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Bryant University
The Graduate School
College of Arts & Sciences

TRENDS IN AMERICAN NEWSPAPER COVERAGE OF AUTISM

A Thesis in Communication

by

Allison Miller

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Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts
January 2019

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Abstract

The public's understanding of disabilities is cultivated via several media resources, including news media. Disability scholars often cite negative representations of disabilities in mass media, yet analyses of newspaper journalists' coverage of autism remain scarce. The present study explores the frames, stereotypes, stigmatizing cues, and individuals cited in news coverage of autism through a content analysis of *The New York Times* and *USA Today* coverage of autism from 2013-2016. The findings revealed that episodic frames are consistently utilized to discuss autism. References to abnormal social tendencies and coupling autism with adverse circumstances were the most common stereotypes in newspaper coverage. The study's results show that the presence of stigmatizing cues increased over time, with label references representing the most common stigmatizing cue. Episodic coverage was more stigmatizing than thematic news coverage. Medical professional and journalist sources were most present in news coverage. Theoretical and practical applications for media and disability scholars are discussed.

Keywords: autism, episodic frames, sources, stereotypes, stigmatizing cues, thematic frames

TABLE OF CONTENTS

List of Tables	v
Introduction	1
Literature Review	2
News Framing	4
Stereotypes	11
Stigma	17
Rationale	22
Methods	28
Selection of Sample	29
Coding Variables	30
Selection of Coders, Training, and Coder Reliability	37
Results	41
Discussion	46
Theoretical and Practical Implications	55
Limitations	59
Future Research	60
Conclusion	62
References	64
Appendix A: Codebook	76
Appendix B: Code Sheet	81

LIST OF TABLES

1. Presence of All Variables Over Time	71
2. Presence of Stigmatizing Cues in Episodic Frames, Thematic Frames, and Overall	73
3. Presence of Sources in Episodic Frames, Thematic Frames, and Overall	74
4. Presence of Stigmatizing Cues Among Sources	75

Trends in American Newspaper Coverage of Autism

As the public endeavors to make sense of what it means to be disabled, it has engaged in a “spectator” and “spectacle” relationship with those that are disabled (Holton, 2013; Osteen, 2008). Perhaps in accordance with increased diagnoses in recent years, the public has demonstrated particular interest in autism (CDC, 2018a; CDC, 2018b; Holton, 2013). As such, portrayals of autism appear regularly in media, with storylines written into cinema and television, and news journalists capturing features involving autism (Holton, Farrell, & Fudge, 2014). These depictions seldom increase public knowledge about autism or aid in making autism more relatable to viewers; instead such depictions often focus on one-off perspectives, emphasizing isolation and fear (Holton, 2013). The perspective of individuals with autism is often silenced or unrepresented, unless there is an opportunity to present an autistic savant with special abilities (Bie & Tang, 2015; Holton, 2013).

Journalists reporting on autism tend to focus on the condition’s causes and cures (McKeever, 2012), a trend perhaps inspired by the extensive coverage devoted to a potential link between childhood vaccinations and autism, inspired by the release of a study in 1998 which suggested vaccinations may cause autism (Clarke, 2011). The study has since been refuted and reported as scientifically invalid (Clarke, 2011; Holton et al., 2014). This dedication to analyzing the causes and cures associated with autism is also indicative of a reliance on one variation of news framing, episodic framing (Coleman, Thorson, & Wilkins, 2011), the characteristics of which will be discussed in the literature review. In the formulaic manner by which print news journalists habitually discuss autism, features of stigma and stereotypes of autism can be readily identified (Brewer, Zoanetti, & Young, 2017; Jones & Harwood, 2007; MacKenzie, 2018; McKeever, 2012; Wood & Freeth, 2016). Still, to date, no research has comprehensively

examined the concurrence of and relationship between the perspectives present in media coverage, framing, stigma, and stereotypes as they relate to autism.

This study advances existing scholarship about the framing of autism in an important source of information for the public, newspapers, and considers the stereotypes, stigma, and sources of information featured in news articles about autism. As established by previous studies (Holton et al., 2014), news media framing of autism often reinforces or further stigmatizes the diagnosis of autism, and relies on stereotypes of autism. Despite knowledge that news framing of autism plays a notable role in the stigmatization and stereotypes of disability (Stuart, 2006), analyses of newspaper coverage of autism remain scant (Holton et al., 2014). This study links the occurrence of framing, stereotypes, and stigmatization in autism news coverage, which to date, has not been a focus of research. Utilizing scholarship on journalists' framing of autism, health, and mental health issues and literature on the stigmas and stereotypes attached to those disorders, this study seeks to further understand the role of news media in contextualizing autism.

Literature Review

Autism is a developmental disability, part of a group of conditions known as Autism Spectrum Disorders (ASDs) (CDC, 2018b). Autism was originally identified as a condition in 1943, but considered relatively rare until the 1990s and 2000s when incidence of annual autism diagnoses increased (McKeever, 2012; Wing & Potter, 2002). The increased prevalence of cases of autism is most likely due to adjustments in the diagnostic process and greater awareness of ASDs in the public, parents, and medical professionals (Wing & Potter, 2002). Other ASDs include Asperger syndrome and pervasive developmental disorder not otherwise specified (PDD-NOS) (CDC, 2018b). Diagnosed cases of ASDs have become increasingly prevalent throughout recent decades (CDC, 2018a). Today, one in 59 children are identified with an ASD (CDC,

2018a). This is compared to 2008, when one in 88 children were diagnosed with ASD, and 2002, when one in 150 children were diagnosed with ASD (CDC, 2018a). While autism occurs in all racial, ethnic, and socioeconomic groups, it is four times more common in males than females (CDC, 2018a).

Scientists understand that there are multiple causes of ASDs, though most are not known. Generally, scientists have found ASDs can be caused by differences in the brain (CDC, 2018b). It is believed that those differences in the brain could be accentuated by genetic predispositions and environmental factors (Osteen, 2008). Autism may cause notable social, communication, and behavioral issues, which can vary in severity among cases (CDC, 2018b). There is presently no known medicinal cure for autism or its core symptoms (Autism Speaks, 2018). Available medications and other treatment options may help people with autism function better by helping to manage energy levels, issues with focusing, depression, and seizures (CDC, 2018c). Treatments, diagnoses, and explanations related to autism are extremely variant given the condition's complexities (Osteen, 2008). Early diagnosis of autism may ensure access to treatments and therapies, such as occupational therapy, speech therapy, and sensory integration therapy, among others, that may aid in the development of cognitive and communication abilities (Autism Speaks, 2018).

For those who are not in immediate contact with an individual with ASD, it is likely that their notion of the disorder is cultivated with the help of mass media. Media scholars posit that when an individual lacks interaction in their immediate environment with a model of something new or unfamiliar, mass media readily serves as a guide to understanding the issue (Morgan & Shanahan, 2010). As a teacher, the media is influential, a concept which has been repeatedly demonstrated throughout countless iterations of research into media effects (Brewer et al., 2017;

Heuer, McClure, & Puhl, 2011; Jones & Harwood, 2007; Niederdeppe, Farrelly, & Wenter, 2007; Stuart, 2006; Thornton & Wahl, 1996). Consider research by Yanovitzky and Blitz (2000), which demonstrated that an increase in print media coverage of breast cancer and mammography screenings directly accounted for 13% of the behavior of women who engaged in mammography-seeking. Many people intentionally rely on the media as a source of information about health issues. A meta-analysis of the educational materials utilized by cancer patients found that where patients rely on their physicians as a primary source of information about their condition, they purposefully use print media information as supplemental learning material (Chelf et al., 2001). As such, the way in which media journalists frame health issues has important implications for the public's understanding of health issues.

News Framing

Extensive communication and psychology research indicate that media hold a crucial responsibility in framing health issues for the public (McKeever, 2012). Media framing posits that how news reports characterize an issue may have serious implications on how that issue is then understood by audiences (Scheufele & Tewksbury, 2007). Additionally, successful framing – defining the issues that are worthy of public and government attention – can help set the agenda for policy makers (Entman, 2007). The evolution of policy change regarding youth smoking in Florida clearly demonstrates how news coverage can be directly linked to a policy reaction. In examining an interesting case of an increase in policies limiting youth tobacco smoking, researchers found that in Florida counties that had greater news coverage of anti-tobacco events there was also a 94% increase in the odds of those counties engaging in policy change (Niederdeppe, Farrelly, & Wenter, 2007). This case is one of many illustrating that news coverage of a health issue can actually effect a policy reaction.

The framing process involves the purposeful selection of aspects of an issue to make the issue more salient for the audience (Entman, 1993). Entman (1993) posits that the frames presented by media ultimately define problems, diagnose causes, make moral judgements, and propose remedies. Media framing brings attention to, and raises, the perceived importance of problems, encouraging audiences to feel and think about those problems in a particular, predetermined way (Entman, 2007). Frames work as a useful tool for journalists, by allowing them to present complicated topics to audiences in a way that is accessible and requires minimal effort (Entman, 1993; Scheufele & Tewksbury, 2007).

Episodic and thematic news framing. Iyengar's (1991) work on framing understands how reporters frame the burden of responsibility for causing issues and resolving issues. Iyengar (1991) found that stories framed in an "episodic" manner, from the vantage point of the individual, are associated with attributing responsibility to the individual, and stories framed in a "thematic" manner, from the vantage point of the broader society, are associated with responsibility attributed to social causes. Told in an episodic frame, a story about autism might focus on an autistic student's challenges in the classroom. From a thematic frame, a story regarding autism might focus on a community program aimed to help autistic children succeed in a school district.

Iyengar's (1991) seminal work on episodic and thematic frames focused on television reporting of crime news, but has since been applied to health coverage in newspapers and other formats (Coleman, Thorson, & Wilkins, 2011; Holton et al., 2014; McKeever, 2012). These frames are crucially important to health coverage, as blaming society for health problems – in a thematic frame – is associated with public support in adjusting laws, policies, and regulations to address health issues (Coleman et al., 2011). Episodic frames, with individual blame and scope,

are associated with the public holding the opinion that health problems are an individual burden that only the individual can manage or change (Coleman et al., 2011). Such beliefs ensure the public may not concern themselves with considering societal or policy factors that may be associated with the health issue (Coleman et al., 2011). With an episodic frame, a story focused on mental illness is likely to discuss an individual's issues, not prompting public concern or generating broad public interest. A thematic frame, which might underscore community action programs to detect mental illness, is more likely to generate public interest.

Holton, Farrell, and Fudge (2014) applied episodic and thematic frames to their content analysis of autism coverage in 473 newspaper articles from local, regional, and national publications in the United States and the United Kingdom from 1998 to 2012. Both episodic and thematic frame types were present in most of the coverage, with episodic framed sentences appearing more often than those with thematic frames (Holton et al., 2014). While overall articles with thematic frames were significantly relevant in the material, they were often laced with loss frames, meaning the article harped on the risks, disadvantages, and negative outcomes associated with autism (Holton et al., 2014). The results suggest that covering disabilities in the media is a positive step, but just half of the battle; “while journalists might indeed be striving to frame stories in ways that society can connect with, they might also be telling the public how to think about particularly complex issues like mental disabilities and autism” (Holton et al., 2014, p. 200).

Thematic frames of health issues. The thematic frames employed by journalists are contextual, with emphasis on societal connections to an issue, promoting communal responsibility for the issue (Coleman et al., 2011; Holton et al., 2014). For example, a news report on obesity with a thematic frame may cite research connecting poverty with decreased

access to healthy food, leading to weight issues (Coleman et al., 2011). Perceived responsibility for an issue is related to greater public activism and concern for policies, therefore "from a public health perspective, a thematic frame is desirable" (Taylor & Sorenson, 2002, p. 126). Barry, Brescoll, Brownell, and Schlesinger (2009) demonstrated this connection between policy support and thematic frames in examining the metaphors used to prescribe the blame for obesity issues in America. This research demonstrated that metaphors which presented the lowest level of individual blame for obesity issues (i.e., describing obesity as the result of a profit-driven food industry) were most positively associated with support for the enactment of policies; conversely, metaphors endorsing individual blame (i.e., describing obesity as the result of gluttony) was most negatively associated with policy support (Barry et al., 2009).

With a strong preference for thematic frames of health coverage, health experts have called for journalists to employ more thematic framing in news stories, for fear that a lack of such framing leads to incomplete knowledge about health issues, among other concerns (Suran, Holton, & Coleman, 2014). Suran, Holton, and Coleman's (2014) research analyzed online health articles and associated reader comments in coverage of ten health categories which included gender-specific health, cancer, drugs and alcohol, personal health and obesity, and mental health, among others. Of all of the health topics, only mental health coverage, which has been covered with a more thematic frame in recent years, was associated with more thematic framed reader comments (Suran et al., 2014). This evidence suggests that journalists have covered mental health as a social issue for a long enough period of time that individuals are adding it to their own discourse (Suran et al., 2014). Ultimately, Suran et al.'s (2014) research illustrates that framing of news stories in a thematic approach influences how audiences then approach and regard the covered issues in their own discourse.

Thematic frames of autism. Exploration of thematic coverage of autism is limited in scope. Holton et al. (2014) included the perspective in an analysis of newspaper articles from the United States and the United Kingdom. The research observed imbalance between episodic frames and thematic frames of autism, where episodic frames were far more likely to appear in the coverage (Holton et al., 2014). Further, thematic frames discovered were frequently paired with loss frames, meaning the coverage centered on risks and disadvantages associated with autism. Consistent with existing knowledge on the outcomes of thematic coverage of health issues (Suran et al., 2014; Taylor & Sorenson, 2002), Holton et al., (2014) had anticipated that thematic coverage would instead be associated with language and themes highlighting positive outcomes in individuals with autism. The observed combination of thematic frames and loss frames in autism coverage indicates that the coverage is “casting autism as a generally poor outcome that is potentially harmful at the societal level” (Holton et al., 2014, p. 201). In interpreting the demonstrated results of the research, Holton et al. (2014) urged that thematic framing by journalists does not guarantee knowledge and positive perceptions; topics included in thematic coverage require proper descriptions and contextualization. As of the writing of this paper, Holton et al.’s (2014) research represents the only existing research of thematic frames included in print media coverage of autism. Historic neglect of this examination presents guidance for research goals in the present study.

Episodic frames of health issues. As suggested by earlier research (Coleman et al., 2011), the episodic frames employed by journalists are those which introduce an individual, utilized to represent a disease or disability in a media message (Holton et al., 2014). The individual used for the episodic frame can vary, and could be the person diagnosed with the disease, a medical professional treating the disease, a family member, or other individual. While

scholars theorize that thematic frames are considered superior for public health, (Taylor & Sorenson, 2002), episodic frames appear frequently in health news stories (Holton et al., 2014; Suran et al., 2014). Some health communication scholars posit that America's highly individualistic culture extends to beliefs about health – the attitude being that health issues trace back to personal behavior (Kim & Willis, 2007). In American media, individual and episodic approaches to health stories are regarded as the traditional reporting style of journalists (Coleman et al., 2014). Although thematic reporting is linked to public engagement and activism on behalf of health issues (Coleman et al., 2011; Holton et al., 2014), a preference for episodic approaches by journalists may be due to the credibility that is associated with individual, traditional stories (Coleman et al., 2014).

Episodic frames of autism. Bie and Tang's (2015) analysis of 795 articles in leading Chinese newspapers' coverage of autism provides insight into the individuals most commonly referenced in episodic frames of the disorder. While Bie and Tang's (2015) content analysis studies the media coverage in Chinese newspapers, it remains the most recent analysis of individuals cited in episodic framed autism media messages. Such an analysis has not been conducted in reference to American newspapers (as of the writing of this paper). The content analysis conducted by Holton et al., (2014) analyzed episodic frames in autism coverage in a general sense, coding for any story focused on one particular case study or situation. Thus, the Bie and Tang (2015) research represents the most recent indication of the individuals relied on in episodic framed autism media coverage.

In particular, Bie and Tang's (2015) research found that aside from health professionals (cited in 25.5% of autism coverage), the mothers of autistic persons (24.8%) are most often the individuals cited in episodic frames of autism, followed by fathers of an autistic person (9.5%)

(Bie & Tang, 2015). After family members of an autistic person, government officials (9%) and academic sources (7.9%) are used most regularly. Yet, autistic people are only included as the main contributor in 7.2% of Chinese newspaper coverage (Bie & Tang, 2015). Earlier analyses of American newspapers by Holton et al. (2014) observed that episodic framing most often describes a family's unique experience with autism. As such, journalists seldom include the viewpoints of individuals with autism. Such an oversight is a mistake according to disability scholars, who see the inclusion of the disabled perspective as important in reducing stereotypes and stigma about disabilities (Holton et al., 2014). Individual perspectives included in news coverage of autism are often exceptional individuals with rare talent, not necessarily representing a general population (Baker, 2008; Bie & Tang, 2015).

When an autistic person is featured in episodic frames, the individual stories often involve cases of an autistic savant. As Bie and Tang (2015) suggest, when the autistic population is not depicted in media as dangerous or undesirable, most often the perspective shifts to the other end of the spectrum, where autistic individuals with special abilities are highlighted. Baker (2008) theorizes that the common presentation of autistic individuals as rare prodigies may be in an effort to highlight their human appeal, overcompensating for an otherwise neurological and behavioral approach to discussions of their autistic condition (again, demonstrating the media's particular interest in the causes and cures of autism (Coleman et al., 2011)). In these presentations of the autistic savant, the individual's exceptional talents and creativity are highlighted as enriching and benefitting the non-autistic world (Baker, 2008). Given the media prominence of autistic savants, the public might buy into a stereotype that special abilities are a norm for autistic individuals; in actuality, it is estimated that the occurrence of savant skills happens in about ten percent of the autistic population (as of Baker's 2008 analysis). In addition

to an overreliance on citing particular individuals – and usually not the individuals with the condition – in coverage of autism, journalists also have a habit of leaning on stereotypes in their coverage of autism. These stereotypes and the general nature of stereotypes are discussed in the following section.

Stereotypes

In processing social encounters and information, people may often utilize stereotypic beliefs about groups to form judgements. Stereotypes may be considered "energy-saving devices" that aid in processing the influx of information that accompanies an interaction (Goodman, Webb, & Stewart, 2009). Stereotypes may be understood as a relationship between a group and a characteristic of that group (Kurylo & Robles, 2015). Stereotypes serve our understanding of the world, influencing "what information is sought out, attended to, and remembered about members of social groups" (Stangor & Shaller, 1996, p. 6). Stereotypes may also be considered simplified notions about groups which influence social knowledge and information (Kirchner, Schmitz, & Dziobek, 2012).

Several processes may cause the emergence of stereotypes, beyond the mere existence of differences among individuals, according to research by Hilton and von Hippel (1996). Stereotypes may be formed as result of group differences created by self-fulfilling prophecies, where people adjust their behavior, which in turn, influences the behaviors of others to fit expectations (Hilton & von Hippel, 1996); Hilton and von Hippel's example of this points to how a teacher expecting a remarkable performance from their student may behave in a manner that elicits such performance. Stereotypes may also be developed on account of non-conscious detection of covariation, where the co-occurrence of stimuli is noted (Hilton & von Hippel, 1996). Stereotypes may be developed regardless of common sense; for instance, some

stereotypes are the result of illusory correlation, where an individual perceives a relationship between two variables based on a memorable experience, even when that perceived relationship does not exist in reality (Hilton & von Hippel, 1996). For an example of illusory correlation, consider a child who is afraid of dogs because they believe all dogs bite people, perhaps on account of seeing one vicious canine. Stereotypes are also born through out-group homogeneity, in which all members of an outgroup are perceived as sharing the same characteristics and attributes (Hilton & von Hippel, 1996); in other words, a person might perceive members of a particular group as “all the same.”

Stereotypes are often maintained and reinforced via communication, as people generally prefer stereotype-consistent information over stereotype-inconsistent information (Lyons & Kashima, 2003). Stereotype-consistent information is perceived as serving the regulation of social relationships, one of functions of communication (Clark & Kashima, 2007). In chains of communication, information often becomes more stereotypical as it is passed down the chain (Lyons & Kashima, 2003). In sharing a story about an individual with autism involved in a violent altercation, for example, it is likely that as more people recount the information, storytellers will become increasingly reliant on the stereotype that individuals with autism are inherently dangerous and violent (Brewer, Zoanetti, & Young, 2017). This tendency to rely on information that is consistent with stereotypes in conversation is a function of communication processes, not a flaw related to memory or cognitive capabilities (Lyons & Kashima, 2003).

Generally, stereotypes may be identified in the common practice of identifying a characteristic or attribute of one member of a particular group and in turn applying that characteristic or attribute to be descriptive of any and all members of that group. This energy-saving practice is believed to be universal and employed by every individual, regardless of

culture (Seiter, 1986). These are not always a result of direct experience with a stereotyped group member, often these ideals are learned from mass media. Where some stereotypes may be based on a truth or fact applicable to some members of groups, generally stereotypes are understood to be gross generalizations that do not account for differences that occur within any and all groups of individuals (Seiter, 1986). Consider a popular television show, like *The Big Bang Theory*, which features a main character with symptoms of ASD. Based on watching this show and observing this character, a viewer might develop a stereotype that people with ASD are geniuses with unusual approaches to social interactions. While this notion of ASD may be true for the fictional character, it is ultimately not representative of all people with ASD. This is the case of all stereotypes – a characteristic that describes one group member is used to inform subsequent judgments of all other members of that group.

Stereotypes of intellectual disabilities and mental illness. Stuart (2006) contends that news journalists present stories on outgroups in frames that highlight, reinforce, and depend on stereotypes. Wahl's (2003) analysis of American newspaper articles found that dangerousness is the most common theme in stories about mental illness, with over 25% of stories recounting crimes or violence committed by a mentally ill individual. As Thornton and Wahl (1996) found with a comparison of individuals who read a story about a dangerous and violent mentally ill individual and a non-violent story about mental illness, those with exposure to information about violence and mental illness are more likely to see mentally ill people as dangerous, frightening, and in need of containment.

Common stereotypes about individuals with autism include the notion that people with ASD are more criminal or violent (Brewer et al., 2017), are immune to or uninterested in romantic attachments (Bryers, Nichols, & Voyer, 2013), or have lower capacities for empathy

(Krahn & Fenton, 2012), among other stereotypes. Stereotypes about the functions and symptoms of autism are linked to underdiagnosing females with autism, leading to serious consequences related to a lack of treatment for females on the spectrum (Krahn & Fenton, 2012).

Research suggests that the public's perception of autism could be connected to media coverage linking autism to criminal behavior, creating a stereotype that autistic individuals are inherently violent. Brewer, Zoanetti and Young (2017) suggest that "media coverage of violent and other serious crimes sometimes suggests that the perpetrator may have autism spectrum disorder (ASD), despite the absence of evidence of any formal diagnosis of the perpetrator or the presence of other plausible explanatory factors" (p. 117). Brewer et al. (2017) also found in their experimental study that participants reading media messages about autism and criminal activity without educational material about autism subsequently hold more negative attitudes toward and stereotypes about people with autism. By contrast, the group who read educational messages about autism held less negative attitudes toward those with autism (Brewer et al., 2017). The study highlights the importance of explaining autism in media messages to the public, as well as the impact negative portrayals of those with autism may have on evaluations of individuals with autism. This study also shows how easily news reporting can create and "add evidence" to stereotypes about groups unknown to the public.

Activists argue that when they aren't ignored by the media, those with mental health issues or developmental disabilities are often presented in United States news with negative stereotypes that contribute to public misunderstanding of their lives and experiences (Zhang & Haller, 2013). Zhang and Haller's (2013) analysis of 390 individuals with disabilities discovered that disabled individuals are acutely aware of the stereotypic coverage of their condition. In the study, individuals with disabilities reported beliefs that American media most often frames them

as disadvantaged, victims, or supercrips, meaning there is a perhaps demeaning emphasis on their ability to reach accomplishments or live a normal life despite their disability (Zhang & Haller, 2013). Reviews of supercrip coverage of disabilities are mixed across literature (Bie & Tang, 2015; Zhang & Haller, 2013). Zhang and Haller's (2013) review of supercrip coverage indicates that presentations of supercrips are psychologically important to disabled individuals, and can override concerns for the perceived realism of coverage. In fact, even when considered unrealistic by disabled individuals, supercrip coverage is associated with feelings of hope and increased self-esteem (Zhang & Haller, 2013).

Issues related to stereotyping are not inherently hostile and negative; evaluations of outgroups are sometimes perceived as favorable and admirable (Czopp, 2008). Bie and Tang (2015) found that one of the most common stereotypes of autistic individuals in Chinese newspapers was positive, with emphasis on the talent and above-average intellectual ability of autistic individuals, what might be considered 'supercrip' coverage by Zhang and Haller (2013). Nonetheless, positive stereotypes can have negative consequences. Often, even when intended as a compliment, comments on the stereotypic traits of individuals are felt as condescending or offensive (Czopp, 2008). Considering the emphasis on savant abilities in autistic individuals in Chinese newspapers, it can lead to the concern that such coverage creates unrealistic expectations about the abilities of autistic individuals (Bie & Tang, 2015). Further, it is believed that this stereotype dehumanizes autistic individuals, portraying them as having no feelings (Draaisma, 2009). The stereotype that people with autism are savants is perhaps the greatest discrepancy between expert knowledge on autism and the general public's view of autism (Draaisma, 2009).

Many previous studies of stereotypic coverage of autism, including content analyses of news clippings and television programming, have reviewed stereotypic coverage of autism in relation to one specific stereotype of autism. As a result, coding schemes developed to identify stereotypic coverage are varied and particular to individual reports (Bie & Tang, 2015; Brewer et al., 2017; Bryers et al., 2013; Krahn & Fenton, 2012). In examining coverage of the autistic individuals with savant abilities, Bie and Tang (2015) developed a coding scheme that looked for references of special abilities related to mathematics or music. At the present time, no existing literature has performed a comprehensive examination of the presence or frequencies of the most common stereotypes of autism in media coverage.

Stereotypes of autism. While any individual may hold their own unique stereotypic beliefs about autism based on their experiences, several themes and categories emerge as encompassing the most common stereotypes of autism. The following stereotypes of autism have been established through content analyses, experiments involving people with autism, and surveys and interviews with the non-autistic community, and will be further examined in this research. The first set of stereotypes involve autism and sexuality; often, autistic individuals are presented as asexual, too child-like to engage in sex, or completely uninterested in sex (MacKenzie, 2018). Another set of stereotypes about autism reflect beliefs about the social skills and capabilities of autistic individuals; people often believe that autistic individuals are especially introverted, have poor communication skills, or are withdrawn (Wood & Freeth, 2016). An additional set of stereotypes suggests that autistic individuals have difficult personalities (Jones & Harwood, 2007; Wood & Freeth, 2016). Another stereotype set posits that autistic individuals are violent and uncontrollable (Brewer et al., 2017; Jones & Harwood, 2007). A final set of stereotypes to consider is the notion that autistic individuals are inherently gifted

and talented (Osteen, 2008). Examination of stereotypes aids in understanding how autism is represented by the media – this understanding may be further enhanced with research into the stigmatization of autism.

Stigma

Where stereotypes are the categorization of people based on their situation or attributes (Kirchner et al., 2012), Corrigan, Bink, Fokuo, and Schmidt (2015) recognize stigma as social exclusion of people based on those categorizations. While stigma and stereotypes may share characteristics and can exist simultaneously, there are distinctions that separate the two, thus warranting separate examinations for this study. Ultimately, stigma moves a step beyond stereotypes; if a stereotype posits that autistic children are antisocial and awkward, stigma is not allowing autistic children to join an afterschool program on the basis that they are perceived as antisocial and awkward. Thus, in comprehensively understanding how autism is portrayed, it is necessary to consider both stereotypes that are reported by journalists in covering the health issue and how the content of the media coverage could be considered a stigmatizing occurrence.

The public are often curious about disabilities and utilize entertainment media and news media to better understand those conditions that they might not otherwise come into direct contact with (Holton et al., 2014). While media representations of autism help the public discover information about the condition, those representations often risk stigmatizing the autistic condition (Osteen, 2008). News media is perhaps most intent on captivating the audience, even when it comes at the risk of not delivering complete coverage of an issue (Stuart, 2006). By singling out and labeling individuals as having a condition and being different because of that condition, journalists move beyond perpetuating stereotypes and instead move toward stigmatizing issues. This distinction is clear in news coverage, as journalists label and prescribe

the differences between individuals at the center of news coverage and others and provide evidence to reinforce distinctions between those individuals and others.

The chief concern of disability scholars is that news media coverage of autism can be overly simplistic with overwhelmingly negative undertones, “presenting autism as a shameful, isolating, and burdensome impairment that disrupts the lives of those diagnosed with it, their friends and families, and the communities they live in” (Holton et al., 2014, p. 191). Or, portrayals of mental illness are often sensationalized to underscore violence and irrational behavior, delivering “factual evidence” to fictional beliefs about various illnesses (Stuart, 2006). It is necessary to examine news media coverage of autism with careful attention, as such coverage may hold connection to stigma related to autism. In an examination, it is important to note how journalists denote their separation of autistic individuals from others as negative, and necessary to distinguish them from the greater population. As a result, such behavior moves from stereotyping to stigmatizing.

The concept of stigma can also be defined as a way to understand the experiences of individuals that exist when features of marks, labels, assigned responsibility, and peril exist in situations in which power is exercised (Link & Phelan, 2001; Smith, 2007). Belonging to a stigmatized group can introduce health concerns for individuals or happen as a result of a health condition (Smith, 2011). As such “stigma may be based on one’s health condition; being stigmatized may further compromise one’s health and well-being; and caring for a stigmatized person may provide unique challenges above and beyond the health issues” (Smith, 2011, p. 691). Generally speaking, individuals belonging to stigmatized groups are disadvantaged with regard to income, education, access to medical treatment, and general well-being (Link &

Phelan, 2001). In his seminal work on stigma, Goffman (1963) understood stigma as a discrediting attribute serving as a deficit to the individual with the attribute.

The impact of stigma on human rights. The negative consequences of stigma for those with stigmatized conditions are insidious and often require legal intervention to ensure rights and fair treatment. With regard for the troubling effects stigma may have on health and well-being, a number of federal policies have been considered and implemented with aim to reduce the stigma associated with mental illness and increase access to necessary services (Hinkshaw & Cicchetti, 2000). In 1990 and 1997, respectively, the Americans with Disabilities Act (ADA) and Equal Opportunity for Employment Commission (EOEC) were established, creating enforceable rights for people with mental illness (Hinkshaw & Cicchetti, 2000). Further, the ADA and EOEC underscored that in specific regard to employment opportunities, housing, and transportation, discrimination against those with mental illness is strictly unacceptable and punishable by law. Such endeavors are credited with creating greater awareness for employers in how to work with individuals with unique needs and circumstances (Hinkshaw & Cicchetti, 2000). Unfortunately, it is in the areas in which policies advocating for stigmatized groups lack that highlights the importance of federal intervention in creating a safe existence for stigmatized individuals. For example, in examining the link between stigmatizing atmospheres and suicide attempts, researchers found that among areas lacking inclusive and anti-bullying policies, there is a 20% greater risk of suicide attempts among lesbian, gay, and bisexual youth (Hatzenbuehler, Phelan, & Link, 2013).

A model of stigma. Goffman (1963) argued that stigmatized people represent an “undesirable difference” that separates them from those who fit in more readily with the greater society. Where stereotypes are the mere internal categorization or judgement of group members,

stigma relates to the treatment of individuals based on those judgements. Additionally, where stereotypes may be negative or positive, stigma is always negative (Corrigan et al., 2015).

Consider the example of autism and savant abilities. This stereotype of autism could actually be considered positive, as talent is desirable and can be appreciated by the disabled and non-disabled world. Stigma attached to this stereotype, though, will always be negative. Although the judgement (stereotype) of an autistic savant is that they are special and unique, a stigma attached to that judgment would mean exclusion on the basis of that judgement (i.e. the exclusion of the autistic savant from a music class because their skills exceed the skills of their classmates).

Stigma is socialized and communicated, such that individuals are able to identify those who pose "threat" to their community (Smith, 2011). Stigma is achieved and communicated via four content cues which include marks, labels, responsibility, and peril (Smith, 2011). Marks are the cues that make stigmatized individuals recognizable, leading to emotional and behavioral responses (Smith, 2007; Smith, 2011). Marks that cannot be hidden provide the greatest threat of avoidance or rejection from others (Smith, 2007). Individuals with autism, who often suffer from social skill deficits, may be marked by lacking eye contact, having obsessive interests, or presenting unusual behaviors in conversation, like shaking or walking in circles (CDCb, 2017). Stigmatized individuals are often victim of labeling, in which their difference and separation from others is pronounced, by use of pronouns of *us* and *them* or *we* or *they* (Smith, 2007). While a person may have autism, labeling may occur when that person is referred to as "that autistic kid in class." In the stigmatizing process, labels are linked to undesirable attributes and beliefs, providing a façade of proof that labeled persons are inherently different from their non-labeled counterparts (Link & Phelan, 2001).

Another aspect of stigma is responsibility, where it is argued that members of a stigmatized group had some level of choice or control in their situation (Smith, 2011). Holton, Farrell, and Fudge (2014) argue that responsibility is a major focus of autism news coverage, with significant media attention paid to the causes, cures, and symptoms of the disorder. The media's consistent accentuation of the link between the MMR vaccines and autism shows an attempt to pinpoint responsibility for autism diagnoses (McKeever, 2012). The concept of responsibility demonstrates a difference between stigma and stereotypes. Where a group may be looked upon differently because their characteristics are extremely separate from others (stereotype), the notion that they had some choice or control in their difference from others rationalizes their exclusion from others (stigma).

Peril refers to the physical or social danger of a stigmatized individual to the greater community (Smith, 2007). In media coverage of health issues, signaling words are often used to alert groups to the dangers of a stigmatized individual (Smith, 2007). These signaling words depict those in stigmatized groups as strange, uncomfortable, and unpredictable (Ahmedani, 2011). In relation to autism, physical danger, emotional issues, and financial burdens of caring for an autistic person may highlight the peril associated with the condition. This again presents how stigma and stereotypes are different, as mentioned, stereotypes are not inherently negative, but the prescription of peril to a condition makes the distinction of a condition negative and worthy, if not necessary, to exclude from the greater population.

Stigmas presented by the media on mental illness. Aside from merely perpetuating stigmas in their reporting of health issues, journalists are also known to contribute to the negative consequences felt by those who experience stigma related to their illness (Heuer, McClure, & Puhl, 2011). Those with mental illness regard stigma as equally as concerning and traumatizing

as actual health symptoms (Hocking, 2003); family members of those with mental illness hold that less stigma would let them live better lives (Hocking, 2003). In review of stigma related to schizophrenia, Hocking (2003) found that discouraging media from promoting stigmatizing content is one of the most viable paths to reducing stigmas held by communities.

The stigmatization of autism. Analysis by Holton et al. (2014) reveals the prevalence of stigmatizing content in news media coverage of autism. In the examined sample, nearly two thirds of the coverage had explicit stigmatizing cues with references to labels, psychiatric symptoms, deficient social skills, and physical marks of autism. Over half of the articles had reference to the psychiatric symptoms of autism, with mention of cognitive limitations and symptoms that would be perceived as limiting (Holton et al., 2014). Additionally, half of the articles analyzed contained loss frames, with reference to the negative outcomes of autism, like exclusion of autistic children and resource struggles for families with autistic children. In examining the qualities of stigmatizing cues and content, the true distinction between stereotyping and stigmatizing coverage of issues is underscored; where stereotyping is related to distinction of people with a condition from others, stigmatizing is distinguishing the differences between people with a condition from others, framing those differences as negative and wrong, and citing how those people are and should be separated from others.

Rationale

Recent research regarding media coverage of autism has closely examined the frames and cited individuals utilized in coverage of autism (Bie & Tang, 2015; Coleman et al., 2011; Holton et al., 2014), and also the stereotypes and stigmatizing cues (Brewer et al., 2017; Holton et al., 2014; McKeever, 2012). The fundamental rationale for this research is the knowledge that journalistic coverage of mental health issues can contribute to the public's understanding of

those disorders (Corrigan et al., 2015; Holton et al., 2014; Stuart, 2006). Stereotypes and stigmas related to disorders contribute to adverse and concerning health outcomes for affected groups. A deep understanding of existing media coverage of autism is imperative to fuel the necessary advances in contextualizing disorders for the public to better understand them in a more empathetic, authentic, and accurate manner. With this familiarity with the literature on news framing, stigma, and stereotypes related to media coverage of autism, the following rationale offers research questions and hypotheses aimed to advance scholarship on these relationships.

The present study was inspired by existing research which highlights how framing, stereotypes, stigmatizing cues, and sources impact autism news coverage. To date, these features of news coverage have not received joint consideration in coverage of autism, despite the theoretical knowledge that there are relationships between items such as stereotypes and stigma (Draaisma, 2009; Hatzenbuehler et al., 2013) as well as framing and source (McKeever, 2012). The implicit motivation for this research is provide introductory knowledge regarding how these separate pieces have a relationship in autism news coverage. It is nearly impossible to comprehensively understand the functions of framing, stereotypes, stigma, and sources in autism coverage without examining these variables in tandem. This analysis will enhance what is presently known about these variables, as well as provide insight regarding the presentation of autism in news media.

The research indicates that often, episodic frames are present in autism coverage, meaning that autism is presented with an individual scope (Holton et al., 2014). Where this is understood as a feature of autism coverage, little is known about the thematic frames present in autism coverage, as few researchers have examined this relationship. Though the scope and frames exist at the individual level, other research suggests that individuals with autism are

hardly cited in news coverage of autism (Bie & Tang, 2015). Individual perspectives included in news coverage of autism are often stereotypic – displaying exceptional individuals with rare talent, not necessarily representing a general population (Baker, 2008; Bie & Tang, 2015). Additionally, narrow approaches to news coverage of autism becomes concerning with consideration of stigma. The public has an extremely limited understanding of autism given media coverage that seldom includes the perspective of autistic individuals (Bie & Tang, 2015).

Furthermore, autistic coverage most often exists with one or more stigmatizing cues (Holton et al., 2014), contributing to a skewed audience experience (Corrigan, 2000). Stigma related to one's illness becomes a health concern, leading to adverse health and psychological conditions (Smith, 2011). Failure to include the perspective of autistic individuals in health coverage is a mistake according to disability scholars, who posit that including such perspectives may reduce stigma (Holton et al., 2014). With reduced stigma and knowledge that health issues exist beyond the individual immediately impacted, the public is apt to rally in support of societal changes to help address health concerns (Coleman et al., 2011).

Also, though it is apparent that many journalists rely on stereotypes in explaining autism, to date no scholar has conducted a comprehensive examination of the prevalence and frequencies of various autism-related stereotypes in newspaper articles. As such, it is difficult to understand exactly which stereotypes about autism dominate media coverage – and perhaps by default dominate public perceptions of autism, as future research might be able to explore based on the findings of this study. Where the analysis of this research focused on stigma will contribute to knowledge about how autism is described and treated by journalists, analysis of the stereotypes used in this coverage will indicate how journalists and the general population understand autism. This research will indicate how autistic individuals are regarded as different from others, which

may influence how education about autism can reduce, reject, or disprove stereotypes.

Content analyses of autism exist and provide useful insights to current trends in news media coverage of autism. Still, these analyses are scarce, and deep exploration of the particular individuals that newspaper journalists cite in their episodic frames has not been analyzed in America by communication researchers to date – Holton et al. (2014) made note of this oversight by American researchers in their suggestions for future research, indicating that such an analysis should be explored. In particular, there has been no content analysis related to stigmatizing cues of autism newspaper coverage in America since Holton, Farrell, and Fudge’s 2014 work; thus a more recent analysis of media coverage is warranted, especially considering that Holton et al.’s (2014) suggestions for future research made reference to the importance of keeping knowledge about the nature of autism coverage current; a comprehensive familiarity with the attributes of media messages about autism informs improvements in journalists’ approaches to such coverage.

Additionally, scholars have yet to develop a comprehensive examination of the presence and frequencies of the most common stereotypes in print media coverage of autism. Newspapers are in a unique position to offer information to audiences, as Americans’ confidence in newspapers is on the rise (Swift, 2017). Newspapers are the news source in which Americans have the most confidence in comparison to television news and news on the internet (Swift, 2017). Specifically considering health information and news, research indicates that print news media is a primary source relied upon by the American public (Ashoorkhani et al., 2012; Chelf et al., 2001). National newspapers present an ideal form of media to study, as they are representative of non-fictional information, have geographical diversity in readership and coverage, and are representative of the national news environment of any given time.

While analyzing newspaper coverage of autism was recently studied in 2015 in China (Bie & Tang, 2015), it was not in reference to a particular policy that would garner media attention. Given the ability of newspaper coverage of a health issue, and policies related to it, to influence audiences (Niederdeppe et al., 2007), it is important to understand how a health issue like autism was portrayed from early 2013 to late 2016. Previous content analyses of autism coverage (Holton et al., 2014) were not conducted with this acknowledgement of increased journalistic reporting of autism in relation to a new policy being implemented. Thus, it is possible that more stereotypes and stigmas could have been perpetuated in the media coverage of a policy related to autism, thus influencing more audiences.

In particular, a specific law was passed for the autism community in 2014. The Autism Collaboration, Accountability, Research, Education, and Support Act, or Autism CARES Act was signed into law by President Barack Obama in August 2014 (Williams, 2014). The Autism CARES Act reauthorizes the Combating Autism Act, ensuring ongoing efforts to research into risk factors, treatments and services for autism by government agencies and private organizations (Williams, 2014). The Achieving a Better Life Experience Act, or ABLE Act, also enacted by President Obama in 2014, aids individuals and families by allowing tax-free savings accounts for those dealing with lifetime disability costs (Autism Speaks, 2014). Autism advocacy groups were cited as major support in the passing of the ABLE act, considered one of the most significant pieces of legislation benefitting the disabled population in modern history (Autism Speaks, 2014).

Niederdeppe et al. (2007) suggests that advocacy groups generate media interest in issues and media interest is directly linked to reactive policy. By examining a time span which includes the time before the considered policies were in conversation, a peak in communication

surrounding the considered policies, and the time period after the policies were passed, this research will illustrate how policies influence media coverage, and perhaps how media coverage influences policy. Further, this research will help understand how conversations about issues change over time. For instance, this research may illustrate that stigmatizing cues and stereotypes in media coverage existed more frequently before the passing of the policies in question and decreased as the laws were passed and beyond that time period. This example finding could be explained by time-relevant increased familiarity with autism as the passing of laws generated more knowledge, events, advocacy groups, and conversations about autism. This research is unique and important, as no research to date focused on autism has applied policy change as a basis for the selected time period of a content analysis.

Analyses of the existing journalistic practices will hopefully aid scholars in guiding the future coverage of autism, ideally contributing to shift in which journalists help reduce – instead of contribute to – the stigma and stereotypes associated with developmental disability. This analysis will contribute valuable knowledge to this endeavor, which not only enriches communication knowledge, but has the potential to improve the condition of people coping with developmental challenges. The following research questions and hypotheses are posited:

RQ1: How many episodic and thematic frames of autism appear in American newspapers' coverage of autism from 2013 to 2016?

H1: Episodic frames are more likely than thematic frames to appear in American newspapers' coverage of autism from 2013 to 2016.

RQ2: Are the stigmatizing cues (label references, psychiatric symptoms, social skill deficits, and physical appearance/symptoms) present in episodic frames significantly different than those in thematic frames?

H2: Episodic frames are more stigmatizing than thematic frames.

RQ3: What stereotypes are most commonly referenced in American newspapers' coverage of autism from 2013 to 2016?

RQ4: Within each frame of autism, who are the individuals most often cited or quoted in American newspapers' coverage of autism from 2013 to 2016?

RQ4a: Within each source, what stigmatizing cues are present?

RQ5: What is the presence of theme type, presence of stigmatizing cues, nature of stereotype, and source within each year of American newspapers' coverage of autism from 2013 to 2016?

Methods

Previous research and scholarly critiques of journalistic coverage of autism lack specific exploration of the perspectives used to frame autism, as well as the stigmas and stereotypes such framing may contribute to. Additionally, no existing research into newspaper representation of autism has navigated the topic through the lens of important related legislative movements. Thus, this study analyzes a four-year period, from January 1, 2013 to December 31, 2016. The selected time period reflects the time before and after the 2014 signings of two major pieces of legislation related to autism, the Autism CARES Act and ABLE Act. These government acts support research into autism and also tax-free saving accounts for those with lifetime disability costs.

This study is a content analysis of the top circulated American newspapers with the most significant reference to autism from the considered time period. This method emulates McKeever's (2012) in basing the sample in the most circulated and relevant newspaper of the concerned time period. This study considers and examines the articles which appeared in printed editions of the selected newspapers. According to the Alliance for Audited Media, an

authenticator of media circulation endorsed by the library at Bryant University, the three most widely circulated American newspapers in 2013 were *The Wall Street Journal*, *The New York Times*, and *USA Today*, respectively (Miller & Washington, 2017).

Selection of Sample

Research was conducted to select the best database and search vocabulary for determining the study sample. Noting that Holton, Farrell, and Fudge (2014) and McKeever (2012) employed the LexisNexis Academic database in their content analyses, the database was chosen. During consultations with a University librarian regarding a content analysis based in the selected news outlets, NexisUni, which is subsidiary of LexisNexis Academic was selected as the best database option for organizing the sample for coders. This database yielded the most results for the search term “autism,” as opposed to the term “autistic.” As such, “autism” was selected as the central search term for harvesting the sample.

The Wall Street Journal, with 2.3 million readers in 2013 (Miller & Washington, 2017) featured just 9 articles regarding autism from 2013 to 2016, which may be explained by the business-focused nature of this publication; *USA Today* featured 127 articles on autism from 2013 to 2016. With 1.8 million readers in 2013 *The New York Times*, (Miller & Washington, 2017) had 6 times more articles on autism during the considered time period than the other two publications combined, with a total of 850 articles. Therefore, *The New York Times* was originally selected to provide the sample of American articles about autism from 2013 to 2016 for this content analysis.

A search for articles regarding autism featured in *The New York Times* in the chosen time period using the NexisUni database yielded a collection of 850 articles. This sample included all news items related to autism, regardless of article title, featured paper section, or article length.

The sample was cleaned in order to remove extraneous material, such as blog posts, marriage announcements, movie and book reviews, charity event descriptions, community program schedules, duplicate articles, and obituaries. This process removed 269 articles from *The New York Times* sample, leaving a sample of 581 articles. Although the original plan for sample selection did not include articles from *USA Today*, the 127 articles on autism featured in the publication from 2013 to 2016 were included in the final sample to supplement material that had to be removed from *The New York Times* sample. NexisUni's collection of articles from *USA Today* did not include extraneous material as encountered with *The New York Times* sample. Just two articles, which were articles that appeared twice in the sample, were omitted from the final selection of *USA Today* articles. The nine articles from *The Wall Street Journal* were not included in the final sample.

The sample was organized by date of publication for ease of analysis and organization purposes. In summation, the final sample included 706 articles with the keyword 'autism' featured in *The New York Times* and *USA Today* from 2013-2016. After the coding process was completed, 26 entries were removed because information such as article number, date, frame, or source were not properly entered during the coding process, rendering the data unusable. By the end of the coding period, the final sample included 682 articles.

Coding Variables

Units of analysis. Each coding variable required a unique unit of analysis, each based on the successful practices of previous research and applicability toward analyzing the considered hypotheses and research questions.

Framing unit of analysis. To code for framing, coders were trained to detect the dominant frame of the entire article as either an episodic frame or a thematic frame. This

emulates the methods McKeever (2012) utilized in identifying the presence or absence of policy, human, or scientific frames of autism in newspaper coverage.

Stereotypes and stigma unit of analysis. In coding stereotypes, phrases and words were the unit of analysis, meaning that coders noted each time a stereotype was referenced in an article, emulating the methods of Holton, Farrell, and Fudge (2014). As such, sentences within an article could have one, none, or several stereotypes present and were coded as such. Similarly, in coding for stigmatizing cues, coders were trained to detect the presence of stigmatizing cues – whether apparent in a word, phrase or sentence – whenever apparent. Again, this process held that a sentence within an article may have one, none, or several stigmatizing cues present and should be coded as such.

For the purposes of this study, stereotypes and stigma were considered mutually exclusive, meaning that one phrase could not be coded as being both stereotypic and stigmatizing. Coders were carefully trained to be able to distinguish between the two, a process that was enforced and practiced throughout training sessions.

Source attribution unit of analysis. In coding for source attribution, the individual representing autism in a considered article, coders were trained to examine and code for the dominant source of the article, borrowing from the methods utilized by Bie and Tang (2015). The article was the unit of analysis and only one source could be coded per article.

Article details unit of analysis. In coding the year of the article, the article was again the unit of analysis – coders were directed to note the date (month, day, and year) in which each article was published.

Framing. Coders were trained to code for the presence or absence of frames in the articles. This research is focused on determining the presence or absence of two types of frames:

the episodic frame and the thematic frame. Beyond noting the presence or absence of a frame, coders had to determine the dominant frame of the article, or the frame most predominantly apparent in the article. This study borrowed the methods utilized by Holton et al. (2014) and McKeever (2012) to generalize the coding process for episodic and thematic frames. Coders learned that episodic frames focus on an individual case study or individual instance. For example, should an article mention and focus on the unique story of a family's tribulations with an autistic child, the article would be coded as episodic.

Thematic frames have a broader scope, relating to more generalizations. If a story should mention government responsibility for measures protecting autistic individuals, it would be coded as having a thematic frame. In emulating McKeever's (2012) methods, this study's codebook stated that to be considered a frame, the article must, at minimum, contain one paragraph (a minimum of two or three sentences) with an episodic or thematic frame of autism. Coders learned to determine if an article's dominant frame was episodic, thematic, or note if neither frame seemed apparent. The coders understood that the latter choice would be rare and needed an explanation if selected. The coder training indicated that the dominant frame of the article could be blatantly apparent in the headline or within the first few sentences, but nonetheless, coders should read through the entirety of the article to properly determine the absolute dominant frame.

Stereotypes. Coders were tasked with coding for the stereotypes referenced in the news articles. The coders were trained to recognize when an article made a stereotypic statement, which could be a phrase or a word about autism. Coders were originally trained to code for phrases and words that made reference to any of the five most common stereotypes of autism recognized in the existing literature of stereotypes of autism (Bie & Tang, 2015; Brewer et al.,

2017; Jones & Harwood, 2007; MacKenzie, 2018; Osteen, 2008; Wood & Freeth, 2016). These categories of stereotypes included references to: (1) abnormal sexuality; (2) abnormal social tendencies; (3) difficult personalities; (4) violent tendencies; (5) savant skills. During training sessions and the researcher's organization of the sample, a common stereotype of autism emerged and was added to the study (and subsequently added the codebook). This stereotype is called "lumping" for research purposes and will be described in the following section. Each stereotype was thoroughly described in the codebook with examples.

Abnormal sexuality stereotypes related to autism were recognized through references such as describing to dating as a "game" and autistic individuals as unequipped and uneducated in how to "play" or labeling of autistic individuals as unaware of the social nuances necessary to successful flirtatious or sexual encounters (MacKenzie, 2018). *Abnormal social tendencies* were identified through the insinuation that autistic individuals are perhaps exceptionally shy or unable to pick up on others' social cues (Wood & Freeth, 2016). The stereotype that autistic individuals have *difficult personalities* was detected through reference to troubling or frustrating distinctive characteristics of an autistic person, perhaps through a reference to an autistic person refusing to speak in certain situations (Jones & Harwood, 2007). Stereotypes regarding purported *violent tendencies* of autistic individuals could present in reference to a perpetrator of a violent act having autism, despite a lack of evidence or diagnosis by a medical professional (Brewer et al., 2017). Stereotypes related to autistic individuals being *savants* often emerged when savant skills were used as symptoms or clues to indicate or foreshadow that an individual was on the autism spectrum (Draaisma, 2009). The stereotype that emerged during the research process, *lumping*, makes reference to the practice of grouping autism with unfavorable or adverse

conditions. For instance, many articles only mentioned autism to provide comparison to reinforce the notion that the condition primarily discussed was negative.

Stigmatizing cues. Considering Corrigan's (2000) analysis on stigmatizing cues, coders determined the frequency of stigmatizing cues in news articles by coding for: (1) label references; (2) psychiatric symptoms; (3) social skills deficits; (4) physical appearance or symptoms.

Following Holton, Farrell, and Fudge's (2014) use of Corrigan's stigmatizing cues (2000), *label references* related to autism included phrases such as "loner," "abnormal," or "different from others." *Psychiatric symptoms* included observations about cognitive and quality of life limitations or clinical references to one's emotions and responses to situations (Corrigan, 2000; Holton et al., 2014). *Social skill deficits* were categorized by reference to abnormal body language, eye contact, or conversational skills (Corrigan, 2000). Stigmatizing cues related to *physical appearance or symptoms* were perhaps the easiest to identify, existing with note of features such as disheveled dress or appearance or abnormal triggers such as shaky hands (Holton et al., 2014). Stigmatizing cues were apparent because of negative undertones and links to negative outcomes, making them distinguishable from stereotypes. Ultimately, training sessions helped the coders in cultivating the ability to distinguish between stereotypes and stigma in the instances in which an argument could be made either way.

Articles could contain none, one, or several stigmatizing cues, and were coded as such. Coders noted the number of instances containing any of the aforementioned stigmatizing cues. The codebook and coder training aided in cultivating proper ability to discern and categorize stigmatizing cues. Training for this differentiating trait was crucial as stereotypes and stigma are considered mutually exclusive for the purposes of this study.

Source attribution within article. Coders were responsible for coding for source attribution. The coding options included (1) *autistic savant*; (2) *autistic person* – “normal” individual without special abilities; (3) the *mother of an autistic person*; (4) the *father of an autistic person*; (5) the *sibling of an autistic person*; (6) *other relative of an autistic person*; (7) *relative with special status*/otherwise identifiable (e.g. a public official); (8) *other*. Sources could be coded specifically when those sources were clear and universal, (e.g., mother of an autistic person). When the source was especially unique, (e.g. the mother of an autistic child is an actress), coders were instructed to make note. If the source did not seem to fit into any of these categories, the coders learned to select “no source” or “other” and make note of the circumstance with reasoning for their selection. Coders learned such codes were only to only be selected when absolutely no other option seemed present. If sources seemed to fit into two categories, such as parent and relative with special status (e.g. actors or actresses, politicians, or sports figures with a child with autism), the coder was instructed to code for the source as they were introduced and described in the story. Sources were counted only once per article.

Four coding options for source emerged during coding and training. Upon organizing the coders’ first batch of examined material, the following sources appeared written into the “other” category several times: medical professional; education professional; journalist; politician. These source types were added to the code sheet and codebook.

Medical professionals included doctors, nurses, rehabilitation specialists, therapists, researchers, and scientists that were featured in articles as primary sources of information about autism or their patients with the condition. *Education professionals* referred to teachers, teachers’ aids, owners and operators of programs for autistic individuals, speech therapists, and tutors, among other non-family individuals who work with autistic individuals. Coders selected

journalists when it seemed that no singular source was relied on throughout an article; for instance, some articles would cite scientists, parents, and autistic individuals all to create understanding of an event or person related to autism. This became an alternative to selecting “no source” for the instances in which the article maintained an extremely objective point of view. *Politicians* included government officials, executive branch members, and legislators who worked on policy, advocacy, or campaigning with relation to autism.

The codebook and coder training emphasized that the dominant source could likely be notable in the headline or introductory paragraph, but coders were instructed to read the entirety of the article to determine the primary source attributed to the article. An example of why this process is important was emphasized with the following example:

An article could begin with the story of a child with autism and his savant abilities, which perhaps make him an exception to the normal traits of autistic children. The rest of the article may go on to discuss the child’s mother, and how she has become an advocate for her son and autism research. While this article should be determined to have both “autistic savant” and “mother of an autistic person” sources, the dominant source should be “mother of an autistic person” because the mother is the focus of the majority of the article.

Year. Finally, this study intended to identify potential differences or trends in the occurrence of the various coding variables over the years considered in the sample. Therefore, coders noted the date in which the article was published. Coders worked systematically, coding each article in chronological order, maintaining distinctly separate accounts of the coding variables as they occurred in articles from 2013, 2014, 2015, and 2016.

Emerging codes. The coding scheme allowed for the addition of codes that emerged during the coding and training processes. As the coders became familiar with the sample and the characteristics of the articles, the researcher was open to adding additional codes. In addition to following the methods of previous researchers by allowing for emerging codes (Holton et al., 2014; McKeever, 2012), this approach honors the intention of this research to recognize and understand how journalists create meaning and understanding of autism through their writing. In total, four source codes and one stereotype code were added as variables. These codes will be described in the discussion.

Selection of Coders, Training, and Coder Reliability

Selection of coders. Two undergraduate coders were recruited to code the sample. Coders were offered monetary compensation of \$100.00 Visa gift cards provided by Bryant University's Communication Department. These research assistants were not informed of the hypotheses, research questions, or study objectives.

Training of coders. The coders met with the researcher during the second week of the Fall 2018 semester at Bryant University. This meeting did not include any formal training; instead, this meeting focused on introductions and a brief-undetailed description of the thesis project in an effort to keep the coders unbiased. During this initial meeting, coders learned that they would be working over the semester to code articles that would be delivered to them in 40-50 article "batches." The general process of coding was described to the coders during this meeting.

In the second meeting, the researcher met with the coders to review the codebook, code sheet, and three sample articles. The codebook, which has been revised and updated since initial meetings with the coders, may be found in Appendix A. The codebook provided descriptions and

examples for each coding variable, as well as information about the unit of analysis for each. The researcher reviewed the codebook and the code sheet with the coders, answering their questions about the materials. Originally coders seemed most concerned by the mutually exclusive nature of stigmatizing cues and stereotypes. They were, for example, concerned about how to approach the stereotype and stigmatizing cue codes that seemed similar or related in nature (e.g. the stereotype “abnormal social tendency” and the stigmatizing cue “social skill deficit”). During this training, coders were advised that stigmatizing cues would represent the statements with negative, distracting, or debilitating tones. The researcher made note of the coders’ initial concerns and adjusted the codebook accordingly. In this meeting, the researcher shared three articles from the sample with the coders. These articles were randomly selected from the sample.

Coders were given a few minutes to fill out the code sheet for the three articles; the researcher also filled out code sheet to compare answers. To review the coders’ understanding of the materials and coding process, the researcher volunteered to read the article out loud, asking the coders to interrupt if the researcher read something that they had coded. The researcher asked the coders, alternating who was asked first each time, to share what they had coded. Each reported answer was compared to the selection made by the researcher and other coder. When there was disagreement on whether something should have been coded or what the code should have been, the researcher facilitated discussion about why each person selected their answer and made notes about where coders seemed confused. In these discussions, it became apparent that it was easier for coders to code for stereotypes than it was to code for stigmatizing cues; the coders both admitted to some hesitation about coding something as a stigmatizing cue because they felt that the statement would have to be glaringly negative to receive a stigmatizing cue code. Coders were informed that stigmatizing cues may be signaled by negative qualifiers, but a statement did

not need to be profoundly negative to receive the code. Instead, in deciphering stigmatizing cues, coders were instructed to look for instances in which the distinction of autistic individuals was coupled with indication of judgments and qualifiers (e.g. “the student with Asperger’s was prone to disruptive outbursts, so the teacher chose not to take the class to the play”).

In this meeting, coders described a shared interest in using online forms instead of physical code sheets. In their reasoning, they mentioned they felt it would be easier for them to split the screen on their computer to fill in the form while reading the article on their screen. Additionally, they felt that online sheets would make it easier for them to code whenever free time presented itself; they did not want to keep track of or constantly carry paper code sheets.

In the third training session, the researcher arrived with a revised codebook and five articles, as well as an online code sheet made with Google Forms. This code sheet can be reviewed in Appendix B. This training session revealed much more consistent coding behavior between the two coders. It was in this coding session that the coders and researcher discussed “lumping” phrases that were noticed in articles from the training sessions. This was noted by the researcher and ultimately added to the coding scheme as a result.

Upon the conclusion of this training session, the researcher felt comfortable releasing the coders to begin coding the 10% of the sample used as a reliability check. The researcher scheduled a meeting during this first official “batch” of coding to serve as a check-in with the coders. The coders arrived to this meeting with a request to add source options on the code sheet. These additional four source options (medical professional, education professional, journalist, and politician) were discussed in the coding variables section.

Coder reliability. The coders spent about two weeks working through the sample of 80 articles; these articles represented 10% of the sample, a reliability check recommended by

McKeever (2012) and Bie and Tang (2015). This data was compared and examined to test how consistently the coders examined the articles. Once the sample of articles was organized by year, a random number generator decided which article should be the first in the sample. This article and the following 79 appearing in the organized sample were selected to be representative of the study sample.

The Cohen's kappa coefficient statistical test was employed to examine each individual variable (Cohen, 1960). Cohen's kappa scores ranging between .61-.80 are considered substantial, scores ranging from .81-1.00 indicate near perfect agreement (Cohen, 1960). In exploratory mass communication research, a Cohen's kappa score of .70 or higher is considered an acceptable level of reliability (Lombard, Snyder-Duch, & Bracken, 2002). The reliability scores for each category are discussed. Final intercoder reliability for frame was $K = .95$. The reliability for all stereotype variables was $K = .96$ (abnormal sexuality $K = .99$; abnormal social tendency $K = .92$; difficult personality $K = .99$; violent tendencies $K = .98$; savant skills $K = .98$; lumping $K = .90$). The reliability score for stigmatizing cues was $K = .92$ (label reference $K = .98$; psychiatric symptom $K = .77$; social skill deficit $K = .98$; physical appearance/symptom $K = .98$). The reliability score for source was $K = .98$. The scores for each category and individual variable achieved acceptable reliability in accordance with other published content analyses (Bie & Tang, 2015; McKeever, 2012). Noting lower scores for lumping and psychiatric symptom, the descriptions of these variables in the codebook were adjusted. Coders were provided with an updated version of the codebook as well as a verbal description of both variables.

The final 90% of the sample was randomly split between the two coders. Using 5% of the sample toward the conclusion of the coding process, reliability was again measured. Reliability

scores were acceptable and fairly consistent with the earlier reliability check for each variable, scores fell between a range of .76 to 1.0.

Results

Data Analysis

To summarize findings associated with categorical variables, proportions and frequency distributions were calculated. Some group comparisons of categorical variables were developed using chi-square tests for independence (χ^2). Tables associated with the findings of several research questions may be located at the conclusion of this manuscript. Table 1 represents the presence of each variable examined in the content analysis from 2013-2016 and in total.

RQ1: Frames in Newspaper Coverage

Research Question 1 considered the presence of episodic and thematic frames presented in 2013-2016 coverage of autism in *The New York Times* and *USA Today*. Overall, the episodic frame was most present ($n = 399$; 58.5%). Thematic frames constituted 41.5% ($n = 283$) of newspaper coverage in the considered sample. Table 1 demonstrates the presence of episodic and thematic frames as they occurred in each year of the coverage.

Hypothesis 1: Episodic and Thematic Frames

Hypothesis 1 predicted that episodic frames would be more present than thematic frames. Hypothesis 1 was supported, a chi-square test for independence was performed to examine presence of episodic and thematic frames. The results were significant, $\chi^2(3, n = 682) = 16.919, p < .001$, Cramer's $V = .158$. Episodic frames ($n = 399$; 58.3%) were more prevalent than thematic frames ($n = 283$; 41.5%) in newspaper coverage of autism from 2013 through 2016. In 2013, 84 of the 160 articles (52.5%) had an episodic frame; 76 (47.5%) had a thematic frame. Of the 172 articles collected from 2014, 100 (58.1%) had an episodic frame, while 72 (41.9%) had a

thematic frame. Of the articles from 2015, 110 (53.4%) had an episodic frame; 96 (46.6%) had a thematic frame. The presence of episodic frames increased in 2016, 105 (72.9%) of articles had an episodic frame, while 39 (27.1%) had a thematic frame.

RQ2: Frames and Stigmas

Research Question 2 considered how the presence of stigmatizing cues might differ in articles with an episodic and thematic frame. A chi-square test for independence revealed significant results regarding the frequencies of stigmatizing cues within episodic framed and thematic framed content, $\chi^2(3, n = 393) = 11.662, p < .05$, Cramer's $V = .172$. Within the total 682 article sample, 393 stigmatizing cues appeared; 284 (72.3%) happened within the episodic frame, 109 (27.7%) were within the thematic framed coverage. Table 2 demonstrates how each stigmatizing cue appeared within the episodic and thematic coverage.

Comprising the 284 stigmatizing cues identified in episodic coverage were 130 (45.8%) label references, 69 (24.3%) psychiatric symptoms, 75 (26.4%) social skill deficits, and 10 (3.5%) physical appearance/symptoms. Of the 109 stigmatizing cues to appear in the thematic framed coverage, there were 69 (63.3%) label references, 13 (11.9%) psychiatric symptoms, 25 social skill deficits (22.9%), and 2 (1.8%) physical appearance/symptoms.

Hypothesis 2: Frames and Stigmas

Hypothesis 2 argued that episodic frames would be more stigmatizing than thematic frames. Hypothesis 2 was supported, a chi-square test for independence indicated a significant relationship between frame type and presence of stigmatizing cues, $\chi^2(3, n = 393) = 11.662, p < .05$, Cramer's $V = .172$. As previously stated, 393 stigmatizing cues were recognized in autism coverage from 2013-2016. The majority of the stigmatizing cues were identified in the episodic

coverage ($n = 284$, 72.3%). Overall, stigmatizing cues were less common in thematic coverage ($n = 109$, 27.7%).

Comprising the total 393 stigmatizing cues identified in the sample, there were 199 (50.6%) label references, 82 (20.9%) psychiatric symptoms, 100 (25.4%) social skill deficits, and 12 (3.1%) physical appearances/symptoms. Many of these stigmatizing cues appeared in the episodic coverage: 130 (65.3%) label references, 69 (84.1%) psychiatric symptoms, 75 (75%) social skill deficits, and 10 (83.3%) physical appearance/symptoms.

RQ3: Stereotype Coverage

Research Question 3 asked about the stereotypes most commonly referenced in journalistic coverage from 2013 to 2016. In the total 682 articles, between both the episodic and thematic coverage, there were a total of 665 references to stereotypes about autism (see Table 1). Overall, lumping was the most common stereotype ($n = 287$, 43.2%), followed by abnormal social tendency ($n = 168$, 25.3%), violent tendency ($n = 70$, 10.5%), savant skills ($n = 68$, 10.2%), difficult personality ($n = 60$, 9%), and abnormal sexuality ($n = 12$, 1.8%).

RQ4: Frames and Sources

Research Question 4 considered the individuals cited within episodic and thematic frames in newspaper coverage of autism. Table 3 demonstrates the frequency distribution created to identify the presence of sources within the total coverage, and more specifically, within episodic and thematic framed articles.

In episodic framed articles ($n = 399$), the most common sources were journalists ($n = 88$, 22.1%), individuals with autism ($n = 62$, 15.5%), and mothers of individuals with autism ($n = 61$, 15.3%). Other sources that appeared frequently in episodic coverage included education professionals ($n = 36$, 9%), fathers of autistic individuals ($n = 34$, 8.5%), and medical

professionals ($n = 33$, 8.3%). Smaller percentages of the episodic framed articles were attributed to relatives with special status ($n = 17$, 4.3%), politicians ($n = 14$, 3.5%), autistic savants ($n = 11$, 2.8%), siblings of autistic individuals ($n = 5$, 1.3%), and other relatives of autistic individuals ($n = 4$, 1%). In the episodic coverage, 34 (8.5%) articles were considered to have “no source” or an “other source.”

In thematic framed articles ($n = 283$), the sources recognized most frequently were journalists ($n = 107$, 37.8%) and medical professionals ($n = 97$, 34.3%). Other sources included in thematic framed articles were politicians ($n = 27$, 9.5%) and education specialists ($n = 15$, 5.3%). Individuals with autism accounted for the source in 12 thematic framed articles (4.2%) and mothers of autistic individuals were the source in 8 thematic articles (2.8%). A sibling once appeared as the source in a thematic framed article ($n = 1$, .04%). In thematic coverage, 16 (5.7%) articles were considered to have “no source” or “other source.” Autistic savants, fathers of autistic individuals, relatives of autistic individuals with special status, and other relatives of autistic individuals were not considered the source in any thematic framed article.

RQ4a: Sources and Stigmatizing Cues

Research Question 4a considered the presence of stigmatizing cues within each source. See Table 4.

Individuals with autism and mothers of individuals with autism were often the source in articles with relatively high use of stigmatizing cues. Label references were present in articles where individuals with autism were the main source ($n = 29$) and in those in which mothers of autistic individuals were the source ($n = 28$). Psychiatric symptoms were noted in articles with an autistic individual source ($n = 21$) and a mother source ($n = 22$). Social skill deficits were present among articles with an autistic individual source ($n = 23$) and mother source ($n = 20$) as well.

Articles featuring medical professionals as the main source had a high presence of the following stigmatizing cues: label reference ($n = 40$), psychiatric symptom ($n = 13$), and social skill deficit ($n = 17$). Generally, label references appeared often as a stigmatizing cue in the sample.

Relatively high frequencies of label references appeared within articles with the sources of journalists ($n = 39$) and education specialists ($n = 21$) in addition to the aforementioned sources.

Label reference was the only stigmatizing cue that appeared within articles attributed to the politician source ($n = 7$). The stigmatizing cue physical appearance/symptom did not appear often within the sample in general, or within articles within any specific source.

RQ5: Year of Publication, Frames, Stereotypes, Stigmas and Sources

Research Question 5 asked about the frequency of time and frame type, time and nature of stereotypes, time and presence of stigmatizing cues, and time and source. These relationships are examined in the subsequent sub-headings. Table 1 demonstrates each the occurrence of each variable in the sample from 2013-2016 and in total.

Framing. In the sample, episodic frames ($n = 399$, 58.5%) appeared to be more prevalent than thematic frames ($n = 283$, 41.5%) in consideration of the total sample ($n = 682$). Episodic frames were also more common than thematic frames in each of the four years comprising the sample. While episodic frames were most common in each year considered, in the 2016 sample ($n = 144$), episodic frames ($n = 105$, 72.9%) appeared to be more present than thematic frames ($n = 39$, 27.1%).

Stereotypes. A total of 665 stereotypes were observed in the 682 article sample. In 2013, 23.5% ($n = 160$) of the sample articles emerged; 22.9% ($n = 152$) of the recorded stereotypes occurred in this sample. Articles from 2014 counted for 25.2% ($n = 172$) of the sample; 22.1% ($n = 147$) of the stereotypes were recorded in articles from 2014. In 2015, 30.2% ($n = 206$) of the

sample articles were counted; 30.2% ($n = 201$) of the total stereotypes were identified in this year. In 2016, 21.1% ($n = 144$) of the sample articles were recorded; 24.8% ($n = 165$) of the stereotypes were found in this year.

Stigmas. In the 682 article sample, 393 stigmatizing cues were observed from 2013-2016. Comprising the 393 stigmatizing cues from 2013-2016 were 73 (18.6%) stigmatizing cues in 2013, 85 (21.6%) in 2014, 105 (26.7%) in 2015, and 130 (33.1%) in 2016.

Source attribution. Time appears to have some relationship to the presence of source in the examined coverage. Journalists emerged as a prevalent source in each year of the considered coverage (2013 $n = 47$; 2014 $n = 56$; 2015 $n = 59$; 2016 $n = 33$). The second most common source, medical professional, also demonstrated similar a similar level of frequency over time (2013 $n = 29$; 2014 $n = 30$; 2015 $n = 41$; 2016 $n = 30$). Sources appearing to demonstrate variance over time were the father of an autistic person source (2013 $n = 3$; 2014 $n = 8$; 2015 $n = 7$; 2016 $n = 16$) and politician source (2013 $n = 4$; 2014 $n = 3$; 2015 $n = 23$; 2016 $n = 11$).

Discussion

This study unearths findings related to news framing of autism, stigmatization of the disorder, stereotypes of autism, and the sources most regularly relied upon to discuss the developmental disorder. Presented in this research is a content analysis of the coverage of autism by two leading American newspapers in the four-year period of 2013-2016.

Episodic frames prevailed as the consistently dominant frame found in news coverage of autism appearing in *The New York Times* and *USA Today*. This finding corroborates research focused on samples of autism coverage from 1996-2012 (Holton et al., 2014; McKeever, 2012). Over time, the dominance of episodic frames only increased; while episodic frames accounted for a little over half of the coverage from 2013-2015, in 2016, episodic frames represented over

two-thirds of the articles about autism. Indeed, as anticipated, episodic frames commanded autism coverage in this study.

The findings of this research illustrate the persistence of stigmatizing cues in print media coverage of autism. Moreover, a particular reliance on label references in depictions of autism is demonstrated, consistent with existing analyses (Holton et al., 2014). While this holds true in both episodic and thematic frames of autism, the findings underscore that stigmatizing cues are far more apparent in episodic frames. Of the labels present in the examined coverage, 65.3% appeared in episodic frames; 84.1% of the counted references to psychiatric symptom happened within the episodic frame. As predicted, episodic frames were more stigmatizing than thematic frames. Each stigmatizing cue was more present within the episodic frame: 75% of social skill deficits and 83.3% of physical appearance/symptom references were identified in the episodic coverage. As the diagnosed cases of autism has risen rapidly in recent decades and the symptoms associated with the condition exist along a spectrum (CDC, 2018a; CDC, 2018b), it is possible that journalists simply rely on existing and accepted rhetoric about autism, without regard for whether those depictions are presented with a stigmatizing tone. As Holton et al. (2014) note, the reliance on family perspectives of autism could drive the use of stigmatizing cues; journalists simplify the viewpoints and experiences of individual family members to describe the condition more generally. Indeed, autism is surrounded by “mystery and controversy” (McKeever, 2012) for much of the public; utilizing existing understanding, which includes stigma, around the condition might simply make descriptions of new information in media coverage more salient for journalists to communicate to audiences.

News coverage presented references to stereotypes far more frequently than references to stigmatizing cues. Data provided by this research introduces preliminary knowledge on the

stereotypes most frequently associated with autism in newspaper coverage of the condition. Lumping – the tendency of journalists to group autism with an adverse condition, or make a seemingly unrelated reference to autism to underscore that the issue in discussion should be perceived negatively – emerged as the most common stereotype in the coverage, representing 43.2% of the stereotyping counted in the data. This stereotype was added to the coding process as an emerging code, something that had not been considered until the methods of this research were underway. An unsuccessful search for existing information about features of “lumping” in news articles on health topics indicates that this could be considered a new concept in research regarding how health issues are represented in the media. The frequent presence of this stereotype might not flag a major concern for disability scholars – lumping is not a direct judgement about any specific characteristic of the disorder. Still, the label of autism to mark a negative tone about another condition provides cause for concern – and reason consider lumping a stigmatizing cue in future research.

The frequency of stereotypic references to autism and abnormal social tendencies, violent tendencies, savant skills, and difficult personality were previewed by the literature review. Abnormal social tendencies represented about a quarter of the stereotypes noted in the findings. This may be attributed to the fact that social symptoms are perhaps the most universal trait of autism (CDC, 2018b). Where experiences of autism may exist along a spectrum, the experience of social issues is common among low-functioning and high-functioning groups alike. In utilizing this stereotype to describe autism, journalists might be attempting to make their description of the condition recognizable and universal.

References to violent tendencies and savant skills – sensational topics for autism coverage – appeared in the findings at similar rates, representing 10.5% and 10.2% of the

detected stereotypes, respectively. Until this research, neither stereotype had been examined in terms of frequency in media coverage in a content analysis. As savant skills were technically counted twice – as both a source type and a stereotype – it is difficult to draw comparisons between these findings and the findings of existing research, which only focused on the savant perspective as a source type (Bie & Tang, 2015). The findings of this research show that both stereotypes appeared consistently in the four year-period examined, indicating that both may be considered common stereotypes of autism.

As for the remaining examined stereotypes, with 60 total references, references to difficult personality appeared less frequently than violent tendencies and savant skills, but more than references to abnormal sexuality, which appeared 12 times in the total coverage. As Brewer et al., (2017) suggest, nods to difficult personalities in autistic individuals make them distinguishable from other, “average” children, which is likely why this stereotype emerged. Appearing in 9% of the examined coverage, these findings indicate that difficult personality should be considered among the common stereotypes of autism. Making up just 1.8% of the stereotypes recognized in the study, the findings of this research indicate that abnormal sexuality may not be a common stereotype of autism, at least among the general population.

The research which prompted the inclusion of abnormal sexuality as a stereotype in this study came from research on college students’ perceptions of autism (MacKenzie, 2018). Interestingly, the most references to this stereotype ($n = 3$) came from the sample article “Along the Autism Spectrum, a Path Through Campus Life,” 2016), which discussed a group of students on the autism spectrum attending university through a support program. Taken together, this suggests that although not a generally common conception of autism, the notion that individuals on the spectrum are sexually abnormal might be a stereotype among a particular age group.

The sources included in episodic framed autism coverage generally corresponded with the traits of episodic coverage. Sources with the ability to describe information to audiences in simplified form are likely to represent scientific topics for audiences (McKeever, 2012). As Entman (1993) noted, breaking complicated topics down for audiences is the primary task of journalists. Journalists are able to position their voice and perspective to read as that of an expert on the topic. In consideration of this, the detection of journalists as the most frequent source in the episodic coverage seems appropriate and consistent with what is known about episodic framing.

Though no individual relative type monopolized the coverage to the extent of journalists, if considered together, family members of autistic individuals played a leading role in the considered coverage. This finding is consistent with previous research (Bie & Tang, 2015; McKeever, 2012), as well as consistent with the hallmarks of episodic framing. Episodic frames reinforce the notion that issues regarding autism are individual in scope – the reliance on family perspectives in autism coverage suggests that autism is ultimately a family issue. Bie and Tang (2015) note that this approach is likely related to the fact that autism has no cure – essentially, it is the family’s obligation to manage and support their autistic relatives. Although medical experts were not detected as the source frequently in episodic coverage in the present study, they were counted frequently as the main source in thematic coverage, consistent with McKeever’s recognition of medical experts as a frequent source within frames that have a more societal approach.

At the heart of the matter, individuals with autism were included the source in 15.5% of coverage – twice as often as autistic individuals were included as the source in Chinese newspaper coverage from 2003 to 2012 (Bie & Tang, 2015), but consistent with how often

McKeever (2012) identified the “experts” on the matter in *The New York Times* and *Washington Post* from 1996 through 2006. Also inconsistent with Bie and Tang’s (2015) research is the prevalence of the autistic savant source perspective in this data. Bie and Tang (2015) found that 60% of autistic individual sources were depicted as prodigies. Of the autistic individuals counted as a source in this research, only 15% were those labeled as savants. While this discrepancy might indicate that coverage of autistic savants is more prevalent in Chinese print media, it must be acknowledged that Bie and Tang only accounted for the savant perspective in studying source; the present study examined the presentation of autistic savants in both source and stereotype.

In terms of the relationship between presence of source and stigmatizing cues, the findings indicate that the stigmatizing cues are not simply ubiquitous in media coverage; particular sources were highly correlated with the presence of stigmatizing cues. Around 68% of the stigmatizing cues present in the examined coverage were attributed to articles associated with individuals with autism (19%), mother of autistic individuals (18.6%), medical professionals (18.3%), and journalists (12.5%). Taken together, 70% of the detected label references from the sample can be attributed to articles with these four sources. Consistent with previous research (Holton et al., 2014), this illustrates that articles are heavily reliant on label references in their explanations of autism. The finding that medical professionals are associated with a high presence of stigmatizing cues in articles, particularly labels, is noteworthy. Taken with the finding that 74.6% of medical professionals appearing as the source of an article happens within the thematic frame, this could indicate that medical professionals take a scientific and removed approach to discussing autism.

While it appears that individuals with autism and their mothers were often the source of articles with stigmatizing cues, it must be recognized that these two sources were revealed as generally common sources within the examined literature. Furthermore, these two sources stood out as common within episodic coverage, which was determined to be more stigmatizing than thematic coverage. The majority of the coverage taken with an autistic person source or mother of autistic person source typified the common characteristics of episodic framing, focusing on the human aspects of the disorder, reading like a personal story (McKeever, 2012). While this framing is generally associated with the notion that the impact of autism is limited to the families it effects (Bie & Tang, 2015; Coleman et al., 2011), these stories may illustrate connections between a family's experience and how that experience can be impacted by policies and greater society.

For example, one article that appeared ahead of the 2016 presidential election came from the perspective of a mother's tribulations with an adult daughter on the autism spectrum ("America's Autistic Adults," 2016). In discussing the challenges she had in managing the needs of her 29-year-old autistic daughter, the author discussed how candidate Hillary Clinton's plan for supporting people with autism across their lifespan would impact her family and others. She also drew parallels between transition stages for parents of non-disabled children and parents of children with a condition – sending a child off to college, sending a child with autism off to supportive housing. In another article, a mother of an autistic child examines Sesame Street's introduction of an autistic character, noting her daughter's excitement about the character, but expressing concern that having an autistic character would be nothing more than a fad for children's television programming. Though these stories appeared with episodic frames and stigmatizing cues, the fact that the sources drew comparisons and made aspects of their

experiences relatable to families unfamiliar with autism indicates that episodic coverage and labeling are not inherently negative – they may appear in stories that increase awareness among those who are not personally familiar with autism.

It is important to consider the findings of this research in the context of time. In particular, this research was designed to examine the time period before and after two major pieces of legislation impacting the autistic population came into effect in America, namely, the Autism CARES Act of August 2014 and the ABLE Act of December 2014. This time frame was selected with intention, aiming to identify connections between trends in autism media coverage and legislative events. A preliminary look at the amount of articles on autism featured in *The New York Times* and *USA Today* from 2013 through 2016 and the frames of those articles reveals two notable findings.

First, there is a striking peak in articles from 2015, when 206 articles were published on autism, presenting 2015 as a clear outlier year in terms of articles published. A cursory investigation into this spike reveals that the increase in coverage is likely related to politics, but not necessarily the legislative acts originally considered. In the fall of 2015, dozens of articles in the sample referenced presidential candidates' opinions on vaccines and autism. This trend seems to have been prompted by comments that then-candidate Donald Trump made during a Republican presidential debate, in which he shared his belief that vaccines cause autism. *The New York Times*, in particular, ran about twenty articles in a two-month period toward the end of 2015, each covering comments about autism made by presidential candidates.

The other noteworthy finding from this examination is an outlier in episodic frames. Where episodic frames were more present than thematic frames in autism coverage from 2013-2015 by a conservative margin, in 2016, episodic frames dominated the coverage, making up

72.2% of the coverage that year. While notable, again, this finding does not demonstrate any clear connection to the legislative acts of 2014. Typically, policy change is more regularly associated with thematic frames (Barry et al., 2009). Coverage from the year 2013 observed the highest presence of thematic frames (47.5%); it is possible – though not conclusive from this research – that the relatively high rate of thematic frames present in 2013 provided some encouragement for the policies that came about in 2014.

Stigmatizing cues related to autism referenced in newspaper coverage increased consistently over the four-year period. This increase happened even though article totals from each year did not demonstrate consistent growth. In surveying this trend, it is important to consider that autism diagnoses continually increase, for reasons largely unknown (CDC, 2018a). Holton et al. (2014) suggest that the ever-changing state of autism in America makes journalists cautious in their descriptions of the disorder. Reliance on stigmatizing cues – what is known and expected of the disorder – allows journalists to discuss news about the condition at the most salient level for audiences. Further, as indicated by this study, journalists tend to highlight episodic frames as well as familial sources on autism. Dependence on these frames means a reliance on few viewpoints and tendency to oversimplify information, again for audience salience. These findings corroborate earlier inquiry (Holton et al., 2014) and can likely be attributed to what have become journalistic practices in capturing autism.

A time-framed analysis of the findings indicate that the presence of certain stereotypes is relatively arbitrary – references to difficult personalities, violent tendencies, and savant skills appeared in the coverage without any indication of a pattern. This is compared to references to abnormal social tendencies, which steadily decreased over the four-year period. As one of the most commonly occurring stereotypes found in this study, this result is promising. Considered in

relation to the legislative acts of 2014, it is possible that increased awareness about autism contributed to less reliance on stereotypes to explain the condition. Another notable finding from this examination is how instances of stereotypic lumping changed over time. While instances of lumping were detected 61 times in 2013 and 56 times in 2014, references to lumping hiked considerably in the latter half of the considered coverage. In 2015, there were 100 instances of lumping. In 2016, there were 70 lumping references. Given the nature of this stereotype, it is difficult to conclude the reasoning for this change in lumping over time. Perhaps, increased public awareness of autism made the condition an ideal reference in helping audiences further understand other conditions.

Theoretical and Practical Implications

From a theoretical perspective, this study and its examined literature indicates value in further examining stereotypes and stigma. In fact, a relationship between the two represents a primary recommendation for future research, which will be discussed in a later section. Current literature highlights a connection between stereotypes and stigma (Corrigan et al., 2015; Draaisma, 2009; Hatzenbuehler et al., 2013), where it is understood that stereotypes represent the categorization of individuals and stigma represents how individuals in those categories are understood and treated. However, analyses of stereotypes and stigma – even on a theoretical level – are separate and distinct. Communication scholars' separation of stereotypes and stigma is perhaps a mistake.

The distinction between stereotypes and stigma at the theoretical level is underscored by current approaches to communication research. Stereotype research examines how individuals are grouped based on their situation and attributes (Kirchner et al., 2012); the historic focus of stigma research is based in understanding how and why distinctly characterized individuals are

treated and viewed (Corrigan et al., 2015). Still, what is understood about stereotypes influencing the information remembered about individuals (Stangor & Shaller, 1996), extends to stigma about individuals, the ability to discern and distinguish those who “threaten” a community (Smith, 2011). Inherently these concepts are related, but perhaps in an effort to comprehensively understand the characteristics of each, this connection is historically ignored in the existing analyses.

The undergraduate research assistants in this study faced difficulty in discerning between stereotypes and stigmatizing cues – conceivably because these factors are more related than previously understood. Future study designs might conceptualize stereotypes and stigma on a continuum, where stereotypes are understood as the grouping of individuals and stigma is understood as judgements about those groups. Exploration of how stereotypes build to stigma represents an opportunity for research and reflection by communication scholars, as well as an opportunity to better understand the implications of each.

Analysis of stereotypes demonstrates that as information is passed through a chain of individuals, the information becomes continually more stereotypical (Lyons & Kasima, 2003). This finding could be enhanced by building on the notion that information not only becomes more stereotypical, it becomes stigmatizing. This theory would lend itself to study in interpersonal communication scenarios, as well as media practices, as existing literature highlights that journalists build on the existing notions held about groups in their reportage (Stuart, 2006). Hocking’s (2003) understanding of stigmatized groups posits that stigmas held by the public would be reduced if journalists reduced the instances of stigmatizing language in their messages. Examination of how a reduction in stereotypic language in media messages might

influence stigmas held by the public could provide evidence for the continuum that exists between stereotypes and stigma.

Although many of the findings demonstrate that journalistic practices in describing autism have remained relatively consistent in America since previous research, the discovered changes in article source over time provide optimistic information about current nature of autism-related news media. First, the journalist source saw a notable decrease toward the end of the examined time period. As discussed, covering health issues is a tall charge for journalists; though journalists are non-medical experts, they are inherently responsible for understanding complicated topics, then describing them in an approachable manner for audiences (Scheufele & Tewksbury, 2007). A step away from this practice, illustrated by the decline in the journalist source in 2016, indicates that journalists may be removing themselves from their stories, allowing the actual experts on autism to tell their stories. Even so, for true public understanding of autism, it is crucial to include the perspective of autistic individuals (Bie & Tang, 2015; McKeever, 2015), a source that ultimately tapered off by the end of the examined time period.

Another promising indication from the findings was the increased inclusion of the father source in autism coverage. Though no scholarly inquiry has explored the topic, the nature of Bie and Tang's (2015) research, as well as much of *The New York Times* and *USA Today* sample generally indicate that beyond being a family issue, autism is a mother's issue. Increased inclusion of the father perspective indicates perhaps greater comfort among parents with the autism diagnosis. Further, more father participation contributes to a larger "expert" pool on autism. The public's understanding of autism and acceptance of the disorder as a public health issue may benefit from the first-hand perspectives that have the ability to discuss autism in a way that is relatable. Perspectives such as those of individuals with autism, their loved ones, and their

support teams – often those that come through education programs – have the experiences to not only tell their stories, but help audiences connect to the aspects of autism that make it a universal concern.

It is crucial to consider the implications of what is known about newspaper coverage of autism as a result of this study and others. News coverage of health issues has been linked to behavior changes – consider the research of Yanovitzky and Blitz (2000), which highlighted that print news coverage of breast cancer increased mammography-seeking behavior. Research on Florida policies on youth smoking illustrated that increased news coverage of related issues was linked to policy change (Niederdeppe et al., 2007). Considering that autism diagnoses continually increase (CDC, 2018a), it is possible – though unexplored in a research study – that increased news coverage of autism has led more parents to seek diagnoses for their children who exhibit behaviors characteristic of ASD.

Regardless of whether the features of 2013-2016 autism coverage impacted diagnostic behaviors, it is known that news coverage impacts attitudes and knowledge about discussed disorders (Entman, 2007; Scheufele & Tewksbury, 2007). Therefore, it is imperative to maintain knowledge about the characteristics of news coverage of autism current so that disability and communication scholars may have a cursory understanding of what the general public understands about autism. With one in every 59 children receiving an autism diagnosis (CDC, 2018a), there is a growing population of autistic individuals as well as a community of individuals connected to autism. As this population becomes more common in society, the public is required to have an accurate understanding of this disorder. As diagnoses of autism increase, there is increased urgency for balanced, accurate, and responsible descriptions of autism in news media.

Limitations

This study is not without limitations. The first limitation is associated with the relatively low Cramer's V scores associated with each chi-square test for independence. Specifically, Hypothesis 1 and Hypothesis 2 were accepted based on the p -values, despite the Cramer's V scores indicating a small effect sizes. This corresponds to a higher likelihood for Type II error. The researcher chose to regard the test results as significant based on significant p -values, as the primary overall goal of this research was to identify frequencies and instances of the considered variables within the data in order to make interpretations about general trends in autism coverage.

Another limitation of this research is related to the study design. As a content analysis, the data utilized in this study was collected by two coders. While the coders passed reliability checks twice during the research portion of this study, it is possible that the coders made errors or acted inconsistently during the coding process. Human error serves as a threat to validity and reliability in this study. The undergraduate research assistants employed in this study had differing analytical skills. One of the coders worked quickly through the material, with confidence in their understanding of the codes; the other coder took much longer to manage their batches and reported behavior indicative of an intensely analytical approach to the coding process. These differences in coding behaviors could indicate discrepancies in reporting, although the reliability checks provide confidence in consistency between coders.

The undergraduate students each coded a total of about 400 articles over a relatively short time period. Although coding materials were distributed to the students in intermittent batches to prevent coding fatigue, it is plausible that the coders rushed through certain materials or made mistakes. In a future study, employment of more coders would make individual coders

responsible for smaller samples to code, potentially decreasing chance for error. The coding process would also be improved by longer, more intensive training.

Another limitation is related to the sample size. The sample ($n = 682$) was smaller than anticipated, hampered by the subtraction of extraneous material. The sample was not comprehensive of all news material from 2013 through 2016, as it was derived from two newspapers and did not include other television news, movies, radio, or other media forms. Further, this sample was derived only from American news sources. Inclusion of international news may have provided a more comprehensive understanding of autism in the media and furthered some of the previous research which inspired this content analysis.

The articles comprising the study's sample were those which appeared in physical print newspapers from 2013-2016. As this sample consists of the printed 2013-2016 articles from *The New York Times* and *USA Today*, it is different from the sample that would be expected from online articles. It must be considered that the results from this study could be limited to the audience of print newspapers. Still, the sample size of 682 articles surpassed the samples utilized in previous research and surpasses 20% per year standard for content analyses put forth by previous researchers. In addition to including more media forms, newspapers, or types of articles in future research, a future study should consider using a larger time period to gather a sample. The four-year period presented in this research is considerably small in relation to previous research.

Future Research

The recognition of disabilities and disabled individuals in the media may decrease stigmas and stereotypes about those disorders (Holton et al., 2014). With instances of autism increasingly prevalent in America (CDC, 2018a), it is crucial that the public is familiar with the

disorder. Increased familiarity with autism may lead to more inclusive behaviors and perhaps better and more accessible treatment for those with the developmental condition.

Future research related to this study should reinvent the coding design. Particularly, results of this study suggest improved ways to approach mutually exclusive codes and various units of analysis. Coders in the present study were trained to view stereotypes and stigmatizing cues as mutually exclusive. In hindsight, it would have been interesting to examine the relationship between stereotypes and stigmatizing cues, as theoretical knowledge about stereotypes and stigmatizing cues indicates a connection. Further, this study design called for frames to be measured once per article. Upon reflection, a study of frames as they appear and shift within articles – perhaps by measuring frames by sentences – would have likely yielded findings about trends in coverage over time. Adjustments to coding design and related research questions presents a promising guide for future research.

Future research based on this study should examine the stereotype of “lumping.” This code, which emerged in the study, was the most common stereotype in the coverage. Future research should explore if this trend is present in media coverage of other health concerns. Future research should also consider whether lumping should be grouped as a stereotype or instead, a stigmatizing cue that falls under label reference. This relationship could be considered in a study design that did not regard stereotypes and stigmatizing cues as mutually exclusive. Future research into stereotypes associated with autism might also explore the stereotype that it only affects males – the coders involved with this research process both reported this idea at the conclusion of their involvement in the study. Finally, future research might consider a time period inspired by elections, as this research indicated a relationship between campaigning and discussion of autism in the media.

Conclusion

News media play a critical role in shaping public knowledge about disability and health concerns. Although journalists may identify as part of the entertainment industry (Stuart, 2006), they act as a primary resource in helping the public make sense of complicated topics, such as what it means to be disabled (Osteen, 2008; Scheufele & Tewksbury, 2007). As their coverage of disabilities influences how the disabled population is perceived and treated (Holton et al., 2014; Smith, 2011), journalists have a responsibility to deliver balanced, thoughtful, and accurate representations of health issues. The present study highlights areas in which news coverage of autism may be improved.

The consistent reliance on episodic frames to discuss autism should signal concern. Use of this frame puts individuals with autism and their family members at a disadvantage by presenting autism as an issue that exists at a case-by-case basis. More balanced coverage and inclusion of thematic perspectives by journalists helps to signal the aspects of autism that should be in conversations about public health (Coleman et al., 2011). Further, balanced and honest coverage should not perpetuate stereotypes about autism for sensational appeal. Associating autism with topics such as violence or savant abilities unfairly and inaccurately groups individuals with the disorder. In creating a comprehensive understanding of autism for audiences, journalists should not make generalizations about the disorder based on a single episode.

The reportage analyzed in this content analysis indicates that autism coverage is not only layered with stereotypes, but also stigmatizing cues. Persistent allusions to label references warrant concern. The stigmatizing use of label references hints that when presented in media coverage, autistic individuals are excluded or considered “other.” Journalists should be aware of

this language; label references in autism coverage corroborate Osteen's (2008) understanding of the relationship between the public and the disabled as that of spectator and spectacle. Finally, the present study demonstrates that journalists are not allowing the discussion of autism to come from experts on autism. Representing the most common source in this examined coverage, journalists are not leaving the room necessary for individuals with autism and those that care for them – family members and education specialists – to describe and depict what it means to experience the world with autism. As demonstrated by this research and existing research, how autism is covered in the media has reaching implications – it is imperative that journalists take this responsibility to ensure that those with autism are represented accurately.

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Table 1

Presence of All Variables Over Time

<u>Variable</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>
Total Articles	160	172	206	144	682
Episodic Frame	84	100	110	105	399
Thematic Frame	76	72	96	39	283
Stereotypes Overall	152	147	201	165	665
Abnormal Sexuality	1	1	4	6	12
Abnormal Social Tendency	49	48	40	31	168
Difficult Personality	7	22	17	14	60
Violent Tendency	16	9	26	19	70
Savant Skills	18	11	14	25	68
Lumping	61	56	100	70	287
Stigmas Overall	73	85	105	130	393
Label Reference	38	50	57	54	199
Psychiatric Symptom	16	9	23	34	82
Social Skill Deficit	18	24	19	39	100
Physical Appearance/Symptom	1	2	6	3	12
Savant Source	4	1	2	4	11
Non-Savant Source	27	17	20	10	74
Mother Source	13	20	19	17	69

Table 1 (cont.)

<u>Variable</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>
Father Source	3	8	7	16	34
Sibling Source		2	3	1	6
Other Relative Source	1	1		2	4
Relative with Special Status Source	4	4	5	4	17
Medical Professional Source	29	30	41	30	130
Education Professional Source	11	18	9	13	51
Journalist Source	47	56	59	33	195
Politician Source	4	3	23	11	41
No Source/Other Source	17	12	18	3	50

Table 2

Presence of Stigmatizing Cues in Episodic Frame, Thematic Frame, and Overall

	<u>Label Reference</u>	<u>Psychiatric Symptom</u>	<u>Social Skill Deficit</u>	<u>Physical Appearance/ Symptom</u>	<u>Total</u>
Episodic Frame	130	69	75	10	284
Thematic Frame	69	13	25	2	109
Total	199	82	100	12	393

Table 3

Presence of Sources in Episodic Frame, Thematic Frame, and Overall

<u>Source Type</u>	<u>Episodic Frame</u>	<u>Thematic Frame</u>	<u>Total</u>
Savant Source	11		11
Non-Savant Source	62	12	74
Mother Source	61	8	69
Father Source	34		34
Sibling Source	5	1	6
Other Relative Source	4		4
Relative with Special Status Source	17		17
Medical Professional Source	33	97	130
Education Professional Source	36	15	51
Journalist Source	88	107	195
Politician Source	14	27	41
No Source/Other Source	34	16	50

Table 4

Presence of Stigmatizing Cues Among Sources

	<u>Label Reference</u>	<u>Psychiatric Symptom</u>	<u>Social Skill Deficit</u>	<u>Physical Appearance/Symptom</u>	<u>Total Stigmatizing Cues</u>
Savant Source	4	1		1	6
Non-Savant Source	29	21	23	2	75
Mother Source	28	22	20	3	73
Father Source	12	9	11	3	35
Sibling Source	1		1		2
Other Relative Source	3	2	5		10
Relative with Special Status Source	7	3	3		13
Medical Professional Source	40	13	17	2	72
Education Professional Source	21	6	10		37
Journalist Source	39	3	6	1	49
Politician Source	7				7
No Source/Other Source	8	2	4		14
Total	199	82	100	12	393

Appendix A

Codebook

Section One: Stereotypes

Read for phrases, sentences, or passages. A sentence may have one, none, or several stereotypes. Most often, a stereotype will be apparent in a sentence, but you may reflect on a several-sentence passage and decide to code it as a stereotype.

Mark each time you identify one of the following stereotypes.

Abnormal Sexuality: This stereotype is recognized with reference to autistic individuals seeming asexual, too childish to engage in sex, or uninterested or uneducated in dating and sex. There may be reference to dating as a “game” that autistic individuals are unable to “play.” This stereotype may allude to a notion that autistic individuals are unaware of the social nuances that are involved with successful flirting or sexual encounters.

Example: “Some autistic students are expelled on grounds of sexual harassment. They are so eager to fit in that they may, for example, comply with the demands of a bully who says, “I’ll be your friend and go to dinner with you every night of the week if you go kiss that girl.”

Abnormal Social Tendency: This stereotype may be recognized with reference to autistic individuals being especially introverted, lacking communication skills, acting withdrawn, not controlling their emotions properly, lacking empathy, and not understanding basic social cues.

Example: “Job applicants with autism are certainly at a disadvantage for the interview – they struggle to make eye contact and keep up with conversation.”

Difficult Personality: This stereotype may be detected through reference to troubling or frustrating distinctive characteristics of an autistic person, perhaps through reference to an autistic person refusing to speak in certain situations. This stereotype will often be associated with frustration that an autistic individual is incapable of understanding and conforming to the social norms of non-autistic people.

Example: “We all know what interacting with people with autism and Asperger’s syndrome looks like – clipped, precise answers and an aversion to physical embrace.”

Violent Tendency: This stereotype that autistic individuals are inherently violent or uncontrollable might be present in reference to a perpetrator of a violent act having autism, despite lack of evidence or diagnosis by a medical professional. This stereotype might also present a violent behavior by an autistic individual as unsurprising, or a given on account of their diagnosis.

Example: *A news article discussing the Marjory Stoneman Douglas High School shooting alleged perpetrator, Nikolas Cruz: “Mr. Cruz has a ‘significant history of mental illness and is possibly autistic.’”*

“The ensuing encounter should have been nothing more than a harassing annoyance. Instead, not surprising given the rigid thinking and “fight or flight” instinct characteristic of those with autism, things escalated.”

Savant Skills: If an individual on the spectrum has an uncanny talent for a specific hobby, the article might present that autistic person’s skill as common for autistic people. Often, these presentations highlight how the autistic person is able to enrich the non-autistic world with their abilities. This stereotype also emerges when savant skills are used as a symptom to indicate or foreshadow that an individual has an autism diagnosis. Also, this stereotype might appear with reference to “Rain Man” (a movie centered on a person with a developmental disorder having an exceptional memory).

This stereotype is not limited to one particular type of talent: the subject may be able to compose music, list every president, name every country, paint realistic art renderings, etc.

Example: *“At about 3 years old, Jacob was diagnosed with a form of high-functioning autism. Not long afterwards, he rapidly began excelling at the piano, quickly moving to harder and more difficult compositions.”*

Lumping: This stereotype is apparent when autism is grouped together with, most commonly, a rather unfavorable condition.

In some articles, you may find that the only mention of autism is to provide comparison to reinforce the idea that the actual subject of the article is negative.

Example: *“Unfortunately, Allegra’s heart condition is something that, like autism or cancer, she will have to live with forever.”*

“... like autism or schizophrenia”

Section Two: Stigmatizing Cues

Read for phrases, sentences, or passages. A sentence may have one, none, or several stigmatizing cues. Most often, a stigmatizing cue will be apparent in a sentence, but you may reflect on a several-sentence passage and decide to code it as a stigmatizing cue.

Tally each time you identify one of the following stigmatizing cues.

Label Reference: This involves the singling out and labeling of individuals on account of the differences that are characteristic of their autism diagnosis. In news articles, difference between autistic individuals and non-autistic individuals are labeled and prescribed.

Labels for people with autism may include: loner, abnormal, high-functioning, low-functioning, and different from peers, “Rain Man,” “on the spectrum,” or even “the autistic” instead of “person with autism.

Example: “The boy in my daughter’s class is definitely on the spectrum.”

Psychiatric Symptom: Stigmatizing reference to psychiatric symptoms are marked by observations about the cognitive abilities, quality of life limitations, or clinical references to a person’s emotions and responses to a situation.

Example: “I don’t know how the mother of Pippa, a 16 year old with autism, does it. That child is going to be dependent on her parents for the rest of her life.”

Social Skill Deficit: Stigma about illness may be noted in remarks about the way a person acts and behaves. Comments about abnormal body language, eye contact, and conversational skills should be categorized as a stigmatizing social skill deficit (and not fall into the category of stereotypes) when the discussed as negative, distracting, or debilitating.

Example: “The entire class was unable to go on the field trip because the principal feared Kali would have one of her outbursts during the play.”

Physical Appearance/Symptom: Stigmatizing attitudes can be signaled with reference to physical appearance. This may come in the form of comments about attractiveness and personal hygiene. A person with autism may be discussed as unkempt with a mismatched outfit.

Example: “Poor Max is simply a mess; his hair is always dirty and he will rewear the same outfit twice in one week.”

Section Three: Frames

Read through the entire article before deciding on the frame – there can only be one frame per article. To be considered a frame, an article should have at least one paragraph, or two to three sentences, that fit one of the following two frames.

Episodic Frame: As the name suggests, an episodic frame involves an issue approached in terms of a specific event or episode. These stories discuss a private, immediate event or incident with little or no context about the incident in relation to greater society. Stories with an episodic frame are immediate and discuss *individuals* and *events*.

Example 1: Reese Witherspoon revealed that she has had “multiple experiences of harassment and sexual assault” throughout her Hollywood career, adding her account to many that have arisen after multiples allegations of sexual harassment were made against producer Harvey Weinstein. Before introducing her *Big Little Lies* co-star Laura Dern at ELLE’s Women in Hollywood event on Monday night, the actress and producer spoke up about the director who assaulted her when she was just 16 years old.

**episodic frame of the #metoo movement*

Example 2: By his twenties, Kyle Kaylor imagined he would be living on his own, nearing a college degree, and on his way to a job that fulfilled him. Instead, at 21, he found himself out of school, living with his parents, and “stuck” working as a manager at a fast food restaurant scraping to make hand-to-mouth. Launching into adulthood has been tricky, he said.

**episodic frame of the college graduate unemployment*

Thematic Frame: Thematic frames present stories with emphasis on societal connections to an issue. Thematic frames discuss the public with reference to institutions and environments. Stories with a thematic frame are contextual and discuss *issues* and *trends*.

Example 1: Emboldened by Judd, Rose McGowan and a host of other prominent accusers, women everywhere have begun to speak out about the inappropriate, abusive and in some cases illegal behavior they’ve faced. When multiple harassment claims bring down a charmer like former Today show host Matt Lauer, women who thought they had no recourse see a new, wide-open door. When a movie star says #metoo, it becomes easier to believe the cook who’s been quietly enduring harassment for years.

**thematic frame of the #metoo movement*

Example 2: Over half of America’s recent college graduates are either unemployed or working in a job that doesn’t require a bachelor’s degree, the Associated Press reported this weekend. The story would seem to be more evidence that, regardless of your education, the wake of the Great Recession has been a terrible time to be young and hunting for work.

**thematic frame of the college graduate unemployment*

Section Four: Source

An article may only have one source. Identify the DOMINANT source of each story. The source could easily be notable in the headline or introduction, but you should remain mindful of the primary source as you read through the entirety of the article.

Autistic Savant**Autistic Person – “normal” without special abilities****Mother of an Autistic Person****Father of an Autistic Person****Sibling of an Autistic Person**

Other Relative of an Autistic Person: Aunt, uncle, cousin, grandparent, etc.

Relative with Special Status: A famous actress is the aunt of an autistic person; politician with autistic child.

Medical Professional: Doctor, nurse, researcher, researcher

Education Professional: Teacher, tutor, teacher’s assistant, occupational or speech therapist, community program coordinator

Journalist: The journalist perspective reads as an omniscient presence, relying on a third-person point of view. The journalist source may cite doctors, scientists, family members, government officials, organization members, education professionals, or others in their articles. This source likely will not include the first-person perspective of autism.

Politician: This source will likely be specifically named and therefore apparent, (i.e. President Donald Trump; “claimed a government official”). Candidates for public office should be coded as a politician source.

No Source/ Other Source: Please only select this when the source does not fit into any of the aforementioned categories. When selecting “other” please describe your interpretation of the source in the notes.

***** if the source seems to fit into two categories (such as the mother or father of the autistic child happens to be an actor or athlete), the coder should code for the source as they are introduced and described in the story.*****

Appendix B

Code Sheet

Coder:

- Eliza
 Johanna

Article number: _____

Article date: _____

STEREOTYPES

Abnormal Sexuality

1 2 3 4 5 6 7 8 9 10

Abnormal Social Tendency

1 2 3 4 5 6 7 8 9 10

Difficult Personality

1 2 3 4 5 6 7 8 9 10

Violent Tendency

1 2 3 4 5 6 7 8 9 10

Savant Skills

1 2 3 4 5 6 7 8 9 10

Lumping

1 2 3 4 5 6 7 8 9 10

STIGMATIZING CUES

Label Reference

1 2 3 4 5 6 7 8 9 10

Psychiatric Symptom

1 2 3 4 5 6 7 8 9 10

Social Skill Deficit

1 2 3 4 5 6 7 8 9 10

Physical Appearance/Symptom

1 2 3 4 5 6 7 8 9 10

FRAME

- Episodic
- Thematic

SOURCE

- Autistic Savant
- Autistic Person (normal/not savant)
- Mother of an Autistic Person
- Father of an Autistic Person
- Sibling of an Autistic Person
- Other Relative of an Autistic Person
- Relative with Special Status
- Medical Professional
- Education Professional
- Journalist
- Politician
- No Source/Other Source: _____

Notes: