).

Hagino's (1980) study also centered on the effect of reading stories to non-disabled children. His research led him to posit that a young child's feelings about a disabled person improved when the children are read books with disabled characters in the plot (Trepanier-Street & Romatowski, 1996). Mauer (1979) documented that when read books emphasizing friendships between able-bodied and disabled children, boys in the study group, ages four through seven, were more apt to try and befriend disabled classmates (Trepanier-Street & Romatowski, 1996).

Blaska and Lynch's (1998) findings were that books that featured disabled persons as overachievers did not have a positive impact on the opinions of the able-bodied children vis-à-vis the disabled. Instead, they found that books which described disability in accurate terms, like Down's Syndrome instead of "mentally retarded," and books that did not solicit sympathy or pity for disabled persons had the most impact on able-bodied children attitudes toward disability. The researchers submitted that honest, realistic books have the most potential for creating positive feelings regarding disabled persons among able-bodied children (Blaska & Lynch, 1998).

Sawyer and Comer (1991) researched the effectiveness of using bibliotherapy to change perceptions of disabilities. Bibliotherapy is defined as guided reading that facilitates understanding of the self and the environment. The researchers found that giving school children carefully selected, assigned readings about disabilities, positive attitudes toward disabilities developed.
Reading such stories aloud also elicited changes in perceptions vis-à-vis disability (Blaska & Lynch, 1998). Schrank and Engels (1981) found that bibliotherapy is highly effective in fostering, among able-bodied children, non-judgmental attitudes toward children with learning disabilities (Shrank & Engels, 1981).

Andrews (1998) cites studies conducted by Dobo and Hopkins (1982), Stroud (1981), Wagoner (1984), Monson and Shurtleff (1979), which suggest that able-bodied children who read inclusion literature which stresses themes common to disabled and able-bodied children, can break down social barriers between these two groups of children. Dobo and Hopkins (1982), Stroud (1981), Wagoner (1984), Monson and Shurtleff (1979), stated that inclusion literature can lead a child to learn that disabled persons may share the same interests as themselves. The realization of commonality mitigates negative responses emanating from non-disabled (Andrews, 1998).

Trepanier-Street and Romatowski (1996) assessed the effect of children’s inclusion literature in changing first graders’ sensibilities toward the disabled. The results of their research on 71 first graders suggested that select readings that are positive and realistic in characterizing disability can increase the potential of friendships between disabled and able bodied children (Trepanier-Street & Romatowski, 1996).

Mason (1985) submits that,

An effective way to help counteract misconceptions and discriminatory attitudes toward the disabled and to develop positive feelings is thorough reading. If a children can see the world through another’s eyes, and become aware of his problems, and share some of his feelings, he will perhaps gain a fuller understanding and sensitivity toward others. Good children’s literature offers such possibilities (Mason, 1985, 48).
Educator Marks (1997) suggests that reducing stereotypical concepts about the disabled can be accomplished through select reading of anti-bias literature. She advocates that teachers use curriculum which includes texts and narratives highlighting the contributions to society made by disabled persons of all ages (Reducing, 1997).

C. Minority Legislation and Mass Media Agenda-Setting and Framing of Minority Issues

Legislation can mandate equal treatment and opportunities for a minority group, but mass media groups do not always change framing and agenda-setting vis-à-vis that minority group. In this regard it is of import to note that prior research demonstrates that passage of Civil Rights Acts in the 1960s was not accompanied by adoption of acceptable mass media frames of African-Americans in children’s literature. Post-Civil Rights legislation, significant changes in mass media agenda-setting regarding African-Americans has not occurred either; few children’s novels feature African-American characters.

Adams (1981) analyzed 32 Newbery Medal Books published from 1950-1981 to determine the acceptability of frames of African-Americans in children’s literature. Some of the variables she used to measure the level of acceptably were: the socio-economic class of the African-American characters portrayed, the language used by the characters, the illustrations of African-Americans, and religious affiliation of the characters.

Using the same variables, Adams (1981) analyzed framing of African-Americans in children’s classics published from 1697 to 1934. Again, she sought to measure the level of acceptability of the framing. Her findings were that of 19 Newbery winners, 34 were acceptable, and three of the 25 classics were acceptable. This constituted a 39 percent level of acceptability of framing
of African-Americans; just over one-third of the books surveyed contained

Adler and Clard’s (1991) analysis of Newbery winners revealed that 10
of the Newbery Medal winners and honor books selected from 1984-1988 had
analyzed Newbery Medal books and Caldecott Award books published during
the years 1963-1983. Based on variables including (a) physical descriptions, (b)
language, and (c) status in the community, Gary (1984) found that negative
frames pertaining to African-Americans dominated children’s literature
(Gary, 1984).

A content analysis of Newbery winners in 1991 by Stier & Clard (1991)
found that among the 10 Newbery Medal winners and honor books published
in 1984-1988, “white males were over-represented” (Adler & Clard, 1991,
abstract). Larrick (1972) surveyed in excess of 5,206 trade books published
during the years 1962-1964. She found that “[o]f the 5,206 children’s trade
books launched by 63 publishers in the three year period, only 349 include one
or more Negroes—an average of 6.7 percent “(Taxel, 1986, 246). Larrick stated:
“Integration may be the law of the land, but most of the books children see are
all white” (Taxel, 1986, 246).

Larrick’s study was replicated in 1975, by Chall et al. who found that in
1975 only 689 of a sample of 4,775 children’s books contained one or more
significant African-American characters. More of the books were
multicultural; however, 85.6 percent of the books still did not feature African-
Americans (Taxel, 1986).

While some progress has been made in publishing more positive
materials, there is still not a significant number of books concerning blacks
when compared to the total number being published (Gary, 1984, 40).
majority of content analysis of children's books, pre-and post-Civil Rights Acts, suggest that mass media framing and agenda-setting vis-à-vis African-Americans, has not significantly changed.

Mick's (1996) research suggests that legislative changes can impact mass media's portrayal of minority groups. The results of her content analysis affirm that positive changes in agenda-setting and disability models in the New York Times and Los Angeles Times occurred after the passage of the Americans with Disabilities Act (ADA) 1990 (Mick, 1996).

In her analysis Mick (1996) found both newspapers have gradually increased the quantity and quality of coverage of disability related articles (Mick, 1996). According to Mick (1996), during the years 1986, 1990, and 1994 there were more articles about disabled persons in the newspapers cited. The year 1990 marked the highest number of articles—that was the year the Americans with Disabilities Act (ADA) was passed by Congress and enacted statewide in the United States (Mick, 1996).

Mick (1996) additionally found that in 1994, the number of articles which portrayed disabled as objects of pity declined. In the same year, there was an increase in articles which were framed by integration (Mick, 1996). Much of this change was attributed to the passage of the ADA and its far reaching legal and social influence (Mick, 1996).

The previous literature reviews have made several points clear. Children become aware of disabilities at a very young age, and many children have negative attitudes towards disability. Research studies directed by Gerber (1977), and Jones and Sisk (1970), Cruz (1987), Cohen and others (1994), Nabors (1997), Cohen, Nabors, and Pierce (1994), Nabors and Morgan (1993), and Nabors, Cohen and Morgan (1993), and Billings (1963) documented this.
Literature reviews document as well that fiction and non-fiction works can foster anti-bias attitudes in children. Literature reviews regarding the connection between pro-minority legislation and mass media portrayals of that minority suggest that legislation may or may not impact mass media framing and agenda-setting. In the case of African-Americans, legislation advancing civil rights were not accompanied by increased inclusion of positive images of African American characters in the literary canon. Mick (1996) research, however, suggests that legislation, like the ADA, can precipitate changes in the quality and quantity of representation of disabled persons in daily newspapers.

Based on Mick’s (1996) findings that the New York Times and the Los Angeles Times featured more disability issues post-passage of the ADA 1990, and the content of these articles shifted from a "traditional"-pity model to a "progressive"-integration model, it is expected that similar changes can be documented in the frequency of disability related stories, and types of disability models used in Highlights for Children and Sesame Street Magazine pre-and post-passage of national legislative initiatives mandating mainstreaming. Since previous research has not focused on agenda-setting and framing of disability narratives and graphics in children’s magazines pre- and post-PL 94-142 and subsequent amendments, more research is needed to determine if changes in these areas have occurred post-passage of PL 94-142 and PL 101-476.

D. Research Questions and Hypotheses

In view of the lack of research documenting disability frames and models published in serial children’s magazines, a content analysis of such
frames and models in *Highlights for Children* and *Sesame Street* Magazine was conducted. The following research questions and hypothesis were tested:

**Question 1.** Did the total number of "traditional" and "progressive" articles about disability published in *Highlights for Children* Magazine change after the passage of the PL 94-142 in 1975?

**Hypothesis 1.** Significantly more "traditional" and "progressive" articles about disabilities were published in *Highlights for Children Magazine* after the 1975 passage of the PL 94-142 than they published before the passage.

**Question 2.** Did the disability models published in articles about disability in *Highlights for Children* change after the 1975 passage of the PL 94-142?

**Hypothesis 2.** Articles describing disabilities that were published in *Highlights for Children* before 1975's passage of the PL 94-142 will contain more "traditional" disability images but fewer "progressive" articles than will articles published after passage.

**Question 3:** Did disability narratives in *Highlights for Children*, post-PL 94-142, feature more accompanying photographs and illustrations than disability narratives published pre-PL 94-142?

**Hypothesis 3:** Pre PL 94-142 *Highlights* disability narratives had fewer accompanying photographs and illustrations than did post-PL 94-142 disability narratives.

**Question 4.** Did the number of "significant" photographs and "token" illustrations published in *Sesame Street* Magazine remain the same directly after passage of PL 94-142 (1976-1990) as opposed to twenty years hence, e.g., 1991-1997?

**Hypothesis 4.** Agenda-setting practices in *Sesame Street Magazine*, as expressed by the numbers of "significant" and "token" photographs and illustrations, will be temporal; more disability graphics will be published in the years following passage of PL 94-142 but this number will taper off in subsequent years.
III. Materials and Methods

A. Selection of Materials

To test the stated hypothesis, a content analysis of *Highlights for Children* and *Sesame Street Magazine* regarding the variables cited earlier was conducted. *Highlights for Children* was selected for content analysis because of its (a) longevity—it was founded in 1946, and (b) its widespread circulation—which is estimated to be three million readers monthly. It is a profitable publication as well, and in 1996 was rated seventy-seventh in revenue in by Folio (Beneditti, 1996).

*Highlights Corporations* is not only involved in publishing *Highlights for Children*, it also has direct connections with educational institutions as well as journalistic institutions. It is part owner of Zaner Blaser, Inc., a company which publishes school textbooks for grades K-8 which are marketed to schools throughout the United States (Background, 1998).

The corporation owns SDE, Inc., which sponsors seminars and conferences for both administrators and schoolteachers who are involved in elementary school education. *Highlights Corporation* has holding in Boyds Mills Press Inc. which publishes trade books under the imprint Caroline House, Bell Books, and Wordsong (Background, 1998). They market consumer products for children. Among their offerings are puzzle books and geographical puzzles, as well as a literature program. All these items are designed and marketed directly to the consumer by the *Highlights Corporation* (Background, 1998).

Through its corporate holdings *Highlights* is prominent not only in serial children’s literature. Through its educational seminars, publication of children’s textbooks, and trade books it is closely linked to educational
institutions in the United States, and it influences both educators and administrators of elementary schools across the country (Background, 1998).

*Sesame Street Magazine,* which debuted in 1974 is, like *Highlights,* a major force in children's serial literature. The magazine is currently published by Children's Television Workshop (CTW) a nonprofit agency formed in 1968. It is best known for producing the long running and immensely popular children's television show "Sesame Street." However, CTW is a multi-faceted organization involved in a range of activities that have a powerful and direct impact on the opinions, attitudes and values of young children regarding disability issues (About, 1999).

In addition to publishing the epophysyous *Sesame Street Magazine,* CTW also publishes other magazines. These include *Sesame Street for Parents, Kid City, Contact Kids,* and *Padres de Sesame Street.* The last is a Spanish-language edition of *Sesame Street Magazine* which is distributed, free of charge, to various doctors' offices located in Latino neighborhoods in the United States (About, 1999).

CTW produces Sesame Street and several other children's TV programs including "Big Bag," "The New Ghostwriter Mysteries," "Ghostwriter," "CRO," "Dragon Tales" and "Show and Tell Me" (in development), "3–2–1 Contact," "Square One TV," "Encyclopedia" and "The Electric Company." Children's Television Workshop also markets films, videos, software and toys and games (About, 1999). They also broadcast public service announcements and are involved in community outreach programs intended to strengthen families (About, 1999).

With its involvement in so many aspects of child-oriented mass media, it is a powerful trend-setter and forceful opinion maker. Thus, the
manner in which it frames disability and its agenda-setting practices is worth investigating via content analysis.

B. Data Collection of *Highlights for Children*

To collect sufficient data to test HO:1 and HO:2, all issues of *Highlights for Children* from 1961-1999 were read, and articles about disability were selected to be included in the sample. This time period, 1961-1999, was selected not only to ensure sufficient data for a valid study, it was also selected because it encompassed years pre- and post-PL 94-142, thus facilitating a content analysis of pre- and post-1975 PL 94-142 disability frames and models.

Narratives that dealt with the following conditions were included in the sample: Down’s Syndrome, visual, auditory, speech or language impairments and orthopedic impairments. Stories featuring characters with severe respiratory disorders, autism, traumatic brain injury, specific learning disabilities, physical, cognitive, adaptive, social, and emotional development delays as well as delays in communication development were also included in the sample. These conditions are the same as those identified as disabling by PL 94-142 (Individuals, 1999).

After the stories were selected, the date of publication, inclusive page numbers, total number of pages, total number of columns, and total length of the articles were recorded. The content of the narrative was then assessed and based on the language, tone, and overall emotional impact of the words, sentences, and phrases in the story, a decision was made as to what variables e.g., pity, inspiration, social integration, etc. were evoked. Figure 1 gives examples of how the researcher assessed the content of the articles.

In a typical *Highlights*’ narrative, both traditional and progressive variables were elicited. For example, a story might emphasize the
"independence" of a disabled character, but the article might also evoke feelings of "sympathy" for that character. In order to determine if the narrative was "traditional" or "progressive," the number of inches devoted to (a) "traditional" variables—pity/sympathy, inspiration, superhuman, ill adjusted, and (b) the number of inches devoted to "progressive" variables—equality, social integration, involvement in normal activities, accurate medical terminology, healthy, and independence, were added up and percentages were calculated.

Articles which were 50 percent traditional and 50 percent progressive were labeled mixed. Any mix of "traditional" and "progressive" variables in excess of 50 percent and 50 percent, e.g., 60 percent and 40 percent and above, resulted in the narrative being deemed traditional or progressive depending on which category had the larger total percent.

C. Data Collection of Sesame Street Magazine

To test Hypothesis 4, which stated that there would be an more disability graphics in Sesame Street Magazine directly following passage of PL 94-142, but that this number will decrease in the ensuing years, data (consisting of illustrations and photographs of disabled persons published in Sesame Street Magazine from 1976-1990 and 1991-1997), were collected. These years were selected so that a comparison could be made between the years directly after passage of PL 94-142 and subsequent years.

Clark Library at San Jose State University had the most complete selection of back issues of Sesame Street Magazine; however years 1984, 1986-1987 were not available. Thus the analysis encompassed 1976 through 1990 and 1991 through 1997.
Graphics were selected as data because *Sesame Street Magazine*, which is geared to preschool children, is graphic-laden as opposed to *Highlights* which appeals to older children and has mainly narratives.

The process of collection of data entailed reading each issue of *Sesame Street Magazine* published from 1976-1990, 1991-1997 and selecting graphics that dealt with disability as defined by PL 94-142. Once selected, both types of disability graphics—illustrations and photographs, were measured, dated, counted, and coded as either "token" or "significant." "Token" graphics were small, cartoon-ish illustrations that were not accompanied by explanatory text and were just part of the background of the total graphic. "Significant" photographs were actual photos of disabled persons which were accompanied by explanatory text.

This categorization and coding was done to determine if over time, disability modeling changed from "token," to "significant." After mainstreaming disabled preschool children, did *Sesame Street Magazine* introduce children to realistic images of disabled persons by including more "significant" photographs and eliminating "token" illustrations?

D. Statistical Methods for *Highlights for Children* and *Sesame Street Magazine*

The 62 articles disability related narratives published in *Highlights for Children* from 1961-1999 were categorized as "traditional" and "progressive." Chi-square goodness of fit was used to assess if the number of articles published in *Highlights* post-1975 was greater than the number of articles published 1976-1990. In this particular comparison, only years 1976-1990 were considered so that the comparison of the number of articles was based on an equal number of years for post-PL 94-142 and pre-PL 94-142.
A Fisher's Exact Test was used to test the hypothesis that the articles published post-1975 were "progressive" while those published 1975 and earlier were "traditional." Analysis of the Sesame Street Magazine data included years 1976-1997. There were incomplete data for years 1984, 1986-1987, 1998-1999-issues for these particular years could not be reviewed. Thus, the results of this analysis should be cautiously interpreted.

In the analysis of Sesame Street "token" illustrations and "significant" photos, a one sample t test was performed to these that the mean number of "significant" photos and "token" illustrations in articles published in 1976 and later was greater than zero since there were no disability related articles prior to 1976. All results were significant at the 0.05 level unless otherwise stated.
IV. Findings

A. Discussion of *Highlights for Children* and *Sesame Street Magazine* Findings

In regards to hypothesis 1, chi square goodness of fit results indicated that there was a tendency for more disability related narratives to be published pre-PL 94-142 than post. Twenty-three (55 percent) articles were published from 1961 through 1975. Nineteen (45 percent) articles were published 1976 through 1990. Thus this first hypothesis was not confirmed (Table 1).

Strong evidence ($p=0.026$) yielded from Fisher's Exact Test supported hypothesis 2 which stated that "progressive" as opposed to "traditional" models predominated in post-PL 94-142 disability narratives. Pre-PL 94-142, 57 percent of the narratives used the "traditional" disability model, and 43 percent used "progressive" models. Post-PL 94-142, 72 percent used "progressive" models, and 28 percent used "traditional" (Table 2).

In regards to hypothesis 3, the number of graphics did not increase or decrease and remained, on average, 2.35 per story. The $t$-test used to test hypothesis 3 stating that there would be more graphics accompanying disability related articles pre-and post-PL 94-142 resulted in a $p=0.0003$. This signifies that there are less than 3 chances in 1,000 that the difference in disability graphics pre-and post-PL 94-142 is accidental (Table 3).

$T$-test results, however, indicate strong evidence to support that the mean number of photographs per issue was higher post-1975 than pre-1975 (1.56 vs. 0.26, ($p=0.0058$)). Pre-PL 94-142, on average, 0.26 photos accompanied disability related stories, while post-PL 94-142, on average, 1.56 photos accompanied disability related stories (Table 3).
Sesame Street Magazine issues published 1976-1990 were more likely to contain disability-related images than those published from 1991-1997 (p=0.025). The mean annual number of disability-related photographs for magazines published in 1976-1990 was higher than in 1991-1997 (p=0.92). (Table 4).

All photographs in the study period were significant. Seventy-eight percent of illustrations were token and 22 percent were significant. These 22 percent were accompanied by text, and were not cartoon-ish in their representation of people with disabilities (Table 4.) A breakdown of "token" illustrations and "significant" photographs demonstrates the erratic numbers of years with disability graphics (Table 5).
V. Figure and Tables

Figure 1. Highlights for Children Coding for "Traditional" and "Progressive" Narratives.

<table>
<thead>
<tr>
<th></th>
<th>&quot;Traditional&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pity</td>
<td>I was doomed to be a cripple (Owens, 24)</td>
</tr>
<tr>
<td>Super.</td>
<td>He captured seven Boston Marathon victories (Folprecht, 17).</td>
</tr>
<tr>
<td>Insp.</td>
<td>Their spirit could be an inspiration to every one of us (Lowell, 11).</td>
</tr>
<tr>
<td>Ill Adjusted</td>
<td>Tears welled up in his eyes, &quot;Why me?&quot; he shouted (Kucherov, 20).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>&quot;Progressive&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>She took her cane and walked to the bus stop (Bradley, 9).</td>
</tr>
<tr>
<td>Med.</td>
<td>Spina bifida means there is a hole in her spinal column (Freeman, 35).</td>
</tr>
<tr>
<td>Social</td>
<td>The three friends wheeled their way to Carl's garage (Kite, 29).</td>
</tr>
<tr>
<td>Indep.</td>
<td>She took physical therapy strengthening her upper body (Knowlton, 13).</td>
</tr>
<tr>
<td>Equal</td>
<td>A kid with asthma can do just about anything (Ostrow, 33).</td>
</tr>
</tbody>
</table>
Table 1: Number and Percent of Disability Articles in *Highlights for Children* Pre- (1961-1975) and Post- (1976-1990) PL 94-192.

<table>
<thead>
<tr>
<th>Years of Articles</th>
<th>1961-1975</th>
<th>1976-1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Articles</td>
<td>55 (23)</td>
<td>45 (19)</td>
</tr>
<tr>
<td>( p = 0.54 )</td>
<td></td>
<td></td>
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</tbody>
</table>
Table 2. Comparison of "Traditional" and "Progressive" Framing Pre- and Post- PL 94-142 in *Highlights for Children*

<table>
<thead>
<tr>
<th>Years of Articles</th>
<th>1961-1975</th>
<th>1976-1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of &quot;Traditional&quot;</td>
<td>57</td>
<td>28</td>
</tr>
<tr>
<td>Percent &quot;Progressive&quot;</td>
<td>43</td>
<td>72</td>
</tr>
<tr>
<td>p=0.026</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. Comparison of Illustrations and Photos in *Highlights for Children* Pre- and Post- PL 94-142

<table>
<thead>
<tr>
<th>Years of Illustration</th>
<th>1961-1975</th>
<th>1976-1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average No. Per Year</td>
<td>2.35</td>
<td>2.35</td>
</tr>
<tr>
<td>p=0.495</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of Photographs</th>
<th>1961-1975</th>
<th>1976-1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average No. Per Year</td>
<td>0.26</td>
<td>1.56</td>
</tr>
<tr>
<td>p=0.003</td>
<td></td>
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</table>
Table 4. Mean Annual Number of "Token" Illustrations and "Significant" Photographs for *Sesame Street*

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Mean Annual</td>
<td>1.2</td>
<td>3.67</td>
</tr>
<tr>
<td>p=0.025</td>
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<table>
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</thead>
<tbody>
<tr>
<td>Mean Annual</td>
<td>11.4</td>
<td>3.67</td>
</tr>
<tr>
<td>p=0.92</td>
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<td></td>
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</table>
Table 5. "Token" and "Significant" Graphics in *Sesame Street Magazine*

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Graphics</th>
<th>No. Illustrations</th>
<th>&quot;Token&quot;</th>
<th>&quot;Significant&quot;</th>
<th>No. Photos</th>
<th>&quot;Token&quot;</th>
<th>&quot;Significant&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1977</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>1978</td>
<td>49</td>
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<td>0</td>
<td>0</td>
<td>49</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>1979</td>
<td>34</td>
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<td>0</td>
<td>0</td>
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<td>1981</td>
<td>34</td>
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<td>2</td>
<td>0</td>
<td>32</td>
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<td>32</td>
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<td>8</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>1983</td>
<td>16</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>13</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
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<td>1985</td>
<td>35</td>
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<td>0</td>
<td>0</td>
<td>35</td>
<td>0</td>
<td>29</td>
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<td>1986</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>1987</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>1988</td>
<td>47</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>46</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>1989</td>
<td>79</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>70</td>
<td>0</td>
<td>70</td>
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<tr>
<td>1990</td>
<td>48</td>
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<td>2</td>
<td>0</td>
<td>46</td>
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<td>1991</td>
<td>37</td>
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<td>3</td>
<td>0</td>
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<td>1992</td>
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<td>1993</td>
<td>25</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td>15</td>
<td>0</td>
<td>15</td>
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<tr>
<td>1994</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1995</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
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<tr>
<td>1996</td>
<td>7</td>
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<td>0</td>
<td>0</td>
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<td>1997</td>
<td>13</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>5</td>
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<td>0</td>
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</tbody>
</table>
VI. Conclusions

A. Discussion of Conclusions

The findings of this study suggest post-PL 94-142 agenda-setting in *Highlights for Children* did not change; an increase in the number of disability narratives post-PL 94-142 was not established. Contrary to expectations, *Highlights for Children* published slightly more disability related stories before mainstreaming than after. One reason for the findings was that issues published after 1990, e.g., 1991-1999, were not included in the analysis. The exclusion of these years was done so that an equal number of years pre-and post-PL 94-142 could be analyzed. The majority of the *Highlights* issues published from 1991 through 1999 had disability related stories.

Other findings of this study were that, as stated in hypothesis 2, disability articles published after PL 42-142, tended to be "progressive." After PL 94-142, 72 percent of the articles were "progressive" and 28 percent were "traditional, before mainstreaming. 57 percent were "traditional" and 43 percent were "progressive."

Several examples of narratives illustrate the changes in disability models in *Highlights*. From 1961 to 1999 *Highlights for Children* published 12 narratives involving mobility disabilities: spina bifida, polio, multiple sclerosis, and non-specified mobility disorders that required use of wheelchairs. Five of the stories published before PL 94-142 were "traditional." "Michael’s Secret," published in 1964, used pity/sympathy to depict an orthopedically challenged boy who "has nobody to play with" (Morton, 25). The 1970 narrative, "A Boy and a Man," featured a boy with polio who refused to have any social interactions. The central character is "ill adjusted" and barks out comments like, "I hate parties, leave me alone" (Carey, 38).
In comparison to pre-PL 94-142, post-PL 94-142, non-fiction narratives about mobility disorders were largely "progressive." One such example is the 1994 non-fiction narrative, "Alex and Me," which featured a woman with multiple sclerosis. This non-fiction narrative emphasized the central character's independence and her relationship with her guide dog who helped her engage in normal activities.

"Dancing Wheels," a non-fiction 1994 post-PL 94-142 narrative, was "progressive," and featured a woman with spina bifida who founded a dance company. "Rolling to Victory," a 1996 post-PL 94-142 non-fiction narrative about a woman with spina bifida, was also "progressive" and detailed the central figure's participation in the Boston Marathon.

The 12 narratives about auditory disabilities illustrate the shift from pre-PL 94-142 traditional variables to post-PL 94-142 progressive variables. "Triumph over Despair," published in 1970, details Beethoven's life with variables ill-adjusted and inspiration. Deafness causes him to become, "eccentric moody and irritable" (Kucherov, 36). Inspirational variables include phrases like, "Beethoven surmounted problems that would have crushed anyone with lesser genius" (Kucherov, 36).

Framing of hearing impairments changed from "traditional" to "progressive" after PL 94-142. Post-94-142 Highlights began publishing articles which featured sign language stories. Included in these sign language stories were: "Airport" in 1986, "Hand Talk" in 1988, "Talking Hands" in 1991, "Making Cookies" in 1989, "Here Comes the Hungry Crocodile" in 1991, and "On the Telephone Wire" in 1996. Sign language was affirmed as a legitimate form of communication and thereby deaf persons were seen as equals to the able-bodied.
Visual disability, like auditory disabilities, was portrayed predominately "traditional" pre-PL 92-142 and "progressive" post-PL 94-142. The 1970 the non-fiction narrative, "Miracle in the Dark" about Louis Braille, used the pity/sympathy frame with phrases like: "For him, all of the lights had gone out" (Roddy, 35). The 1972 book review of the book, "Touch of Light: The Story of Louis Braille," aroused sympathy with the following description of Mr. Braille’s disability: "Louis’ world grew darker and darker" (Brown, 33).

"John Muir: Pioneer Conservation," published in 1970, was also "traditional." His disability was described as follows: "Blindness was a long sentence to a man whose greatest pleasure in life was to examine the delicate stamen of a mountain wild flower" (Enochs, 21). "Traditional" variables pity and sympathy are evoked in this description of how his disability impacted him: "He saw his dreams sinking in the depths of the blackness that surrounded him" (Enochs, 20).

In contrast, "progressive" disability models prevailed in the 1993 non-fiction narrative about Ray Charles titled, "Piano Man." Emphasis was placed on his independence in the recording studio; equal status to those without visual disabilities; and engagement in social and normal activities. "In Dreams," published in 1993, was "progressive" as well. It focused on the medical aspects of visual handicaps by explaining what visually disabled persons "see" when they dream.

The eight non-fiction narratives about disabled athletes published from 1966 to 1996 highlight the post-PL 94-142 shift from "traditional" to "progressive" disability models as well. The 1966 narrative," How I Became an Athlete" chronicled Jesse Owens' athletic career and his childhood bout with an orthopedic disability. The "traditional" variable of pity is elicited in
the following passages from the narrative, when Jesse states, "I was doomed to be a cripple" (Owens, 24).

"Wheelchair Olympics," published in 1970, used "traditional" models also. The predominant frame is inspirational, and the conclusion of the narrative states, "Life has not been easy for America's wheelchair athletes. But because they have been so successful at fighting hardship and despair, they have come to be called the only athletes in the nation who are 'winners' before the games begin" (Yudell, 31).

The 1973 narrative about a girl with polio, "Nancy Merki: The Minnow Who Couldn't Swim," was framed by the pity variable. A description of her attempt to swim is as follows: "She was trying to kick her little legs, the good one and the weak, crooked one" (Folprecht, 24). The story also focuses on the inspirational aspects of her life. This narrative concludes with the following statement: "Years before, she had been only ten years old, she had been so afraid of the water. And her right leg had been crooked, now she was a swimming champion with two straight and strong legs" (Folprecht, 25).

Post-PL 94-142 articles addressing individual athletes with disabilities became more "progressive." In 1990, "Jim Abbott's Special Delivery: It's No Handicap for the Young Angels Pitcher," emphasize Mr. Abbot's professional accomplishments and focuses little attention on his disability. The only reference to his disability is the quote, "I want to be known as a good baseball pitcher, not just as a good one-handed baseball pitcher" (Klodnicki, 8). The article highlights his involvement in normal activities, shows him as being essentially healthy, and equal to able-bodied baseball pitchers and is thus "progressive."

"Rolling to Victory," a post-PL 94-142 non-fiction narrative about a Boston Marathon winner with spina bifida is "progressive." Unlike earlier
narratives which used terms like “crippled,” Ms. Driscoll’s medical condition is explained thus: “Jean was born with a condition called spina bifida which means there is a hole in her spinal column” (Freeman, 34). She is also characterized as being essentially healthy and involved in normal activities like attending high school.

Other findings of this study were that *Highlights for Children* had the same mean number of graphics pre-and post-PL 94-142, but post-PL 94-142, more photographs were used. The 1970 disability narrative, “A Boy and a Man,” featured an accompanying illustration of boy with polio lying in a hospital bed. The pre-PL 94-142 story, “Michael’s Secret” about a boy with a non-specified mobility disorder also had an accompanying illustration of a boy lying in a hospital bed.

These illustrated graphics contrast with *Highlights for Children’s* use of photos post-PL 94-142. Post-PL 94-142 photos of disability ranged from photos of an Irish folk dancer who had severe scoliosis, to photos of persons with guide dogs, photos of disabled persons using motorized wheelchairs, and photos of persons in wheelchairs wheeling in marathons.

The sum effect of using photographs of disabled persons as opposed to illustrations is that a more realistic image of disability is conveyed. However, the increasing use of photos as opposed to illustrations cannot be directly linked to the passage of PL 94-142, and could be resultant of changing technologies and expenses utilized in the publication of children’s serial magazines.

In regards to *Sesame Street* graphics pre-and post-PL 94-142, more "significant" photographs were published than years 1991-1997. Mick (1996) and Haller (1992) also found that in the years directly after pro-disability laws were established, the agenda-setting of major newspapers—the *New York*
Times, the Los Angeles Times, and the Washington Post—changed and they published more stories about disability-related topics. However, the coverage was increased for a short amount of time, and declined after the pro-disability laws had been passed. Agenda-setting was not permanently changed, and the basic policy of the magazine vis-à-vis their interest in publishing "significant" images of disabled persons did not change as a result of PL 94-142 and the nationwide mainstreaming of disabled children.

Another reason that there were more disability graphics in Sesame Street Magazine from 1976-1990 and fewer from 1991-1997 was that disabled characters, Linda Bove—a deaf actress, and Tarah Schaeffer—a wheelchair user born with osteogenesis imperfecta, were added to the show in the late 1970s. They were subsequently added to the cast of characters depicted in Sesame Street Magazine. The total absence of disability graphics during the 1990s coincided with the introduction of new characters to the television show, "Sesame Street," which may have eclipsed the characters of Linda Bove and Tarah Schaeffer.
VII. Directions for Future Study

A. Analysis of Findings and Recommendations for Future Research

The findings of this researcher regarding disability agenda-setting and disability models used in *Highlights for Children* pre-and post-PL 94-142 in part mirror those of Haller’s (1992) study of the *New York Times* and the *Washington Post* coverage of the deaf community during the years 1986 to 1990. Haller had found that after a series of civil rights protests were launched by the deaf community, coverage in the cited newspapers not only increased, but the models were more "progressive" than they had been before protests. This researcher did not find significant changes in agenda-setting in *Highlights* post-PL 94-142; however, like Haller (1992) stories about disabilities did become more "progressive."

Findings of this study regarding agenda-setting practices of *Highlights for Children* post-PL 94-142 differed from those of Mick (1996) who found that post-ADA the *New York Times* and the *Los Angeles Times* increased coverage of disability related stories. However, like Mick (1996) who established that, post-ADA 1990, the *New York Times* and *Los Angeles Times* increased coverage of disability stories, this researcher also found that disability models in *Highlights* became "progressive."

Mick's (1996) findings suggested that changes in agenda-setting practices in the *New York Times* and *Los Angeles Times*, which resulted in increased coverage of disability issues post-ADA were short-lived. In time, the number of articles subsided, but, the "progressive" frame continued to be applied to articles that were published.

In the case of *Highlights*, the numbers of disability articles did not change, but the models did, and the changes in modeling were not temporary.
Even twenty years post-PL 94-142 articles in *Highlights* tended to be "progressively" framed.

Results from *Sesame Street Magazine* analysis of disability graphics resemble Mick (1996) and Haller’s (1992) findings that during the years directly following passage of pro-disability legislation, the publications in question increased coverage of disability issues, but in subsequent years, the coverage dropped. *Sesame Street* disability graphics increased directly after passage of PL 94-142, but in the following years, the numbers of disability graphics decreased.

This researcher’s inability to establish strong statistical evidence of significant increases in articles relating to disability, post-mainstreaming, resemble the findings of Adams (1981), Adler and Clard’s (1991) who found that post-Civil Rights legislation, depiction of African-Americans in Newbery Medal books did not increase. Larrick (1974) and Chall et al.’s (1975) findings that post-Civil Rights legislation, the number of children’s trade books featuring African-American characters did not increase significantly also resemble the findings of this researcher. In the presence of nationwide mainstreaming of a significant minority group, disabled children, children’s serial literature did not dramatically increase the number of narratives highlighting disabled persons. The studies’ findings that there was an increase in the use of photographs, as opposed to illustrations depicting disabled persons may suggest that, in a visual sense, more realistic images of disabled persons were manifested in children’s serial magazines *Sesame Street* and *Highlights for Children*.

The pattern of results that emerges when one considers the findings of this researcher and others such as Mick (1996) and Haller (1992) who have undertaken research regarding disability, pro-disability legislation, disability
agenda-setting, and disability frames is that changes in agenda-setting, specifically, are only implemented for a short period of time. Permanent changes in agenda-setting vis-à-vis disability and consistent inclusion of disability related articles in the publications researched has not been found. The media chooses to focus on disability for circumscribed periods of time, specifically after pro-disability laws have been passed and when pro-disability protests are occurring.

Future researchers who endeavor to conduct research regarding agenda-setting, and framing vis-à-vis disability should consider several making several changes in the variables ascribed to "progressive" and "traditional" frame factors. The categorization of disability models into "traditional" and "progressive," as was done by Clogston (1990), Mick (1996), and this researcher, was fruitful; however, "traditional" variables pity/sympathy, ill adjusted/burden, inspirational, superhuman could be expanded to include variables which more directly assess language content and medical accuracy of the narrative.

Future researchers should also consider ranking the variables within the "traditional" and "progressive" models in a hierarchical manner. This would provide insight into not only which model predominates, but also which variables predominate and are most frequently invoked. This would facilitate a better understanding of how disabled people are perceived and portrayed in children's serial magazines.

Children's magazines are an important part of the children's mass media industry. Despite the potential encroachment of on-line children's magazines, children's print serial magazines continue to proliferate and new publications like Cricket, Sports Illustrated for Kids, Tops, Ladybug, Zillions, as well as Sesame Street Magazine and Highlights for Children, continue to be
profitable (Wartella, 1995). These new magazines, and the continuing popularity of *Highlights*, *Sesame Street*, and others indicate that children's serial magazines are vital to the economic survival and profit of the magazine and children's media industry.

The potential audience for children's serial magazines is getting larger and larger. Population statistics show that the baby boom is not over; in 1987 there were 52.5 million children under age 15, in 2000 there were 55.9 children ages birth to 15. The youth market which children's serial magazines are geared to continues to burgeon (Wartella, 1995).

The combined factors of more available children's magazines, and an increased audience for them, make it especially crucial to examine the images children's magazines project, in narratives and graphics, of disabled persons. These images have the potential to form powerful impressions among young readers thus it is doubly important to document these images and understand the factors that shape what kinds of images are projected to the public. A full understanding of what images they promulgate, and the factors that determine those images, e.g., legislation, will hopefully insure that the media create images that are acceptable to disabled persons as well as the able-bodied population.

Aside from this study, analysis of disability frames, models, and agenda setting in narratives and illustrations in children's magazines pre-and post-PL 94-142, has not been undertaken. In light of the novelty of this direction of inquiry, further research is needed.
VIII. Selected Bibliography


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Changes in Disability Narratives and Graphics
in *Highlights for Children* and *Sesame Street Magazine*
pre- and post-Public Law 94-142

A thesis
Presented to
The Faculty of the School of Journalism and Mass Communications
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Sciences

by Kira Isak Pirofski
May 2001

Approved by School of Journalism and Mass Communications

1. William Tillinghast, Ph.D.

2. Cecilia Baldwin, Ph.D.

3. Harvey Gottliffe, Ph.D.
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