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Puzzled Representations: Popular Media and How Educators Come to Know Autism

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PUZZLED REPRESENTATIONS: POPULAR MEDIA AND HOW EDUCATORS

COME TO KNOW AUTISM

by

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(Under the Direction of Delores Liston)

ABSTRACT

People learn about the world through popular culture. Popular culture media representations of autism can be found in TV, film, literature, Internet media, advertisements, and more. This study employed a quantitative correlational design to survey 273 Georgia educators regarding their perceptions of autism, including knowledge about autism, best practices for teaching students labeled as having autism, perceived positivity and accuracy of popular media representations of autism, as well as participant identification with popular media representations of autism and personal characteristics (i.e., age, sex, level of education, type of degree, years of teaching experience, professional and personal experiences). Six major findings emerged from this study. First, there is no relationship between media usage and knowledge of autism or knowledge of best practices. Second, factors contributing to more knowledge of best practices include more teaching experience, specialized training, and working in inclusive or varied settings. Third, the majority of educators did not associate autism with negative traits, nor did they align with early theories of autism. Fourth, educators noted communication and functional skills to be the most important focus of education. Fifth, educators believed that students with autism should be educated with their non-disabled peers as much as possible. Finally, the majority of educators learned about autism

through personal experiences or professional development, not popular culture media. Results suggest that field experiences working with students labeled as having autism and integrated critical disability models should be incorporated into educator preparation and professional development.

INDEX WORDS: Autism, Critical Disability Studies, Labels, Media representations of autism, Models of disability, Neurodiversity, Normalization, Perceptions of autism, Teacher expectations

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COME TO KNOW AUTISM

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DEDICATION

For my husband Chris, who always pushes me to follow my dreams and do all that I want

to do. Thank you for all your support in so many ways.

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The entire process towards earning my doctoral degree has been such an incredibly enlightening journey that would not have been possible without the many professors who have taught, challenged and inspired me along the way.

I always felt that college was just what you did after high school and never thought I would be in college for 10+ years, but as I attended Mount Saint Mary College, a fire for critical inquiry was sparked by doctors Joan Miller, Irene Nunnari, Marie-Therese Sulit, and James Cotter. It was during my time at the Mount that I knew I wanted to continue to learn and even earn my doctorate.

I met Dr. Regina Rahimi at Armstrong Atlantic State University where she continually challenged and pushed me through her classes as I earned my Masters degree. She counseled me to pursue the Curriculum Studies EdD at Georgia Southern University, and I am so glad and grateful that she did.

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CHAPTER 1

PUZZLING AUTISM: CRITICAL DISABILITY STUDIES AS A THEORETICAL

FRAMEWORK FOR UNDERSTANDING AUTISM

Introduction

Rationale for Research & Purpose of the Study

Popular media's representations of autism are plentiful; found in film, news

media, television, internet media, both fiction and non-fiction literature and

advertisements, these representations strongly influence the way people understand and

perceive autism and people labeled as having autism. Explicit representations of autism

are found throughout popular culture media; two very recent examples include abc's hit

TV show, *The Good Doctor* and *Sesame Street*'s newest character, Julia. Conversely,

more subtle, implicit representations found through out media may feature characters

with some traits that could be considered to be '*on the spectrum'* including those with

impaired social skills, restricted interests, savant skills, language deficits (including

difficulty understanding figurative language), and sensory sensitivities; cbs's *The Big*

Bang Theory's Dr. Sheldon Cooper comes to mind. Recent research (Haller, 2010; Jack,

2014; Loftis, 2015; McGuire, 2016; Murray, 2012; Murray, 2008b; Osteen 2008) has

discovered that autism is represented in popular media and news media in negative and

damaging ways.

Representations are socially constructed by popular culture media artifacts such as

film, literature, television shows, documentaries, memoirs, Internet media, and

advertisements. In keeping with Hall (1992), Maudlin and Sandlin (2015) note that these

artifacts "communicate information with which we interact (both actively and passively)

through viewing, listening, reading, feeling, consuming, and producing" (p. 369). People

learn about the world through popular culture. With rates of autism diagnoses rising

steadily in the last few decades' autism is becoming more prevalent and common in

western society. However, many people still have only ever experienced autism through

interactions with popular media. As people interact with popular culture media artifacts,

meaning is produced (Maudlin & Sandlin, 2015). "More specifically, popular culture

teaches us about race, class, gender, and sexuality, reifying these differences as social

relationships that are repeated and thus constructed as social norms" (Maudlin & Sandlin,

2015, p. 371). I argue the same is true for disability and specifically, autism. With

regard to autism, these messages reproduce ablest notions of normalcy and construct

negative stereotypes of autism as *Other*. Representations are reconstructed and repeated

in various popular culture media artifacts. "As this process occurs, social norms become

ordinary and taken for granted and their very social constructedness is disguised"

(Maudlin & Sandlin, 2015, p. 371). Miller (1999) notes, "It is increasingly important for

educator's to take seriously the processes by which media images and constructions

pervade all our lives" (p. 234). It is important to have a foundational critical

understanding of the various ways popular culture media constructs autism for society in

order to "make informed decisions" to decide to accept representations as accurate or to

trouble them as inaccurate, damaging, or stereotypical (Maudlin & Sandlin, 2015).

My study will examine educators' exposure to popular culture media regarding

autism and investigate if educators' perceptions of autism align with popular media

representations of autism. Educators will be asked to determine if they view

representations of autism in popular culture media as realistic or unrealistic and as

positive or negative. The study will also examine if educators' responses regarding perceptions and knowledge of autism align with traditional representations of autism or with alternative representations. Additionally, the study will also gather where and how educators glean their knowledge about autism and best practices for teaching students labeled as having autism. The information collected by this study will inform if media exposure regarding autism correlates to educators' perceptions and knowledge of autism. The study will answer how Georgia educators come to know autism. With the prevalence of autism rising it is more important than ever to understand how educators form knowledge about this unique group of students who will no doubt be a part of the school communities in which they teach. The number of autism diagnoses have risen drastically in the last 20 years. According to the CDC in 2012, 1 in 68 individuals were diagnosed with ASD compared to just 1 in 150 in the year 2000 (2016). Teacher educators can use the information from this study when evaluating teacher perceptions of autism based on popular culture media and design cultural activities to empower educators. In keeping with Steinberg (2009), Maudlin and Sandlin note (2015), "empowerment comes when we are able to read media and make informed decisions about what we have read" (p. 369).

Research Questions

Given the increased prevalence of autism and the assumed influences of popular culture, this study seeks to investigate: What perceptions do teachers have of autism, and are these perceptions correlated to personal characteristics and popular media exposure? Specifically,

1. What are teachers' perceptions of autism?

2. Does experience with media correlate or predict teachers' perceptions or knowledge about autism?

3. Do personal characteristics (i.e., age, sex, level of education, type of degree, years of teaching experience, professional and personal experiences including having a friend or family member with an autism label) correlate or predict teachers' perceptions or knowledge about autism?

Political Considerations

Debates regarding the naming of people labeled as having autism need to be considered. Proponents for "people-first" language, advocate that the person should be put first, then the disability label when referring to people with disabilities and people labeled as having autism. "'People-first' language has for many years attempted to counter the label domination by emphasizing the personhood of the child before the label" (Hodge, 2016, p. 193). For example, one would use the phrases, 'child with autism,' 'student who has autism,' or 'people diagnosed with ASD.' Proponents for "people-first" language argue that that emphasis should be put on the individual, not the label.

Conversely, some individuals who identify with the characteristics of autism and subscribe to the neurodiversity movement (Sinclair, 2012; Bascom, 2012; Runswick-Cole, 2016) prefer to call themselves *autistic people* because they feel "person-first" language separates them from their autism. This perspective will be discussed in more detail later on in this chapter. Proponents of this view argue they would not be themselves if they were not autistic, and that autism is not a disability at all, rather a difference. Additionally, some autistic individuals view "person-first" language as an

illogical practice, for instance you would not separate any other characteristics from a person using "person-first" language (as an example, tall girl vs. girl who is tall, African American boy vs. boy with African American ethnicity) (Sinclair, 2012). However, Davies argues, "These narratives should be troubled for their contribution to essentialising autism as a fixed and immutable biologically based condition, even if it is a condition framed as legitimate difference rather than deficit or disability" (2016, p. 143). The language of the neurodiversity movement, which prefers the use of 'autistic' to 'person with autism,' reinforces the discourse of the medical model (discussed later in this chapter).

Moreover, in harmony with the social relational model or disjuncture theory (this perspective will be discussed in more detail later on in this chapter) Mallett and Runswick-Cole (2016) note, "…we use the collective term 'disabled people' in order to underline the view that disability is something done to a person, not something someone has" (p. 112). Hodge (2016) reminds us that, "the use of 'with' as in 'a child with social and behavioural difficulties' still encourages people to locate the 'problem' of learning or behaviour within the child and his/her identified 'condition' "(p. 193).

When discussing people labeled as having autism in my dissertation I am making the political, theoretical and personal choice to acknowledge and draw attention to the social construction of the autism label and the disabling effects it imparts on people who identify or are identified with the label. In keeping with the authors cited above, I choose not to use "person-first" language which situates the problem of disability within the person by using verbiage such as 'who have' or 'diagnosed with' autism which signals the medical model. I also choose not to use language of the neurodiversity movement as

it re-inscribes bio-medical positioning of individuals labeled as having autism. Simply, albeit cumbersome, I will refer to individuals as labeled as having autism. I use this term in hopes of reminding my readers that autism, as is disability, is a socially constructed concept, not purely a bio-medical problem. Impairments associated with the label are not to be discounted, as they intersect with the environment to create disability and real barriers to living and participating in society.

Theoretical Framework

When investigating cultural representations of autism it is important to consider the context in which autism is presented, both historically and currently. Historical and current cultural contexts bring to light why representations of autism have been widely accepted and embraced. Additionally, it is important to view these representations through a critical lens embracing major assumptions and key concepts articulated in disability studies discourse. These key concepts of critical theory relevant to critical disability studies include examining power relationships of privilege and oppression, social and economic implications, and the way language and discourse are used to convey meaning and power (Crotty 1999; Foucault, 1977; Howell, 2013). By critically examining cultural representations of autism using these key concepts it is possible to expose the underlying messages of popular culture media representations of autism. Often the underlying messages presented by popular media are hegemonic, ablest, reinforce stigma, and value normalization.

Overview of critical disability studies key concepts. Critical disability studies concepts crucial to this study are impairment, disability, disablism, ableism and normalization. A discussion of different models of disability is also imperative to

critically situating this study. A foundational understanding of these key concepts focuses the examination of popular culture media representations of autism within a critical disability studies theoretical framework.

Clarification between the terms *impairment* and *disability* is needed to better understand disability discourse and models of disability. The term *impairment* is used in reference to an individual's physical or cognitive abilities or chronic health condition (Davis, 2013a; Shakespeare, 2013). The term *disability* is used to reference the social constructions imposed on individuals, which create inequities (Davis, 2013a; Ferrie & Watson, 2015; Michalko, 2008; Overboe, 2012; Shakespeare, 2013). Disabling social constructions can be barriers to active participation in society, the environment, the educational system, or the work force. Moreover, these social constructions can be societal perceptions that limit other people's autonomy or self-determinism (Kapp, 2011). The way a model characterizes differences between disability and impairment is a defining trait of that model.

Disablism can be understood as the process of oppression and exclusion that results from interaction between the socio-political environment and a person's impairment (Ferrie & Watson, 2015; Goodley, 2014, Kumari-Campbell, 2012). Kumari-Campbell (2012) notes, "…disablism focuses on the negative treatment towards disabled people and social policy…disablism is concerned with disabled people as Other (those people) - Other than 'us.' The 'us' is presumed to be abled-bodied - an abled-bodied perspective" (p. 213). Disablism works on individuals causing disabling affects including social, political and environmental injustices and inequities, in addition to creating and reinforcing Othering representations of people with impairments.

Ableism is privilege and favoritism towards able-bodiedness, health, independence, cognitive, social, and emotional competence, and competitiveness among other normative characteristics, which are valued by majority society (Connor, 2008; Davis 1995; Erevelles, 2011; Goodley, 2014; Hughes, 2012; Kumari-Campbell, 2012;). "There are two features that produce ableism relation: (1) The idea of *normal* (normal individual); (2) A *Constitutional divide* – a division enforced between the 'normal' = human and the aberrant (sometimes pathological) = subhuman" (Kumari-Campbell, 2012, p. 215). Normalizing functions based on societal values works to privilege normativity.

> The natural and the normal both are ways of establishing the universal, unquestionable good and right. Both are also ways of establishing social hierarchies that justify the denial of legitimacy and certain rights to individuals or groups. Both are constituted in large part by being set in opposition to culturally variable notions of disability.... (Baynton, 2013, p. 18-19).

Investigating what society values culturally highlights human characteristics, which are privileged.

Normalization (Foucault, 1977) is a form of ableism, since it aims to reproduce society's privileged ideals and norms. Normalization is very present in education, especially typical educational programs designed for students with autism; teaching students labeled as having autism to replicate ideal patterns of behavior, language and social skills, rather than accommodating and embracing individual differences (Bascom, 2012; McGuire, 2016). For example, students who are labeled as having autism are often explicitly taught soft skills as part of a specialized curriculum. The Verbal Behavior

Milestones Assessment and Placement Program (VB-MAPP) and The Assessment of
Basic Language and Learning Skills-revised (ABLLS-R) are examples of such
specialized curriculums designed for students who have autism (Partington, 2010;
Sunberg, 2008). These programs focus on a variety of skills including soft skills such as
how to participate in a mainstream classroom setting, how to engage with typical peers,
and even how to play in normative ways.

      Overview of models of disability. A few relevant models of disability give
insight for the discussion of critical disability studies as a theoretical framework.
Representations of autism vary vastly when viewed through different models of
disability. There are several models that seek to define "disability;" the medical model,
the social model, the social relational model, and the neuro-diversity model. Each model
will have different implications for understanding disability, society, and power relations.
This dissertation will utilize the social relational model.

      Most commonly held understandings of autism are currently grounded in the
medical model of disability (Erevelles, 2001; Goodley, 2014; Goodley & Lawthom,
2008; Loja, Costa, Menezes, 2011; Siebers, 2013; Straimer, 2011; Straus, 2013;
Titchoksky & Michalko, 2012). "The individual/medical model remains influential in
biomedical circles, at least insofar as disability is often assumed to be a negatively
valued state associated with a physical anomaly" (Beaudry, 2016, p. 211). According to
Beaudry (2016), the medical model takes into account the underlying biological
conditions of people with disabilities thus, acknowledging a big part of their existence.
Roush and Sharby (2011) explain that the medical model places, "the cause of disability
in anatomical or physiological departures from 'normal' that need to be 'fixed' or

cured…with the belief that these fixes provide the best path to function and independence" (p. 1716). The medical model of understanding disability represents the traditional curriculum as well as idealist and positivist assumptions. Within the medical model, disability is understood as a something broken, something in need of fixing, an epidemic that needs to be combatted, and to be sure, a bio-medical deficit. This model understands disability to be the manifestation of impairment. Straimer (2011) describes this model as, "an image of persons with disabilities as patients, rather than emphasizing their social status…" (p. 37). Disability is problematized as something broken, dysfunctional and requiring fixing (Davis, 2013; Erevelles, 2011; Goodely, 2014; Goodley & Lawthom, 2008; Runswick-Cole, 2016; Siebers, 2013; Straus, 2013; Titchoksky & Michalko, 2012). Moreover, disability is medicalized, quantified and is separated from the person. Lester (2011) notes, "dis/abilities have been constructed as biological truths, with the medicalization of bodies resulting in 'problems' being viewed as discrete diseases that only legitimated agents (e.g., psychiatrists, health professionals, etc.) are capable of discovering, naming, and treating" (p. 98). According to this model, doctors and professionals are all-knowing and hold absolute truths. Additionally, the medical model positions disabled people as inferior to the non-disabled; exacerbating ableism and couching disability within the personal tragedy theory (Goodley, 2014; Loja, Costa, Menezes, 2011; Shakespeare, 2013). Within the medical model, the problem of disability is located in the individual, rather than with the disabling barriers and attitudes (Shakespeare, 2013). However, Beaudry (2016) notes, that it is important not to "amputate" physical and mental experiences from people's lives, as some people experience disability as an individual; rather than a social problem (p.212). The medical

model of disability is understood by disability scholars to be reproducing systemic disablism. Although the medical model does account for impairments people labeled as having autism must grapple with, it is limited by reproducing systemic disablism and therefore will not be the primary model utilized in this dissertation.

Another more recent model is the neurodiversity movement's difference model, which acknowledges and celebrates human diversity (Bascom, 2012; Runswick-Cole, 2016). The difference model is couched in the medical model because it situates disability in bio-medical differences such as differently wired brains, and does not acknowledge disabling social constructions (Runswick-Cole, 2016). The neurodiversity movement endorses autism as a difference in the brain, not a disorder. Runswick-Cole (2016) notes that this approach is attractive, because it offers affirmation, political identity and celebrates autistic difference. However, attractive, the difference model still places value in the bio-medical; it positions autism as a bio-medical category. "Neurodiversity relies on discourses of medical pathology…. The stories of the medical world remain pervasive and powerful, they are dominant meta-narratives in our contemporary culture…" (Runswick-Cole, 2016, p. 24). The danger here is not acknowledging that people with autism are disabled, albeit by socially constructed barriers. This re-inscribes, the medical model by only locating all barriers and difficulties a person labeled as having autism faces within the individual's differences, not society. Although the neurodiversity model does not identify autism as a pathology, it is limited by crediting the difficulties of people labeled as having autism to medical difference located within the person and therefore will not be the primary model utilized in this dissertation.

The social model was the first response to the medical model. The social model (Conejo, 2011; Davis, 2013a; Davis 1995; Erevelles, 2011; Hughes, Goodley, & Davis, 2012; Michalko, 2008; Shakespeare, 2013; Straus, 2013) holds that disability is a result of the effects of ablest social conditions. Disability scholars recognized that the medical model of understanding disability was creating inequities and sought to represent disability as a social construction born out of disablism (Davis, 2013a; Davis, 1995; Erevelles, 2011; Hughes, Goodley, & Davis, 2012; Shakespeare, 2013; Straus, 2013). The social model believes that disability is socially and culturally constructed based on normative values, which produce disabling effects on non-normative bodies. The social model, Conejo (2011) posits, "analyzes disablism- the discrimination against people with disabilities- with the aim of eradicating it…it analyzes the physical, social and economic barriers faced by people with disabilities in many dimensions of their life" (p. 96). This model looks at the constructed social factors affecting disabled people. Brown (2008) states, "the social model of disability encompasses artificial boundaries and definitions placed [on people with disabilities] by others" (p. 4). This model is critiqued for not taking the interactions of a person's impairment into account and theorizing disability as purely a social construction (Goodley, 2014; Lester, 2011, Runswick-Cole, 2016; DePoy & Gilson, 2013). Although the social model does credit difficulties people with disabilities face to socially constructed barriers, it is limited because it ignores the real implications of impairments on the lives of people with disabilities and therefore will not be the primary model utilized in this dissertation.

The social-relational model (Bickenbach, 2012; Goodley, 2014; Lester, 2011; DePoy & Gilson, 2013) acknowledges that disability is a complex interaction between

ablest social forces and the realities of impairments and illnesses. The social relational

model, also termed *disjuncture theory* (DePoy & Gilson, 2013), is a response to both the

medical and the social models. This model is careful not to discount the real

complications and effects of impairments on a person's lived experience, but also not to

view disability as only a problematic incarnation of a person's impairments. "Through

this lens, disability is an ill-fit between embodied experience and diverse environments in

which bodies act, emote, think, sense, communicate, and broadly experience" (DePoy &

Gilson, 2013, p. 487). The social-relational model recognizes that there are complex

interactions between impairments and the way non-normative bodies are socialized. The

interaction between societal values and effects of the impairment create barriers. Lester

(2011) describes three barriers discussed in the social relational model, which together

constitute disability: barriers to being, barriers to doing and impairment affects. Lester

(2011) explains, "when people in positions of power determine that this individual cannot

perform certain activities or participate in a particular setting due to his/ her impairments,

the individual then experiences a dis/ ability as his rights are denied" (p. 100). The social

relational model takes both the person's medical impairment and social constructions into

account while discussing and defining disability.

The social-relational model is becoming a more widely recognized way of

understanding the complexities of disability and impairments. The World Report on

Disability defines disability using the social relational model, as Bickenbach (2011)

notes, "disability…is a complex, dynamic, multidimensional concept that engages, both

intrinsic features of human physiology and functioning - the domain of health - and

features of the physical, human built, social and attitudinal environment"(p. 148).

Additionally, the National Institute on Disability and Rehabilitation Research describes disability as, "a product of the interaction between characteristics of the individual (e.g., conditions or impairments, functional status, or personal and social qualities) and the characteristics of the natural, built, cultural, and social environments" (DePoy & Gilson, 2013, p. 486). The stance of this model is that disability is not purely based on a medical impairment, or purely a social construction, but a complex combination of both the impairment and social and attitudinal factors, which together constitute a person's experience of disability. The social relational model, couched in critical theory, is the model I will use to frame my discourse on disability in my dissertation.

Critical disability studies as a theoretical framework. Critical disability studies is a field of its own, however it serves as a form of critical curriculum inquiry. Critical disability studies is a relatively young field; Davis (2013b) notes that, "disability studies earliest proponents were writing in the 1970s and 1980s. The second wave of disability writing can be seen as emerging in the 1990s" (p.264). Critical disability studies offers a lens through which curriculum and culture can be investigated critically. Critical disability studies offers researchers a way to investigate curriculum and culture's intersections with themes of disability including barriers in society, lived experiences with impairments, stigma, normalcy, and representations to name a few. It is critical because it explores power relations within those themes. Critical disability studies shares many assumptions with critical theory, and for the curriculum scholar can be used as a theoretical framework.

Key assumptions of critical disability studies gleaned from critical theory include examining power relationships of privilege and oppression with regard to ableism and

normalization, the social and economic implications of disablism, and the way language

and discourse are used to convey meaning and power (Crotty 1999; Foucault, 1977;

Howell, 2013). These key assumptions are used to examine representations of autism in

popular media, as well as the messages that these representations construct for consumers

of popular media. Ablest power relationships privilege those who are deemed 'normal'

by society, thus subjugating outsiders. Social and economic implications of disablism

include the barriers created by society through disablism, which affect individuals' ability

to successfully be a part of their community as well as affecting their ability to earn a

living income. Language and discourse found in cultural and curriculum artifacts such as

literature, film, advertisements, documentaries, memoirs, and other texts construct

representations of disability, which have underlying implications for meaning and power.

"Critical disability studies starts with disability, but never ends with it: disability is *the*

space from which to think thorough a host of political, theoretical and practical issues

that are relevant to all" (Goodley, Hughes, Davis, 2012, p. 3). Critical disability studies

investigate power relationships regarding disabled people, their families and the societies

in which they live (Nunkossing, & Haydon-Laurelet, 2012). Critical disability studies

recognize intersectionalities of impairment including ethnicity, gender, age, economics

status, national location, and sexual orientation (Erevelles, 2011; Goodley, Hughes, &

Davis, 2012). These intersections influence the ways that disability is constructed for

these individuals. Indeed disability will be different for individuals who have less

economic means, as will disability be different for people of color, or people who do not

identify with mainstream societal gender norms. These intersections create different

experiences and constructions of disability that are important to be highlighted and

interrogated. Critical disability studies also explore human rights issues (Ballard, 1999; Moore, 2013; Sabetello & Schulze, 2014). "Critical disability studies politicises the experience of living with an impairment in contemporary society" (Goodley, 2014, p. 156). Additionally, educational implications and experiences for disabled children and adults are interrogated (Ballard, 1999; Gabel & Danforth, 2008; Goodley, 2014).

Moreover, how media and hidden curriculum function to normalize disability, construct disability, and generate expectations of disabled people are also of concern to critical disability scholars (Baynton, 2013; Brown, 2013; Davis, 2013a; Davis 1995; Grech, 2012; Titchosky & Michalko, 2012). Media and the hidden curriculum construct a picture of how disability and people with disabilities should look and act. People with disabilities who do not fit society's expectation as represented through media are seen as aberrant. For example, people with disabilities should overcome their disability and be courageous, but also remain vulnerable and fragile (Haller, 2010).

Critical disability studies seeks to raise a critical awareness pertaining inequities and human rights; to "…enhance our awareness of inequality and, whenever possible, permit new ways of thinking affirmatively about disability" (Goodley, Hughes, & Davis, 2012, p. 4). Critical disability studies encourage participation in society and activism by disabled people to promote their own interests and access (Sabatello & Schulze, 2014). Critical disability studies aims to raise critical awareness toward ending the bio-medical metanarrative that disability is a lone endeavor or an individual tragedy rather than a larger societal issue of equity (Brown, 2013; Michalko, 2008), to "shift our focus away from the perceived pathologies of disabled people on to the deficiencies of a disabling society and its ablest culture"(Goodley, Hughes, & Davis, 2012, p. 4).

Critical disability studies has many implications for education. Of course, educational rights and legislation are outlined for people and children with disabilities. In the United States there are many mandates that educators need to be aware of and be in compliance with in relation to the educational rights of children with disabilities and their families (U.S. Department of Education, Office of Special Education, n.d.). Disability studies also investigates how disability is formed or culturally constructed in schools (Allan, 1999; Goodley, 2014; Lalvani, 2015). For example, according to a study by Priya Lalvani (2015) teachers' beliefs about students with disabilities were most consistently aligned with the medical model of disability; noting that difficulties students with disabilities face including academic and social difficulties stem from their impairments, limitations in functioning and their inherent differences, rather than lack of accommodation, awareness, acceptance teaching practices, or systematic ableism. Additionally, teachers believed that separate programing was most realistic for students who had labels of autism or intellectual disabilities, where they could focus on life skills, rather than literacy or academics (Lalvani, 2015). Disability studies examines different stakeholders' perceptions or interpretations of educational legislation as it relates to human rights and disability. In like manner, Brown (1999) notes, advocacy is needed because it appears to many parents that there is a deep seated fear of disability, which surfaces in the education sector as barriers to inclusion" (p. 36).

The hidden curriculum is explored by critical disability studies scholars to examine how perceptions of disabled people are formed, influenced, and acted upon in educational settings (Brown, 2013; Goffman, 1963). These include the depiction of disabled people in educational materials (if they are included at all) and what those

depictions say about disability. Researchers also investigate the attitudes of teachers, students, and parents toward students with disabilities who are included in mainstream schools or classrooms (Nunkoosing & Haydon-Laurelut, 2012) and how those attitudes affect the classroom community and outcomes. Scholars also investigate how having a special education label or a specific label affects students' educational experiences (Mallett & Runswick-Cole, 2012). Lalvani (2015) found that "for most teachers, regardless of their number of years of teaching experience, disability categories and labels were viewed as helpful in determining educational placement, programming, or learning goals"(p. 384). Additionally parents believed "that being labeled as 'cognitively impaired' would lower teachers' expectations of their children and would stigmatise them" (Lalvani, 2015, p.387). Bianco (2005) found that teachers are heavily influenced by disability labels; that is, special and general education teachers were significantly less likely to refer students with disability labels to gifted program than students with no label.   These elements of the hidden curriculum can be examined through a disability studies lens to raise awareness of factors contributing to the constructed perceptions of disability. The investigation of power relationships and privilege can also be examined with regard to disability in educational sites. As Goodley (2014) notes, "[A] newfound task for inclusive education [is to] come out crip' and to talk back at discourses of compulsory normativity and disablism"(p. 103).   Educators can help facilitate this in classrooms, schools and communities by encouraging students to communicate and participate in tasks and activities in their own meaningful ways, without trying to normalize students' actions. By accepting and encouraging unique and meaningful participation and communication, educators set examples to peers, colleagues and

community members that diverse ways of interaction and expression are valuable and should be embraced and accepted. Creating a space for acceptance and diversity is key for inclusive education in breaking the cycle of ableism and disablism educational spaces.

Representation. Representation of disability, and autism in specific, is a budding topic for interrogation among disability and media studies scholars. Discourse around representation is enmeshed with discourse analysis, and is always critical in its examination. "CDA [critical discourse analysis] is critical in the sense that it aims to show non-obvious ways in which language is involved in social relations of power and domination, and in ideology" (Nunkoosing & Haydon-Laurelut, 2012, p. 196). Work in this area has informed how news media, cultural and curricular artifacts, literature and film, and autistic life writing has constructed an ever evolving spectrum of representations of autism (Bascom, 2012; Haller, 2010; Jack, 2014; Loftis, 2015, McGuire, 2016; Murray, 2008; Osteen, 2008). This dissertation will focus on TV shows, film, literature, documentaries, advertisements and news media to examine how autism is represented and to what extent popular media representations align with educators' perceptions of autism.

Knowing that people with disabilities are a part of a different socially constructed group, outside 'normal', causes society to shape that group to fit their collective understanding. Most often, representations of disability are constructed by people who do not have impairments or a chronic illness. This dissertation does not aim to construct representations of disability or autism, but merely reveal what representations have already been constructed by popular media. However, in presenting such representations this dissertation is responsible for potentially shaping outsiders' perceptions and

knowledge of autism and disability. Creating generalized representations of a group wields power against the disabled community by speaking for them and in effect, silencing them. Troublesome representations of people with disabilities continue to reproduce unequal power dynamics and re-create disability through social constructions. Film and literature have a huge impact on society's understanding of disability and autism. Representations of autism through film and literature *other* individuals on the spectrum, create stereotyped stock characters and often misrepresent the entire group (Loftis, 2015; Murray, 2008; Osteen, 2008). My dissertation will bring to light representations of autism constructed and promulgated by the media. My dissertation does not aim to speak for or silence people labeled with autism; but to report on what has already been constructed about autism and those with the label. Admittedly, there are always problems with representation no matter who is speaking for the group. As the group of people labeled as having autism is so vast and differing, those on the spectrum who can and choose to speak out and construct representations of autism do not stand for or represent the entire group. Additionally, family members and people who have personal and professional experience with autism should not be discounted as they too have valuable insider information. Representation is messy, especially with autism; people's lived experiences will differ so drastically. Still representations that are constructed should be responsible, ethically grounded and balanced (Goodley, 2016).

Although representations of autism have helped to raise awareness in society, an important shift is needed. Popular representations of autism should go beyond awareness and move toward acceptance and understanding, and give power to and acknowledge only those representations that are ethical (Bascom, 2012). Representation is key to my

dissertation. I will investigate where teachers' perceptions of autism lie, and which media representations align with their perceptions.

Significance of the Study

Students who are labeled as having autism make up a significant population in schools across the country and specifically the region where this study will take place; only 3.4% of students labeled as having autism are educated in a separate school or residential facility in Georgia, compared to 8.2% for the U.S. (U.S. Department of Education, n.d.). Further, 538,000 children age 3-21 are served under Individuals with Disabilities Education Act (IDEA) through an Autism label, that is 1.1 % of the overall student enrollment (U.S. Department of Education, National Center for Education Statistics, 2016b).

It is important to understand the implications that media has on teachers' awareness, understanding, and knowledge of autism because some researchers have found that popular media can portray autism and people labeled as having autism negatively and inaccurately. Teacher perceptions of autism are crucial to the education of the rising population of students labeled as having autism. As the growing population of school age children with a label of autism ages, the results of their education will impact their adult lives, the lives of their families and their communities. Autism is a spectrum (*Diagnostic and statistical manual of mental disorders: DSM-5*, 2014) and some students experience more severe disabling impairments than others; however, all students, including the entire spectrum of students labeled as having autism deserve a worthwhile and rigorous education preparing them for a meaningful quality life after school. According to the DSM-5 there are 3 severity levels of autism, level 3 "requiring very

substantial support", level 2 "requiring substantial support", and level 1 " requiring

support" (2014, p. 52). The DSM-5 outlines these levels in areas of social

communication and restricted and repetitive behaviors. Level 3 severity in the area of

social communication is described as, "Severe deficits in verbal and nonverbal social

communication skills cause severe impairments in functioning, very limited initiation of

social interactions, and minimal response to social overtures from others" (2014, p. 52).

In the area of restricted and repetitive behaviors, level 3 severity is described as,

"Inflexibility of behavior, extreme difficulty coping with change, or other restricted /

repetitive behaviors markedly interfere with functioning in all spheres. Great distress /

difficulty changing focus" (2014, p. 52). The severity is lessened with each level.

Additionally, the DSM-5 notes that several specifiers should be indicated when

diagnosed, that is, if there is an accompanying intellectual impairment, or language

impairment, and the degree of the language impairment (e.g., no intelligible speech,

phrase speech etc.), as well if there are other known medical, genetic, environmental

factors, or another neurodevelopmental, mental, or behavioral disorders, and if catatonia

is also present (2014). It is clear that there are innumerable combinations and possible

iterations of autism. Each person labeled as having autism can have vastly different

abilities, impairments, strengths and needs. The type and severity of educational support

and accommodation needed will have to differ according to each unique individual.

Something a label alone cannot express.

      Understanding teachers' perceptions of autism is needed to ensure that teachers

expect and intend to provide a rigorous and meaningful education for children labeled as

having autism, and that the meaning of that label is understood with a positive outlook.

Such research is needed to learn where educators' perceptions of autism lie, how they are influenced by the media and what interventions teacher education programs, school administration, and specialists need to provide to teachers to ensure they have a positive, balanced understanding of autism, and rigorous expectations for children with the label. Moreover, this dissertation will provide knowledge of critical disability studies concepts to teachers, teacher educators, school administrators, and specialists to help them identify and discriminate between inaccurate information, disabling and normalizing forces, and ablest media representations from those that are empowering and equalizing. Popular media including film, literature, documentaries, family memoirs, advertisements and educational texts present representations of autism and people with autism to their audiences; these representations, as will be discussed further in chapter 2, are not always empowering, positive or realistic. As only a proportion of the group can speak for themselves, it is important to critically examine representations of this vulnerable group and differentiate between realistic representations, from the unrealistic, positive representations from negative, and damaging representations from empowering ones.

CHAPTER 2

PICTURING THE PUZZLE: HOW SOCIETY HAS COME TO KNOW AUTISM

Historical Knowledge of Autism

Theoretical Foundations

The way autism is represented in society is constantly changing and evolving. In order to understand autism as it is understood today, it is import to become familiar with the historical foundations of autism. In addition, disability scholars, theorists, and advocates have recently posited new and alternative theoretical positions of autism; building on historical contexts that have influenced society's multiple iterations of autism representations. These theoretical foundations have impacted society's collective knowledge of autism; that is what we think we know about autism today, and what is still unknown about autism. These theoretical foundations also impact how society has formed its understanding of representations of autism in various popular culture media artifacts. Moreover, teacher expectations, awareness, and knowledge of autism are also impacted by these theoretical foundations.

Historical theoretical assumptions and misconceptions. Autism as a term was first used by Eugene Bleuler to describe schizophrenic patients' withdrawal symptoms in 1913 (Eyal et al., 2011). It wasn't until the early 1940s that doctors, Leo Kanner (1943) and Hans Asperger (1944) began detailing a childhood condition using the term autism to describe what would eventually become today's Autism Spectrum Disorder (ASD). It is important to note that the time period in which doctors Kanner and Asperger began researching and writing about autism was in the shadow of WWII; a time in which the Nazi regime was targeting humans to be killed based on natural differences such as race,

disability, sexual orientation, and tribal heritage. According to McGuire (2016), doctors

Kanner, Asperger and others did not want to identify or be identified with ideology of the

Nazi regime, and as a result, positioned autism in direct opposition to natural causes (i.e.,

disability, birth defects, developmental delays) and couched it within child psychology

theories of nurturing deficits. By couching autism within child psychology theories of

nurturing deficits, parents of children with autism were represented as cold and distant

intellectuals who had caused their children to withdraw due to their lack of providing a

warm, caring and nurturing environment for their child. This historical foundation has

and continues to influence how autism is understood, represented, treated and talked

about. For example, it was a commonly held belief that psychotherapy could cure or

draw out the child from their autistic retreat. Still, today autism is couched in rhetoric of

early identification and intervention. Moreover, these assumptions continue to be

problematic for people labeled as having autism and their loved ones. According to these

assumptions, the child is the victim, autism is a deficit, parents are the cause, and doctors

and medicine are the saviors. This positions parents and people labeled as having autism

in a damaging subjugated location to doctors and professionals. In addition, this

reinforces the medical model of disability (discussed in Chapter 1).

One major assumption, which has since been debunked, but still has lasting

effects, is that autism is caused by deficient nurturing; the popular term "refrigerator

mother" (Eyal et al., 2011; Jack, 2014) comes to mind. According to early

psychoanalytic theory of the 1930s, 1940s, and 1950s a lack of motherly warmth or

'refrigerator mothers' as they have come to be known, caused emotional disturbances

such as autism. A major proponent of this ideology was Bruno Bettelheim, whose

writing gained popularity in the 1960s and 1970s. Bettelheim, who was actually not a credentialed child psychologist, has since been widely discredited, most notably by Ricard Pollak in 1998 in his biography, *The Creation of Dr. B: A Biography of Bruno Bettelheim*. According to the historian Jordyn Jack (2014), Bettelheim's theory gained popularity and authority through his writings, which were published in popular household media, not in scientific journals. Even in the early development of autism as a diagnostic category, popular media had a very strong influence on the characterization of autism. As a result, today we see mothers of children labeled as having autism combating this image with compensatory measures, they become warriors, fighting for their children and trying anything to cure their child's autism (Jack, 2014). Rather than working towards acceptance and accommodation, we see autism advocacy focusing on combatting autism, which is a normalizing and ablest practice (Bascom, 2012; Jack, 2014; McGuire, 2016; Murray, 2012). Thus mothers of children labeled as having autism are left in a problematic situation; they have inherited society's representation of blame and guilt, and in order to counteract that representation they *ought to* fight to recover their child from autism (i.e., make them normal). Recently, parents and advocates are beginning to push back to what society says they *ought to do*, and instead advocating for acceptance, accommodation and greater access to human rights (Bascom, 2012; McGuire, 2016; Runswick-Cole, 2016).

Another misconception, which can be credited to Bettelheim and continues to have reverberating effects, is the idea that autism is a normal child locked away, stolen by autism, and who can be cured with therapy (Bascom, 2012; Eyal et al, 2011; Jack, 2014; McGuire, 2016). This assumption falls in line with the medical model of understanding

disability. Within the medical model, autism is positioned as pathology, a deficit, a problem, a dis/ease and *something* broken in need of fixing and reclaiming the normal, healthy, whole child within (McGuire, 2016). Additionally, Simon Baron-Cohan (2003) has developed two theories, which further couch autism in the medical model of deficit; these theories are the Extreme Male Brain (EMB) and Theory of Mind (ToM). Baron-Cohan's (2003) theory of EMB posits that autistic individuals' brains are wired to function in ways associated with males and male strengths. This stereotypes individuals labeled as having autism, as computer geeks, mathematicians, systematic, and rigid, in addition to subjugating females labeled as having autism and feminine traits as *less autistic* (Jack, 2014). Further, EMB posits that brains of people labeled as having autism are imbalanced and lacking feminine traits such as creativity, imagination, and social skills needed to function as *normal* (Baron-Cohan, 2003; Bascom, 2012; Jack, 2014; Murray, 2008a). ToM posits that people labeled as having autism do not possess social emotional abilities such as sympathy or empathy and do not understand the emotions, feelings, or thoughts of others (Baron-Cohan, 2003). Many social skills interventions have been developed to normalize the social skills of people labeled as having autism based on this theory. Instead of learning to understand differences and accommodating as needed, social skills interventions assume that individuals labeled as having autism have a deficit and do not understand or even have emotions (Bascom, 2012; Murray 2008a).

Current alternative theoretical foundations. Disability studies has been gaining momentum over the last 30 years, and scholars have proposed some new theories that couch disability and autism in society. The social-relational model suggests that

disability is the result of complex interactions of an individual's impairment or chronic

illness and their society. Specifically, society has a major part in creating disability

through its normalizing actions, ableism, disablism, socio-economic bureaucracies and

lack of appropriate access and accommodation (Goodley, 2014; McGuire, 2016). In

understanding that disability is a social phenomenon caused by interactions between

impairments and society, individuals with impairments are no longer the locus of

disability. Deficits, individual problems, or a lack is not the sole cause of a disability or

disabling forces. When autism is framed within the social-relational model many current

theories and concepts of understanding autism are illuminated. The implications of

impairments (i.e, social, communication, cognitive) associated with individuals who are

labeled as having autism are not the sum of the person's disability. Rather the disability

is the lack of accommodation by society to allow the person with the impairments to

access society with ease and remove barriers imparted by impairments. However, there

are some people labeled as having autism who feel that autism is but a mere difference in

brain operation, and that no disability results from what outsiders would consider

impairments.

The concept of neurodiversity (Bascom, 2012; Runwick-Cole, 2016) offers an

alternative way of understanding autism and individuals labeled as having autism. The

concept of neurodiversity posits that autism and other neurological differences such as

ADHD are a natural part of human diversity specifically with regard to neurological

performance and functioning. When disability is framed as difference rather than deficit,

acceptance is valued over cures and normalization. Neurodiversity opens up room for

accommodation and shuts out oppressive ablest practices. Further, the movement

towards autism acceptance over autism awareness has been budding in the last few years (Bascom, 2012). Advocates are making their voices heard. They do not wish to be combatted or cured because autism is a fundamental part of their being; they wish to be accepted (Bascom, 2012; McGuire, 2016). The neurodiversity movement endorses autism as a difference in the brain, not a disorder. Runswick-Cole (2016) notes that this approach is attractive, because it offers affirmation, political identity and celebrates autistic difference. However, attractive, neurodiversity places value in the bio-medical; it positions autism as a bio-medical category. "Neurodiversity relies on discourses of medical pathology…. The stories of the medical world remain pervasive and powerful, they are dominant meta-narratives in our contemporary culture…" (Runswick-Cole, 2016, p. 24). The danger here is not acknowledging that people with autism are disabled, albeit by socially constructed barriers. This re-inscribes, the medical model by only locating all barriers and difficulties a person with autism faces within the individual and not society.

Knowledge of Autism

Our knowledge of autism is constantly evolving; what was once taken to be truth now is known to be fable. Perhaps what we now know about autism is that we actually know less than we thought, and that there is much more to autism than there had previously seemed to be. What we think we know now about autism may actually prove to be false in the coming years. New developments in research are constantly continuing as the awareness and prevalence of autism is steadily increasing in society worldwide. It is important to note that much of what we know about autism and autistic characteristics is based on comparison to socially-constructed ideals of normalcy. As social ideals shift

and change and become more flexible and accepting of diversity, how we understand

autism will also shift and change.

What we think we know about autism now. Like all current knowledge that we

have about autism, the diagnostic criteria have shifted; autism is known as a spectrum

disorder, understood in the medical model. According to the latest diagnostic criteria

changes in the DSM-5, distinctions of Asperger's Syndrome and high functioning autism

are no more. Autism is in fact a spectrum; each individual labeled as having autism is

unique. However, there are certain traits that to some degree and combination are shared

among individuals labeled as having autism these include: sensory sensitivities, restricted

interests and stereotypies (repetitive or perseverative behaviors), non-normative social

skills, communication differences or impairments, and other developmental and cognitive

differences or delays (Boutot & Myles, 2011; Eyal et al., 2010; Murray 2012). We also

know that autism is about 4.5 times more common in males than in females (CDC, 2016).

We know that the number of autism diagnoses have risen drastically in the last 20 years.

According to the CDC in 2012, 1 in 68 individuals were diagnosed with ASD compared

to just 1 in 150 in the year 2000 (2016). This can be attributed to a variety of social

forces including popularity, increased awareness and knowledge of autism, stigma of

other diagnostic categories, and the socio-economic and educational statuses of parents

(Eyal et. al. 2010). As autism is a developmental disability and it is generally understood

that, albeit at a different pace, children will continue to progress, thus having less of a

stigma than more permanent disability categories such as Intellectual Disability (ID) and

Emotional Behavioral Disorders (EBD). Many children now labeled with autism would

have been diagnosed with an EBD or ID in previous decades before autism awareness

was as prevalent. Today, some parents will even advocate for their children's disability to be classified with labels that they feel are less stigmatizing; believing cognitive impairments or ID to be the least desirable label (Lalvani, 2015). Indeed, the prevalence of autism awareness has risen in the recent decade to include a number of activities and media coverage such as autism awareness walks, autism awareness month, autism documentaries, reality TV shows and program specials. Additionally, the diagnostic criterion for autism has expanded over the years to include a broad spectrum of traits and abilities. That is, various syndromes which were previously separate from autism are included under the autism umbrella and diagnosed as autism.

We know that autism is an eligible disability category for the state of Georgia Department of Education; students meeting the diagnostic criteria who struggle with normative educational practices are eligible for special education services, including Individual Education Plans (IEPs), Section 504 Plans, and supplemental funding. The eligibility criteria for autism as outlined by the Georgia state rules and regulations [34 C.F.R. § 300.8(c)(1)(i)] states,

> Autism spectrum disorder (ASD) is a developmental disability generally evident before age three that adversely affects a child's educational performance and significantly affects developmental rates and sequences, verbal and non-verbal communication and social interaction and participation. Other characteristics often associated with autism spectrum disorder are unusual responses to sensory experiences, engagement in repetitive activities and stereotypical movements and resistance to environmental change or change in daily routines.

 The Georgia rules and regulations go on to note that ASD encompasses all subtypes of Pervasive Developmental Disorder (PDD) including Rett's Disorder, Childhood Disintegrative Disorder, Asperger's Syndrome, and Pervasive Developmental disorder-Not Otherwise Specifies [34 C.F.R. § 300.8(c)(1)(i)].

 We know that autism is life long, it is a part of the fabric of the individual, it is not something that can be stripped away to reveal a normal or neurotypical person, and each person's ultimate abilities and difficulties will vary as a part of natural human diversity. We know that each individual with autism will not have savant-like splinter skills. However, so often the media, film, and literature will only feature individuals or characters labeled as having autism who have a super ability or savant-like skill (Haller; 2010; Jack 2014; Loftis, 2015; Murray 2008b; Osteen 2008). A common misconception is that all individuals labeled as having autism have some super power or savant skill when in fact only 10% of all individuals labeled as having autism actually possess a savant ability. Hiles states,

> Although there is a strong association with autism, it is certainly not the case that all savants are autistic. It is estimated that about 50% of the cases of savant syndrome are from the autistic population, and the other 50% from the population of developmental disabilities and CNS injuries. The estimated incidence of savant abilities in the autistic population is about 10%, whereas the incidence in the learning disability population (which is very much larger) is probably less than 1% (Hiles, 2002).

What is unknown about autism. Compared to what we know about autism today, there is still a great deal that we do not know or understand about autism. The causes of autism are unknown. It is commonly held that autism is related to genetics, however there has been very little research regarding any specific gene markers or codes related to autism found consistently among individuals labeled as having autism. Like other shifting knowledge of autism, some clinicians, therapists, parents and researchers believe that there are environmental factors that contribute to the symptoms of autism such as diet, vaccines, bacteria, and others (Eyal et. al., 2010). Again, there is little research and evidence to support these theories.

We also do not know what abilities each person labeled as having autism will develop. This seems to be a given with all humans, however when discussing autism there is the always present question of recovery, cure and potential. There is no cure for autism, each person labeled as having autism is an individual and will respond to education and therapies in different manners, and to varying degrees.

Representation

Normal, Stigma, and Normalization

Normal is a socially constructed ideal. The ideal of normal is outside the limits of reality, however, there is an acceptable amount of variation allowable to still be considered normal. The ideal of normal is troubled by impairments and chronic illnesses. Individuals who possess these are set outside the boundaries of normal.

The ideal of normal has been modeled and shaped over time, depending on the needs of society (Foucault, 1977). Normal is not inherent, as there is variation among every human. Smith (2008) discusses how historically, eugenics capitalized on the

social, political, economic and biological ideal of normal, designating all those outside normal as different. In creating the dichotomies of normal and different, one is elevated and one is subjugated.

The threshold of the ideal, or amount of variance allowable to be considered not different, has created normal. Harwood and Humphry (2008) discuss how in education, the ideal child, or the educationally gifted child, is the new norm. If it is the norm for children to be a part of the ideal group, then a second lesser group is created for students outside that ideal, and because students with disabilities are different from the ideal they become a part of the subjugated group.

The vast amount of education caters to the normal child and family, with the exception of special education. Michalko (2008) explains that special education and disability studies problematize disability and normalization. Disability studies critically troubles the ideal of normal and utilizes the social model to explain the presence of disability in society. Additionally, special education makes it the norm to individualize instruction, directly in opposition to the normalization of general education models catering to the ideal/normal group. When investigating the interactions of disability and educational practices, it is imperative to be aware of the discourse surrounding the ideal of normal and its contribution to the curriculum.

In order to understand representations of autism and identities society imparts on people labeled as having autism, it is important to understand stigma. Erving Goffman's (1963) classic work answers the question, "What is stigma?" In his classic 1963 work he describes three distinct types of stigma, physical, moral/ character, and tribal stigmas. Further, he distinguished two groups, *own* and *wise*. *Own* describes people who are the

same as the stigmatized person, such as a part of the same group, while *wise* describes

people who are familiar or wise to the stigmatized group (Goffman, 1963). With regard

to autism, the *own* group would include all people labeled as having autism; the *wise*

group would include clinicians, teachers, advocates, families, friends and disability

studies scholars. Goffman (1963) uses the term "moral career" to describe how the

stigmatized individual understands their identity as being stigmatized, i.e., do they

associate with their group and accept their stigma? This can be understood with regard to

autism as individuals with the ASD label either associating with other individuals who

have the label or trying to pass as *normal* i.e., as an individual without an ASD label.

Current educational practices for students labeled as having autism encourage normalcy

with social skill training and behavior modification. Social stories focusing on how to

interact with and understand people without ASD are commonly found as a part of the

curriculum used for teaching students labeled as having autism.

      Goffman (1963) also wrote of symbols of status and stigma, which identify

people either positively or negatively. There are two ways that individuals are identified

and stigmatized, either through *visibility* or *biography*; that is what can be seen, and what

is known about a person or group, respectively (Goffman, 1963). Both visibility and

biography affect representations and society's perceptions of autism. For example,

certain visible characteristics may signify a person as having autism such as lack of eye

contact, self-stimulatory behaviors (i.e., flapping hands), and walking on ones toes. Such

visible characteristics become identifiers of autism for society and when autism is re-

presented these characteristics may be used. Examples of biography symbols of autism

include knowledge of the diagnostic features of autism including delayed or limited

communication, enjoyment of routine and structure, restricted interests and sensory sensitivities. These are characteristics that may not be visible, but do affect a person's behaviors. Further, Goffman (1963) explains passing for normal has adverse effects on individuals and their families. When value is placed on normative behavior and education focuses on normalizing visible autistic characteristics and accommodating biological ones, people labeled as having autism are encouraged to pass. Passing involves not disclosing, or identifying with one's group (i.e., as having autism). Having a disability such as autism should not carry so much stigma that the pressure to pass for non-disabled is so great; however ablest educational programs place great value on normalizing rather than accepting and accommodating.

Murray (2008b) discusses normalization and how autism is portrayed as a particularly childhood concern, especially marketed for charities. Portrayals of autism focus heavily on children in books and films; many times the possibility of recovery is showcased through successful children labeled as having autism, with special emphasis on early intervention (Murray 2008b). Additionally, many memoirs focus on curing, recovering or normalizing the child labeled as having autism (Cumberland, 2008; Fisher, 2008; Jack, 2014; Murray, 2008b; Stevenson, 2008). Schwarz (2008) posits that the constant negative portrayals of individuals labeled as having autism as non-normative and only valuable when cured has a huge impact on the self-esteem, identity, and personality of people labeled as having autism.

The way autism and individuals with an ASD label are portrayed in society and through media does not generally promote acceptance or accommodation, but rather normalization and stigmatization. Portraying autism as a problem to be battled, people

labeled as having autism are stigmatized as the enemy and normalization the victory. Various representations of autism through popular media such as memoirs, films, television shows, fiction literature and advertisements showcase autism in this negative light. That is, as only accepted when normalized and integrated into society, albeit with a few quirks or special skills; otherwise autism is portrayed as an enemy, a burden, and obstacle to be overcome.

Labeling

Labeling Theory (LT) grew out of Goffman's (1963) work regarding stigma. Labeling Theory posits that labeling is a form of social control through formal labeling such as by doctors of professionals, or informal labeling such as by peers or family (DeRoche, 2015).

> Individuals may experience social stigma from the label; labels could be used to block various social opportunities, such as peer interaction and employment opportunities; and individuals may internalize negative labels (DeRoche, 2015, p. 4).

Although labels can have negative effects they are essential for accessing special education resources. DeRoche (2015) found that greater social, cultural and economic resources increased parents' capacity to attain labels and diagnosis needed to access special education services and accommodations, tutoring, treatments and therapy for their children. As higher socioeconomic status is predictive of higher educational outcomes (Willms, 2002) it is also linked to greater parental participation in special education (Ong-Dean, 2009). Research has found that parents believe it is important to seek a diagnosis or label in order to access accommodations and resources (Broomhead, 2013;

DeRoche 2015).   However, all labels are not created equally. Indeed some labels are even advocated for or against in order to gain access to resources, while minimizing the stigma associated with a specific label (Lalvani, 2015). Lalvani (2015) found that parents believed the most stigmatizing label to be ID, and that parents preferred a label of autism or developmental delay to cognitive impairments. Interestingly, Broomhead (2013) notes that "label forgiveness" or the acquisition of a label can "reduce the parental blame due to the diagnosis shifting blame away from the parent onto an uncontrollable biological 'condition'" (p. 15). This notion reinforces the medical model of disability, placing the difficulties within the biological individual rather than social forces. Research has shown that EBD labels are primarily sought to alleviate the blame and guilt of the parent, while other educational labels are primarily sought to gain access to resources; however even after the label is obtained parents still experience blame (Broomhead, 2013). The effects of labeling are far reaching; they open the door to resources, but they have hidden implications for the individual and family. Clearly autism labels are preferred to EBD and ID labels by parents, however those parents with the cultural capital to advocate and attain such labels is linked to higher SES.

Representations of Disability

Knowing that people with disabilities are a part of a group outside normal, causes society to shape that group to fit their understanding. Historically, representations of autism were constructed by people who did not have an ASD label. Only very recently have some people with ASD labels began advocating for themselves and explaining to the world what it is like to have autism (Bascom, 2012). This is only a small portion of people labeled as having autism; those on the spectrum who are communicatively and

cognitively able. Practices of constructing representations of disability outside the group can wield power against the disabled community by speaking for them and in effect, silencing them. Creating troublesome representations of people with disabilities continues to reproduce unequal power dynamics and re-create disability through social constructions. Representations disability by outsiders are not inherently inaccurate, however it is important to know what has informed the representation. Many representations of autism can only be accurately produced by outsiders such as family members due to the cognitive and communication impairments that some people labeled as having autism possess. It is a great responsibility represent another's group ethically, accurately and respectfully.

One representation of disability that is increasingly more trendy and problematic is that of the "supercrip" (Grue, 2015). Grue (2015) discusses how representations of the 'supercrip' on TV, in the Paralympics, and in Hollywood superhero fiction produce the formula for the 'supercrip,' that is 'supercrip'= impairment X achievement. Such an ideal normalizes and makes it morally imperative for people with impairments to transcend their impairment or chronic illness, through willpower (Grue, 2015). Here again, a socially constructed ideal has become the new norm.

Representations of disability are also present in fiction as authors portray characters with disabilities. Skylar (2015) discusses how authors' representation of their characters with intellectual disabilities skews the reader's understanding of people with intellectual disabilities. Representations of characters with intellectual disabilities should be accurate and ethical, not dehumanizing.

Scholars, artists, authors, teachers, and society as a whole need to be cognizant of group representations, and whether or not those representations are stigmatizing or sensationalist. Group representations that are stigmatizing and sensationalist should be acknowledged and challenged. Scholars, artists, authors, teachers, and society can give power to representations that do not stigmatize, sensationalize, negatively represent or try to normalize people labeled as having autism by re-presenting them in their work and daily interactions. There has been a shift to re-present more positive views of autism and people labeled as having autism in the last decade. This shift is slowly evolving and transforming how autism is represented by society.

Family and Autism Memoirs

Many family members of people labeled as having autism have written memoirs about their experiences. These memoirs follow common patterns and are generally a response to the popular association of autism with "refrigerator mothers."

First, it is important to understand the context of the *discovery* of autism. Kanner and Asperger identified autism as separate from "idiocy" or "feeblemindedness" (Eyal et al, 2010; McDonagh, 2008). With autism being distinguished separately from "idiocy" or "feeblemindedness", common diagnostic terms of the period, a separate cause also had to be distinguished. Kanner noted that parents of children with autism were distinguishably different from parents of the "feebleminded;" that is they were highly intelligent. Kanner's hypothesis was that these highly intelligent parents were not warm or affectionate with their children, and that was what triggered the child's withdrawal.

Jordyn Jack (2014) describes the historical mother figures associated with different ways of understanding autism. These mother figures included the *refrigerator*

mother who is troubled, divorced, distressed and absent, accordingly leading to maternal deprivation; the obsessive *smother mothers* of attachment theory; the *anxious mother* and the *unfulfilled housewife*. These mother figures are stock characters available in rhetorical culture (Jack, 2014). Severson, Aune and Jodlowski (2008) note that Bruno Bettelheim's pseudo-scientific study, *Empty Fortress* only increased the popular belief that refrigerator mothers were the cause of autism with his psychoanalytic causation theory of the "extreme environment." Importantly, Bettelheim was not a trained child psychologist and had only attained fame due to his writing for popular audiences in household publications, which were not accepted by scientific communities (Severson, Aune & Jodlowski, 2008). However, his theories continue to influence popular cultural portrayals of families, motherhood and childhood.

J. T. Fisher (2008) traces the lineage of the mother blaming tradition from Kanner to Bettelheim and Axline, and discusses the impact of these individuals' theories and writings on conversion narratives. Conversion narratives subscribe to the belief that children with autism can be cured or saved; converted by therapists and professionals (Fisher, 2008). One such conversion narrative is Virginia Axline's *Dibs: In search of self*.

In response to the mother blaming tradition mothers have begun writing their own memoirs or conversion narratives. Cumberland (2008) describes the trope of the mother quest as a journey of salvation of the child and redemption for the mother; in mother quest memoirs, the mother is positioned as the hero in a culture of mother blaming. Clara Claiborne Park's *The Siege: The First Eight Years of an Autistic Child,* Jane McDonell's *News from the Border: A Mother's Memoir of her Autistic Son*, and Helen

Featherstones's *A Difference in the Family: Life with a Disabled Child* are examples of mothers' quest memoirs. Mothers trace their physical and emotional journeys through the ups and downs of mothering a child with a disability. These memoirs highlight the struggles that mothers have overcome in order to 'save' their children. Mothers' quests are often transformative, insightful and inspirational. Jack (2014) posits that mothers have rejected the negative stock characters afforded them and instead take on an authoritative savior role through the quest myth narrative, where autism is positioned as a problem, not a difference, and Applied Behavior Analysis (ABA) and other therapies are used as tools to fight autism and bring resolution to the quest. Further, Jack (2004) describes an alternate role for mothers in keeping with the tradition of the mother quest myth, the warrior mother. The warrior mother is the total mother; she has a hand in every aspect of her child's development; this mother figure has to make up for her guilt for not preventing autism by fighting to reverse it, and she must be an "*Autism Mother*" or a super-mom, willing to try anything (Jack 2014). Jack (2014) notes that the "*Autism Mother*" has been glamorized and given authority, thus pitted against the paternal doctor figure, especially given the tradition of mother blaming by doctors. Maternal representations that problematize autism and people labeled as having autism, infantilize autism (as primarily a childhood concern), take authority away from people labeled as having autism, and continue to represent autism as a problem.

Importantly, within the tradition of family memoirs, representations of autism focus on the family while the individual labeled as having autism is peripheral. Family memoirs focus on the drama and trauma of autism and treatment by the family; specifically how care can cure or recover a child from autism (Murray, 2008b).

A final trope in within the tradition of autism family memoirs is the "*Autism Dad.*" Although not as popular as the "*Autism Mother,*" fathers too have to negotiate norms, identities, stock characters and roles associated with traditional fatherhood (i.e., inheritance, athleticism, independence, professional identity etc.); and thus roles and character identities associated with hegemonic masculinity must be reconstructed to fit the "*Autism Dad*" (Jack, 2014). A few of these memoirs written by fathers include James Copeland's *For the Love of Ann*, Barry Kauffman's *Son Rise*, and Josh Greenfield's *A Child Called Noah: A Family Journey.* Additionally, Jack (2014) notes that the role subsumes other identities; morphing them to fit or work with "*Autism Dad.*" Moreover, fathers are frequently portrayed as inactive in a child's life and that negotiation of masculinity and fatherhood roles must be done in order to reconstruct new expectations of fatherhood with autism (Jack, 2014).

Autism memoirs constructed by family members of individuals labeled as having autism highlight the role of the family member. The story is that of the family member's journey and life. Autism is positioned as a problem and a hurdle. In this way individuals with autism are problematized and positioned as causing disturbance in the family. Although the public memory of mother blaming, which has triggered much of this redemptive writing, is beginning to fade, the obsession with fighting autism as if in battle in order to recover or save the child is still very strong and popular, especially among national parent organizations and autism charities such as National Autistic Society, Autism Society of America, Autism Research Institute, Cure Autism Now, Families for Early Autism Treatment, National Alliance for Autism Research, and Autism Speaks (McGuire, 2016).

Media Representations of Autism

Disability studies interrogates media representations of disability and people with disabilities (Ellis and Goggin, 2015; Gabel and Danforth, 2008; Haller, 2010). Investigations in this area are blossoming; however, very little work has been done to investigate the effects of these representations on teachers' perceptions of disability or specifically autism. Scholarly work investigating representations of autism is budding, however it is limited (Jack, 2014; Loftis 2015, Murray, 2008b; Osteen, 2008).

There is a gap in the literature investigating how teachers come to understand autism and what types of representations of autism they have been exposed to through popular media. Additionally, there has not been any research exploring teachers' exposure to popular media regarding autism and how that exposure has influenced their perceptions of autism, their beliefs about teaching children with autism and their overall knowledge of autism. The following studies critically investigate the theme of representations of autism in the media.

Popular Representation of Characters with Autism in Film and Literature

Film and literature have a huge impact on society's understanding of disability and autism. Representations of autism through film and literature *other* individuals on the spectrum, create stereotyped stock characters such as the savant, the vulnerable other, the objectified detective and the familial burden. These stock characters often misrepresent the entire group. Researchers have examined representations of autism in fictional characters from popular culture media such as films, literature, children's books, and television shows (Baker, 2008; Belcher & Maich 2014; Berger, 2008; Burks-Abbott, 2008; Loftis, 2015; Murray 2008a; and Murray 2008b). These stock characters represent

autism and people labeled as having autism in negative and stereotypical ways. There however has not been any research examining how these representations affect teacher perceptions of autism.

      The autistic savant. Christina Belcher and Kimberly Maich (2014) examined ways in which characters with autism spectrum disorder (ASD) are represented by popular media. Belcher and Maich (2014) conducted an analysis of 20 children's picture books, popular novels, television shows, and movies (5 of each type) from the years between 2006 and 2012. The authors found that the media sources they examined represented characters labeled as having autism in television shows as geniuses, and characters labeled as having autism in movies as heroes. Additionally, children's picture books presented autism using clinical representations, and novels portrayed autism in the context of family and everyday problems. Overall, across categories the authors found that autism is presented as scientific, clinical/medical and glamourized by representing savant-like traits and ignoring the challenges common to autistic people.

      Additionally, Baker (2008), Loftis (2015), and Murray (2008b) also discuss the popular representation of characters with autism as savants. Murray (2008b) notes that many texts, films, documentaries, media coverage and studies link autism to savant abilities. Baker (2008) discusses the formulaic representation of autism in film; he notes that there is generally a non-autistic protagonist and an autistic helper, valuable due to a savant skill and who is portrayed as vulnerable, spectacular, and innocent. This representation is problematic because it purports that all people labeled as having autism have a savant skill, when in actuality only 10% of people labeled as having autism have such skills (Baker, 2008). Characters make up for social deficits when they are

represented as savants (Loftis, 2015). Loftis (2015) notes that such a stereotype, although portrayed in a positive light, still oversimplifies life on the spectrum.

Murray (2008b) discusses how influential the film, "Rain Man" was in bringing autism to the forefront of everyday context for viewers. "Rain Man" linked savant abilities to autism as well as depicting a stereotypical character through sets of behaviors (Murray, 2008b). Additionally, Murray (2008b) discusses that characters presented as having autism are always on the periphery and are never central to the narrative, but instead help the non-autistic character develop. Further, characters presented as having autism are never seen for their own subjectivity, but rather are objectified and generally represented negatively (Murray, 2008b).

Loftis highlights the savant representation of autism through examination of "The Girl with the Dragon Tattoo." Here autism is seen as a cognitive difference and a painful flaw associated with mental illness, causing a lower social status (Loftis, 2015). Additionally, people labeled as having autism are represented as having less imagination than other people. Autistic savant skills shock and awe, and are portrayed as compensation for disability; such a depiction dehumanizes people labeled as having autism as super-human (Loftis 2015). Additionally, people labeled as having autism are depicted as puzzles that need solving, supernatural creatures, alien, machinelike, incapable of emotion, aloof (as if in a shell), dangerous, and deviant (Loftis, 2015; Murray 2008b).

Similarly, Alexandria Pronchow (2014) analyzed autism through media presentations including the films, *Rain Man, Touch, Mozart and the Whale, Martian Child, Adam, Temple Grandin, George,* and *Normal People Scare Me*. She found that

contemporary media presented four categories of characters with autism: the "magical / savant", the "different / quirky", the "character with undiagnosed / unlabeled behavior", and the "realistic." Pronchow (2014) concluded that representations were limited to white children and were hyper-positively unrealistic; there were no representations of people with severe autism, nor were there any depictions of hardships; thus ignoring disabling social and cultural forces and impacts of real impairments people labeled with autism face.

The vulnerable other. Murray (2008a) discusses the increased presence of autism in Hollywood; he notes that autism's function in films is to create a plot. Regarding autism literature, Burks-Abbott (2008) notes that the non-autistic author, Mark Haddon creates a popular culture portrait of autism, where autism is relegated to *other-worldliness*. Haddon's book created widespread interest in autism, but opposes self-representation by people labeled as having autism (Burks-Abbott, 2008). Additionally, in his popular book, "The Curious Incident of the Dog in the Night-Time" Haddon portrays Christopher (character labeled as having autism) as vulnerable, needing protection, and strange despite his strengths (Berger, 2008). Further, Berger (2008) posits that Christopher's *untouchability* is writ as sad, especially to non-autistic readers; the character Haddon created in Christopher *others* people labeled as having autism from the norm.

Similarly, Loftis discusses character representations from "Extremely Loud and Incredibly Close" and "The Curious Incident of the Dog in the Night-time." In these works autism stands in for the greater tragedy (that is, 9/11 and family disruption, respectively); autism is depicted as the cause for family denigration (Loftis, 2015). Loftis

(2015) posits that autism is associated with aloofness, misplaced priorities at the cost of human relationships, vulnerability, pain, withdrawal, less than humanness, mind as a computer program, destruction and danger. Moreover, autism is simplistically reduced to series of phobias to which the cure is to overcome via courage (Loftis, 2015).

    The objectified detective. An additional representation of autism is that of the detective. Loftis (2015) discusses the autistic detective character as represented through "Sherlock Holmes" and the TV shows, "Bones" and "Criminal Minds" as well as character representations from "Extremely Loud and Incredibly Close" and "The Curious Incident of the Dog in the Night time." These autistic detective characters are represented as systematic, and detail oriented to the point of missing the *big picture,* and represent traits of autism in stereotypical ways by associating autism with mystery and exoticism (Loftis, 2015). Additionally, people labeled as having autism are objectified as machines, robots, alien, inhuman and puzzles, and represented as mind-blind, rude, cold-blooded, annoying, negative, emotionless, asexual and masculine (Loftis, 2015). Further, Loftis (2015) posits, that cognitive difference is associated with criminality.

    The familial burden. Loftis (2015) also discusses how autism is portrayed as a gothic entity in Harper Lee's "To Kill a Mockingbird." She posits that autistic characters in the southern gothic genre are represented as socially inept and isolated. Further, autism is linked to other problems and causes familial downfall (Loftis, 2015). Loftis (2015) notes that characters with autism are depicted as inhuman, and as monsters; a child with autism is portrayed as a curse, burden, and moral failing of the parents. Moreover, autism is depicted as creating a disruption in the family or community, and is associated

with tragedy, pity, the victim, fragility, weakness, lacking autonomy, childlikeness, mystery, and danger (Loftis, 2015).

Presenting autism as deficit and in a clinical context is a problematic stereotyped representation because it couches autism in the medical model, thus finding deficit within the person labeled as having autism. Additionally portraying autism and characters with autism in negative and dehumanizing ways stigmatizes people labeled as having autism and adds to barriers to access and being accepted in society. Moreover, highlighting savant traits is equally problematic due to the small number of autistic people who actually have savant skills; this representation is not a realistic representation of most of the population who are labeled as having autism. Clearly representations of autism in popular media are sensationalist, derogatory, stigmatizing and dangerous. The repercussions of representing people with autism in such manners in popular media is that those representations reach many viewers and readers, and could potentially affect how consumers of the media view and perceive autism and people labeled as having autism.

Representations of Autism in Western News Media

Mainstream news media also represents disability and autism through its presentation in news stories. The presentation of autism and people labeled as having autism in news stories contributes to how readers and viewers learn about and understand autism. DeVilbiss and Lee (2014) state, "data suggests that televised reports on autism influence public interest in the topic, which underscores the responsibility of networks in disseminating clear and factual public health information" (p. 3273). In addition to being clear and factual, information should be unbiased and realistic. Disseminating

sensationalist and stigmatizing information could have a very harmful effect on how consumers of information come to know and perceive autism.

Negative stereotypes. Sandra Jones and Valerie Harwood (2009) examine the representation of autism in Australian news media. The authors conducted an analysis of 1,515 articles from Australian print media news coverage about autism from the years between 1996 and 2005; they noted a steady incline in articles in more recent years. In fact, 81% or 1,228 articles appeared between 2002 and 2005. Jones and Harwoodn(2009) found that people labeled as having autism were predominantly presented as uncontrollable, aggressive, violent, unhappy, unloved, and poorly treated. Moreover, autism was presented as a great stressor to families and caretakers. Other stereotypes the authors found present in the artifacts were generalizations of people labeled as having autism possessing savant skills, and parents represented as damaged, traumatized, uncaring and incapable.

Additionally, Sarrett (2011) discusses that these deficit-oriented themes construct representations in opposition to the phenomenological accounts reported by people labeled as having autism. Additionally, regarding disability in general, Haller and Lingling (2013) investigated what disabled people say about their representation in news and entertainment. This study was conducted in 18 countries internationally, but the authors noted it was predominantly "USA-centric." Their survey was grounded in disability theory, examining dominant cultural discourses about disability and investigating ableism and stigma in various cultural representations. Most respondents reported news media did not cover disability issues, did not accurately represent people with disabilities, and did not present real-life experiences of people with disabilities.

Additionally, respondents indicated that media frames used to report news stories about people with disabilities were most prevalently stigmatizing and utilized the 'supercrip,' medical and social pathology models. Similarly, Holton, Farrell and Fudge (2014) examine representation of autism in the news, specifically stigmatization and the framing of autism in the news. The authors found that about two-thirds of news coverage about autism contained stigmatizing cues.

Re-inscribing historical stereotypes. Jennifer Sarrett (2011) investigates how autism is portrayed as a static image and the ways in which science, the media, and personal narratives construct opposing representations of autism. Sarrett (2011) examined images and articles of children labeled as having autism from the 1960s and early 2000s in news media and scientific literature to highlight dominant themes of representation. Sarrett's (2011) analysis is theoretical, built on the works of disability scholars such as Stuart Murray and Rosemarie Garland-Thomson. Methodologically, Sarrett (2011) uses Garland-Thomson's "visual rhetoric" to interpret meaning from images in addition to analyzing the image's context, root metaphors, and any common autistic tropes present. Sarrett (2011) notes that the two dominant themes represented in images from both the 1960s and the 2000s are fragmentation and the imprisonment of the normal child.

Research has shown that the representation of autism and people labeled as having autism in the news media is overwhelmingly defaming and damaging. However, more recently, alternative and transformative representations have been presented. More of these positive and realistic representations are needed in mainstream media.

Transformative Representations for Autism Acceptance

Although the following representations are not an exhaustive collection, I would be remiss not to include some transformative representations of autism. Though much less popular, transformative representations of autism do exist. In order to lead to a richer understanding of autism and people labeled as having autism, it is important to raise awareness of these alternative representations.

Such representations of autism have helped to raise awareness in society (DeVilbiss and Lee, 2014). An important shift is slowly beginning to occur; the presentation of popular representations of autism that go beyond awareness and move toward acceptance and understanding. This shift is beginning to happen in memoirs, art, life-writing and other self-representations of what it means to have autism.

Stevenson (2008) notes a few memoirs by mothers of children labeled as having autism, that are beginning to move away from ableist and *othering* representations of the rescuer mentality toward appreciating autism and autistic identities. Conversion narratives of recovery and transformation are still strong, however the trend has recently begun to shift to new conversion narratives of parents' personalities and realizations of acceptance for their children with autism (Fisher, 2008). Schwarz (2008) discusses the importance of positive self-recognition for people labeled as having autism, how majority attitudes are internalized, the importance of disclosure (not *passing*), dealing with social intolerance, fostering and engaging allies, empowerment, and outreach.

Autistic life-writing. Murray (2008b) investigates the presence of autism through "autistic life writing" such as that of Temple Grandin, Donna Williams and Amanda Baggs, and discusses the identity politics of autism, noting that the autism label is now

fashionable. Murray (2008b) posits that autistic lives show a range, except when they are constructed from outside the condition; indeed people labeled as having autism are expected to perform autism as it is packaged through popular representations. According to Murray (2008b), autism is about finding pleasure, contrary to the popular belief that autism is associated with tragedy. Additionally, Murray (2008b) discusses how Melville's presumed autistic character Bartleby, exemplifies autistic presence and performance on his own terms just as autistic life-writers.

Researchers have noted the importance of the influence that media have on people's perceptions of autism and disabilities (Arif, Niazy, Hassan, & Ahmed, 2013; DeVilbiss & Lee, 2014; Haller & Zhang, ND; Holton, Farrell, & Fudge, 2014), however research has not been done to link exposure to popular media to teachers' knowledge or perceptions of autism. There is research regarding teachers' perceptions, attitudes, knowledge and awareness of autism, but none seek to link what has impacted teachers' views or perceptions of autism with media representations.

Teacher Expectations, Awareness, and Knowledge of Autism

There have been multitudes of research done exploring teachers' attitudes and expectations of their students, attitudes of teachers towards inclusion initiatives, and even attitudes of teachers regarding the inclusion of students with autism and other disabilities in their classrooms. However, there is little research done to investigate teachers' perceptions and cultural perspectives of autism. Research regarding teachers' attitudes and expectations of their students (Al-Fadhli & Singh, 2006; Jussim & Harber, 2005; Riley & Ungerleider, 2012; Rubie-Davies, Hattie, & Hamilton, 2006; Sorhagen, 2013) generally found that teacher expectations can affect students' educational outcomes; self-

fulfilling prophecies do exist and have more powerful effects on students from stigmatized groups; and that teacher beliefs about students can affect academic expectations as well as educational decisions made about the student. The major themes which emerge from research regarding teachers' attitudes towards inclusion initiatives (Agran, Alper, & Wehmeyer, 2002; Cameron, & Cook, 2013; Heiman, 2004; Kieron, 2013; Sadioglu, Bilgin, Batu, & Oksal, 2013) include that the majority of schools do not have plans for general education access for students with disabilities; that teaching academics to students with disabilities is not relevant, and instruction should focus more on behavior, social and functional skills, and communication; that students with disabilities should receive their primary academic instruction outside the general education setting from a special education teacher; that inclusive education can be successful with the right supports; and that collaboration between general and special education teachers is essential.

Research regarding teachers' attitudes toward the inclusion of students with autism and other disabilities in their classrooms (Agran, Alper & Wehmeyer, 2002; Lesar, Cuk, & Pecek, 2014; McMullen, Shippen & Dangel, 2007; Shifrer, 2013; Sazak, Pinar, & Sucuoglu, 2011) generally found that teachers believed students with disabilities should not be held to the same standards as non-disabled peers; teachers have altered expectations for students with disabilities; teachers attribute different behaviors to academic success based on ability; and that teachers have lower post-secondary expectations for students with a disability label than similarly achieving and behaving students who are not labeled. Representations of autism are beginning to be examined by disability and media studies scholars, however the specific target to investigate how these

representations affect teachers' perceptions and knowledge of autism has barely been broached. There is also scarce research done to investigate teachers' expectations and knowledge of autism. The available literature is drawn from studies conducted internationally.

Teacher Expectations Toward Students with Disabilities

Special education services, accommodations and modifications are meant to level the playing field for students with disabilities, however recent literature and research show that often teachers have altered expectations for students with disabilities compared to their non-disabled peers (Agran, Alper ,& Weheymeyer, 2002; Cameron & Cook, 2013). Moreover, teachers' perceptions of what constitutes success differ for students with disabilities compared to students without disabilities (Lesar, Cuk & Pecek, 2014). Additionally, students with disabilities' needs and difficulties are perceived by teachers to be different than their non-disabled peers (McMullen, Shippen, & Dangel, 2007; Sazak, Pinar, & Sucuoglu, 2011). Teachers also have lower expectations for students labeled with disabilities than for students without a disability label (Shifrer, 2013; Taylor, Smiley, & Ziegler, 1983). Because of barriers generated through normalization and the real implications of impairments, it can be much more difficult for students who have a disability label to achieve the same measure of success as students without such a label. However, lowered expectations solely based on possession of a disability label could hamper students' potential outcomes if their educational opportunities and challenges are limited.

Teacher Expectations and Attitudes Toward Students Labeled as Having Autism

As students labeled as having autism become an increasing portion of classroom populations it is important to understand teacher attitudes toward educating students labeled as having autism and what influences teachers' expectations of these students. Little research has been conducted in this area, however the current international literature begins to offer some insight into these issues.

Ivey (2007) surveyed teachers in private and public schools to investigate teacher expectations of future outcomes for their students labeled as having autism. Ivey (2007) found teachers viewed friendship, community acceptance, safety, social responsibility, caretaking roles, participation in citizenship activities, independent living and having a vocation as important, but unlikely for students with autism to achieve. Such views align with stigmatizing and negative representations that are presented by popular media regarding autism and people labeled as having autism.

Moreover, Chung, Edgar-Smith, Palmer, Chung, DeLambo, & Huang (2015) examined teachers' attitudes towards students with and without autism. The authors surveyed teachers from pre-kindergarten through grade 12 from a metropolitan city in the United States. Teachers were asked to read two scenarios, one that featured a student with characteristics associated with autism and a second, which featured a typical student. Teachers then indicated their attitudes towards students featured in each scenario using a 5-point Likert scale. The authors found that teachers were more likely to avoid or dislike the student with characteristics of autism. Additionally, the authors found that teachers' attitudes were more negative towards the student with characteristics of autism. Further,

the authors noted that female teachers, who held a special education teaching certificate and taught at the elementary level, did have more positive attitudes towards students with autism. Although Ivey (2007) and Chung (2015) found that teachers' expectations and attitudes toward students with autism were less favorable compared to non-disabled students Syriopoulou-Delli, Cassimos, Tripsianis, & Polychronopoulou, (2012), Kasa-Hendrickson (2005) MacKenzie, Cologon and Fenech (2016) and Rodríguez, Saldaña, & Javier-Moreno (2012) found that teachers had positive expectations and outlooks for their students with autism.

Syriopoulou-Delli, Cassimos, Tripsianis, & Polychronopoulou, (2012) examined Greek teachers' perceptions regarding management of their students labeled as having autism and found that teachers who had specialized training regarding autism and experience working with students labeled as having autism had more accurate knowledge of autism and more favorable perceptions regarding the management of students labeled as having autism. Kasa-Hendrickson (2005) found that teachers treated students with autism as competent and rejected negative labels and assumptions. Moreover, MacKenzie, Cologon and Fenech (2016) found that meaningful and authentic inclusion opportunities were facilitated for students labeled as having autism when teachers' beliefs and understanding about disability align with the social relational model of disability.

Rodríguez, Saldaña, & Javier-Moreno (2012) interviewed special education teachers in Seville, Spain to assess teachers' attitudes towards teaching students labeled as having autism. According to their study, teachers had overall positive views regarding their ability to influence student development, their relationships with families and their views toward educating students labeled as having autism. Additionally, inclusion in a

support network increased teachers' chances of having a positive attitude toward educating students labeled as having autism. Special schools with more resources had more positive attitudes, teacher experience with students labeled as having autism was associated with more positive attitudes, and teachers who worked at a special school and were members of an autism network had the most positive views.

Clearly teachers' expectations and perceptions of students labeled as having autism differ considerably among the available literature. What is not explained by these studies is what has influenced the teachers' perceptions and viewpoints; to what extent are teacher perceptions influenced by popular media presentations of autism; or where did these teachers primarily learn about autism.

Teacher Awareness and knowledge of Autism

Few studies have been done globally to investigate teachers' knowledge and awareness of autism (Al-Sharbati, et al., 2015; Chung, et al., 2015; Taneja Johansson, 2014). The following international studies form a foundation for my research by highlighting teachers' awareness and knowledge of autism.

Yingna, et al. (2016) assessed the knowledge and attitudes regarding autism of pre-school teachers in China. The authors surveyed pre-school teachers in four areas: 1.) knowledge of child development and autism, 2.) attitudes towards autism, 3.) practices and self-perceptions of efficacy towards educating children with autism, and 4.) knowledge of interventions and organizations to support individuals with autism. The authors found that the majority of teachers answered more than half of the survey questions regarding general child development correctly, however provided inaccurate

responses to more than half of the questions assessing knowledge about autism. Additionally, most participants believed that greater education and support is needed regarding autism. Like Yingna et al. (2016), Johansson (2014) also found limited awareness and knowledge of autism among their participants.

Johansson (2014) evaluated various educational stakeholders' awareness of autism. The sample of stakeholders who participated in the study consisted of school staff (principals, general education teachers, special education teachers, counselors), parents, and private specialists in urban India. Semi-structured interviews were given to investigate participants' awareness of autism and their perspectives regarding the education of children with autism. Johansson (2014) found that there was limited autism awareness among school staff. There was also variation among participants' views regarding the challenges encountered by students labeled as having autism. Finally, Johansson (2014) found that all stakeholders consistently believed that the focus and responsibility of the school should be solely academic in nature rather than focusing on communication, social skills, or functional skills.

Media influence on teachers' awareness of autism. Al- Shartbati et al., (2015) explored Omani teachers' awareness about autism. The sample consisted of teachers teaching in grades 1-5, from 5 schools in Muscat, an urban center and the capital city of Oman. Participants were administered a questionnaire designed to gain information about teacher awareness regarding the etiology, signs, symptoms and educational needs of children labeled as having autism. The authors found that misconceptions were commonly endorsed by Omani teachers in all areas of autism awareness explored. Additionally, general knowledge regarding autism was very limited among teachers. The

authors believe that the media has a large impact on the public's knowledge and awareness of autism, and is a contributing factor to the prevalent misconceptions and stigmas present.

Arif, Niazy, Hassan, and Ahmed (2013) investigated the level of knowledge about autism held by private and public school teachers in Karachi, Pakistan. Authors found that 55% of teachers knew about autism only from the media, while only 9% had only learned about autism from formal workshops or trainings. Moreover, DeVilbiss and Lee (2014) note that, "televised reports on autism influence public interest in the topic, which underscores the responsibility of networks in disseminating factual and clear public health information"(p.3273). Through an analysis of Google Trend data, they found increases in Google searches for autism every April from 2004 through 2014 due to April's designation as National Autism Awareness Month and April 1st's designation as World Autism Awareness day. Additionally, authors found spikes in autism Google searches corresponding to Oprah Winfrey's autism special with Jenny McCarthy and Holly Robinson Pete, as well as a 10-part autism special featured on The Today Show. It would seem that media has a large impact on the public's awareness of autism. What is unknown is the relationship between media consumption regarding autism and how educators' knowledge and perceptions are formed.

Knowledge of Autism and Educational Practices

Educators' knowledge of autism is explored by Fennell and Dillenburger (2016) and Hendricks (2011). Fennell and Dillenburger (2016) investigated teachers' knowledge of Applied Behavior Analysis (ABA) best practices for their students labeled as having autism. The authors found that teachers' self-reported knowledge of ABA was higher

than their actual knowledge of ABA. Similarly, Hendricks (2011) investigated special educators' self-reported knowledge and implementation of effective teaching practices for students with autism. She found that special educators who serve students with autism have low to intermediate levels of knowledge regarding autism and effective instructional strategies. Moreover, Hendricks (2011) found that special educators who serve children with autism are not implementing evidence-based strategies at a satisfactory level.

Summary

This literature review has traced how autism has come to be represented by society historically and recently. It has highlighted what facts are known about autism and what today is still unknown. The current literature has examined cultural representations of normalcy and investigated stigmatization and normalization of people with disabilities including those labeled as having autism. Authors and scholars have discussed various representations of autism present in society today including those found in family memoirs, and popular representations of characters found in film and literature. The current literature has interrogated stereotyped representations of autism and examined news media representations as well as transformative representations of autism. Researchers have investigated teacher perceptions of autism including their expectations, awareness, and knowledge of autism. Authors of the recent literature suspect a link between teachers' knowledge and perceptions of autism and the media, however there is a gap in the literature that has yet to be formally investigated. This dissertation will fill that gap. The current literature has guided the development of this

study to learn how teachers come to know about autism and if educator media usage is

linked to knowledge and perceptions of autism.

CHAPTER 3

GATHERING THE PIECES: MEASURING HOW EDUCATORS COME TO KNOW

AUTISM

Design

This study examines what perceptions educators have of autism, and if those

perceptions are correlated to popular media exposure and personal characteristics

including age, sex, level of education, type of degree, years of teaching experience,

professional and personal experiences including having a friend or family member with

an autism label. In order to address these questions this study will use quantitative

research methods. A correlational survey design will be used to collect quantitative data

that will be statistically analyzed to answer the research questions.

Correlational Design

This study will employ a correlation design (Creswell, 2014a). Educators will

take a questionnaire developed by the researcher regarding personal characteristics,

media usage, and knowledge and perceptions of autism. Creswell (2014a) notes, "one

basic objective of this form of research is to explain the association between or among

variables" (p. 340). The quantitative results from the questionnaire will be analyzed and

interpreted to investigate the relationship between P-12 Georgia educators' personal

characteristics, media usage, and their knowledge and perceptions of autism.

Participants

The participants will include a sample of P-12 general and special educators

practicing in Georgia. The target population is 114,800 teachers practicing in Georgia

(GaDOE, Schools and Districts, 2015). The sample size is calculated based upon the

following data analysis plans (i.e., correlation, effect size anticipated, power and alpha set).

Frequency tables will be needed to help determine which independent variable (IV) predicts the dependent variable (DV) when all variables are considered simultaneously. Calculations will be done for correlations between the independent variables (IVs) and the dependent variables (DVs). The predictors, which are significant, will be used for ANOVA and Post-Hoc analysis. Sample size independent variables will be calculated based on work by Gregory Knofczynski and Daniel Mundfrom (2007), "Sample Sizes When Using Multiple Linear Regression for Prediction."   Assuming that no more than five independent variables will be significant and used in the multiple regression, the 5 independent variables (IVs) will produce predicted values of the dependent variable (DV) that will correlate with the observed dependent variable (DV) at about r = .45. This produces an r-squared value of about .20. So, using an r-squared value of .20, and 5 predictors, Knofczynski and Mundfrom (2007) set the sample size for good prediction level at 260 participants, and the excellent prediction level at 950 participants. Similarly, using a more conservative r-squared value of .15 Knofczynski and Mundfrom (2007) set the sample size for good prediction level at 340 participants, and the excellent prediction level at 1,400 participants.

Given the sample sizes identified above, the target minimum sample size for this study is 260. A larger sized sample, if obtained, will help with the power and accuracy of the statistical model to be used in this study; a smaller sized sample, conversely, will weaken the predictive power of the statistical model used in this study and make it more difficult to identify, with precision, which variables predict perceptions of autism (Jones,

Carley, & Harrison, 2003). Power is the ability to find affects that are there (e.g., does media exposure predict autism perceptions). Precision is the accuracy of the prediction (e.g., how big is the confidence interval for the regression estimate for media exposure). The sampling procedures for participants in this study will be convenience and snowball sampling.

Recruitment

Participants will be recruited through convenience sampling via online social media outlets including Facebook and Linked-In. A recruitment announcement will be posted to my personal Facebook and Linked-In pages in addition to the GSU curriculum studies page, and pages for educational groups of which I am member. Educational groups include Sisterhood of Curriculum Scholars and Georgia Southern Curriculum Studies. Approval was gained from the owners of these groups prior to posting. A recruitment announcement will be posted to these pages along with a link to the questionnaire. The posting will also utilize Snowball sampling (Gay, Mills, Airasian, 2009) by asking educators to share the recruitment announcement with other educators in their schools or social circles in order to glean additional participants.

Instrumentation

This dissertation will employ a survey design. "A survey design provides a quantitative or numeric description of trends attitudes, or opinions of a population by studying a sample of that population" (Creswell, 2014b, p. 201). The instrument used to examine educators' personal characteristics and investigate how they come to know and perceive autism will include items with structured responses. The questionnaire will be electronic using Qualtrics software allowing for online data collection.

The 'Teachers' Perceptions of Autism Questionnaire' (Appendix A) was developed by the researcher. Teachers' background information including age, sex, education level and prior experience with autism will be collected through ten demographic items included as part of the questionnaire.

Teachers' knowledge of autism items are inspired by Syriopoulou-Delli and Colleagues' 'Questionnaire About Previous Education of Teachers on Autism Spectrum Disorders and Education- Assessment of Children with Autism Spectrum Disorders' (Syriopoulou-Delliet al., 2012). There are ten knowledge and understanding of ASD items. Knowledge and understanding items include three areas; beliefs about educational practices for students with an autism label, characteristics of autism, and respondent identification with popular representations of autism.

There are four items for beliefs about educational practices for students with an autism label; for example, one item for beliefs about educational practices is "Educationally, it is most important for individuals labeled as having autism to focus on: (choose one.) (a) Functional skills, (b) Communication, or (c) Behavior" (adapted from Syriopoulou-Delliet al., 2012). Answers to educational practice items are scored correct or incorrect (0/1 scale) based on foundation in research-based, best-practice principles.

There are three items for characteristics of autism; one example item for characteristics of autism is "Autism is…(choose one). (a) A developmental disability, (b) A neurological difference, (c) A form of schizophrenia, or (d) Intellectual disability" (adapted from Syriopoulou-Delliet al., 2012). Answers to characteristic items are scored correct or incorrect (0/1 scale) based on DSM-V autism diagnosis criteria.

There are three items for respondent identification with popular representations of autism, one example item for that area is "What is the best way to advocate for autism? (choose one of two options.)(a) Donate to national organizations like Autism Speaks (b) Support and encourage local advocacy." Answers to association with popular representation items are scored on a 0/1 scale as either associated or not associated with popular representations of autism.

Information about the respondent's media usage is measured by items inspired by Samsel and Perepa's (2013) phenomenological study, *The impact of media representation of disabilities on teachers' perceptions*. There are 15 items that measure media usage. Two examples of a media usage items are "How many movies have you seen with autism portrayed? 0, 1-4, 5-10, 10-20, more than 20" and "In your experience, how do movies tend to portray individuals with autism? (Select the number that best reflects you opinion.) Unrealistic (1), Somewhat unrealistic (2), Somewhat realistic (3), Realistic (4); Negative (1), Somewhat negative(2), Somewhat positive (3), Positive (4)."

To ensure content validity, the instrument will be pilot tested by 26-30 individuals who are a part of the target sample, that is approximately 10% of the full-scale study sample size, the recommended by Hazzi and Maldaon (2015). Pilot test participants will read the instrument items and provide written feedback regarding the clarity and appropriateness of the items to be used to revise the survey. In addition, prior to administering the pilot questionnaire, the questionnaire items will undergo expert review by an Autism Specialist, a School Psychologist and a Board Certified Behavior Analyst to address content validity. Changes will be made to the questionnaire based on expert feedback, and then administered to the pilot group.

Ethical Considerations

This study has several potential ethical issues. First, data permissions will be obtained using passive consent; by completing the questionnaire participants will be giving informed consent to use the data for the study. Additionally, anonymity needs to be protected. It is important not only to protect the participants but also, any information gleaned from the questionnaire needs to be treated sensitively, especially items which contain information about the educators' philosophy of education. This is essential in the education profession, which has a strict code of ethics and confidentially. Moreover, it is important to protect participants from potential criticism or scrutiny.

Risk

Risk is no greater than risks associated with daily life experiences. As all participants are unique individuals, therefore there is a potential risk that they may interpret the questionnaire as uncomfortable. Participants will clearly be reminded prior to the survey that they are free to discontinue at any point they feel discomfort.

Procedure

Personnel

The sole researcher, myself, Vanessa Keener, a doctoral candidate in the Ed. D. Curriculum Studies program at Georgia Southern University will recruit participants, distribute the questionnaire, and collect and analyze the data. I will present the findings in a university setting. Additionally, I will be responsible for maintaining the data on a secure drive. The data will be reported to faculty and peers and at Georgia Southern University. The findings will be compiled in this dissertation for publication. The questionnaire data will be completely anonymous (even to the researcher). All data

collected will be maintained on a secured drive. The data will be retained for 7 years after the end of the study.

Institutional Review Board

The researcher has obtained Institutional Review Board (IRB) approval through Georgia Southern University prior to beginning this study. Standard protocols to ensure the protection of human participants will be implemented; all methods used in this study will be approved by the IRB.

The questionnaire will be distributed via an online link available through the recruitment posting.

Informed Consent

Informed consent was distributed to participants prior to accessing questionnaire content area items. Informed consent will be delivered via letter as the first item of questionnaire. An affirmative response will be required in order for participants to continue to remaining questionnaire items. If participants do not give informed consent, they will be thanked for their interest and the questionnaire will be terminated.

Administration

The questionnaire was administered to participants independently via an online link available through Qualtrics. Participants must give informed consent prior to continuing to answer the questionnaire content items. Participants will read each questionnaire item and provide a response before moving to the next item. Demographic information will be collected at the start of the questionnaire. The questionnaire will take approximately 10 minutes to complete. Data will be collected for a minimum of 2 weeks and up to 4 weeks depending on the response rate. Plans to enhance the response rate

include reposting solicitation to participate periodically. A qualifying question will ask participants (after the informed consent), if they are or have been an educator practicing in Georgia to control for any respondent outside the target sample, since my study is using Snowball sampling and the survey may be shared with teachers outside of Georgia. If the participant answers, "No" to this question, then survey will terminate.

Analysis

Data from the questionnaire was scored to create variables. The following research questions will be addressed by relating the independent variables of media usage and background information to knowledge and understanding of autism.

1. What are teachers' perceptions of autism?

2. Does experience with media correlate or predict teachers' perceptions or knowledge about autism?

3. Do personal characteristics, including age, sex, level of education, type of degree, years of teaching experience, professional and personal experiences including having a friend or family member with an autism label correlate or predict teachers' perceptions or knowledge about autism?

Media Usage

Responses for items 13 - 18 will be tallied for an overall media exposure score. Responses for items 19 - 27 will be tallied to obtain an overall score for participant perception of the level of realism presented by the media regarding autism. Responses for items 19 - 27 will be tallied to obtain an overall score of participant perception regarding the degree to which the media positively and negatively portrays autism.

Participants will make a dichotomous choice (yes/no; 1/0) regarding the sources from which they gained information about autism in item 26.

Knowledge of Autism

Responses to items 28 - 31 will be tallied for a score of participant knowledge of best practices for students with autism. Correct responses to items 31 - 37 will be tallied for a score for participant knowledge of the characteristics of autism. Responses to items 31, 32, 33, 35, 36, and 37 will be tallied to obtain a score for participant identification with popular media representation of autism.

Relating independent variables to dependent variables

For each predictor including those for background information, it is possible to run correlations or, assuming sample size is adequate, ANOVA comparisons. After the correlations, those variables with strong relations will be used for a regression analysis to determine which appear to be strongly predictive of knowledge.

Variable Name	Research Question	Items on Questionnaire
Independent Variable: Personal Characteristics 1. Background information 2. Media usage	1. What are the respondents: # of years of teaching, type of certificate held, education level, age, sex, prior experiences?	1. Questions 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
	2. What are the respondents: beliefs about media portrayal, beliefs about media realism, sources of gaining knowledge of autism, and exposure to media?	2. Questions 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27
Dependent Variable: Knowledge about autism	RQ1. What are teachers' perceptions of autism? a) Beliefs about	Questions 28-37 a) 28, 29, 30, 31

	educational best practices for students with autism b) Characteristics of autism c) Identification with popular media representations of autism	b) 31, 32, 33, 34, 35, 36, 37 c) 31, 32, 33, 35, 36. 37
Relating IV to DV	RQ2. Does experience with media correlate or predict teachers' perceptions or knowledge about autism? RQ 3. Do personal characteristics, including professional or personal experience, correlate or predict teachers' perceptions or knowledge about autism?	Questions 13-18 to questions 28-37 Question 2-12 to questions 28-37

Conclusion

The analyzed data collected from the questionnaire will inform what characteristics correlate with educator perceptions and knowledge of autism. The characteristics examined will include prior experiences with autism and media usage. The variables with strong correlations will be evaluated to determine if they predict educator perceptions or knowledge of autism. Additionally, teacher knowledge of autism and the extent that teachers identify with popular media representations of autism will be investigated to determine if media exposure or previous experiences have an influence on educator perceptions of autism, how they come know autism, or influence their beliefs about teaching students labeled as having autism.

CHAPTER 4

PUTTING THE PIECES TOGETHER: EDUCATORS' UNDERSTANDING OF

AUTISM

Pilot Study

A pilot study was conducted to test for reliability and validity of the questionnaire

instrument. In addition to undergoing expert review for validity by a school psychologist,

autism specialist and Board Certified Behavior Analyst the questionnaire was piloted

using a sample of 38 participants from the target population. Baker notes, "10-20% of the

main sample size is a reasonable number for conducting a pilot study" (1994). 38

participants took part in the pilot study; representing 14.6% of the main target sample

size of 260, within the recommended size for the pilot study.

Validity

Participants provided feedback regarding refining the words and statements used

for the questionnaire items as well as available choice options. More response options in

demographic items were added to include appropriate responses for educators such as

therapists and itinerant specialty teachers. More response options were added to the

questionnaire items, *type of school you work in now,* and *type of classroom you work in*

now to accommodate non-traditional types of educators. The scales for media positivity

were refined to include the response options: '*Extremely positive,' 'Somewhat positive,'*

'Somewhat negative' and *'Extremely negative.'* The scales for media accuracy were also

refined to include the response options: '*Extremely accurately,' 'Somewhat accurately,'*

'Somewhat inaccurately' and *'Not accurate at all.'* Additionally, choices were added to

the questionnaire item, '*An autism label is helpful in determining the needs abilities and*

limitations of the student I teach' to represent a range rather than a dichotomous choice. Finally, a response option was removed from the questionnaire item, '*Autism is…'* to aid clarity. This added an additional layer of validity to the instrument.

Reliability

In addition to refining item scales, the pilot was used to collect preliminary data to test reliability as well as to test the feasibility of the intended approach of the main study. Data collected from the pilot study are not included in the data set for the main study. A scale was developed to measure educators' personal characteristics, popular media usage, and perceptions of autism (including knowledge score, best practices for teaching students labeled as having autism, perceived positivity and accuracy of popular media representations of autism, and participant identification with popular media representations of autism). A test sample of participants (educators) was asked about personal and professional characteristics, their level of media usage and perceptions of autism on a series of multiple-choice questions and 4-point Likert scales. The Cronbach Alpha for all questionnaire items was .581. An inspection of the data analysis indicated that scale reliability could be improved by eliminating five multiple-response items (three regarding personal characteristics and two regarding knowledge). A re-analysis with these five items removed from the final scale indicated a reliability measurably improved, Cronbach Alpha = .764 and reached conventional standards for scale reliability (Griffee, 2012). Thus, the final scale used to measure educators' personal characteristics, popular media usage, and perceptions of autism consisted of revised questionnaire items not including multiple-response items. The five items were revised to allow for only one response to be selected, while still maintaining the intention of the item.

Conducting the pilot study provided insight into the feasibility of the main study's approach. Recruiting methods were sufficient, as the test sample was obtained only 3 days after the recruitment flyer had been posted to social media. Additionally, by simplifying questionnaire items to include only those with single response options rather than multiple responses, statistical analysis will also be simplified and streamlined.

Main Study

The purpose of this correlational study was to estimate the relationship between educators' personal characteristics, media usage and their perceptions of autism including knowledge about autism, best practices for teaching students labeled as having autism, perceived positivity and accuracy of popular media representations of autism, and participant identification with popular media representations of autism. To determine the correlation among these variables, the researcher employed a correlational research method and design (Creswell, 2014a; Creswell, 2014b) to answer the following research questions:

1. What are educators' perceptions of autism?

2. What is the relationship between media usage and educators' perceptions of autism?

3. What is the relationship between personal characteristics and educators' perceptions of autism?

Results Relative to Research Questions

The researcher was able to recruit 273 participants for the study. The participants all gave informed consent by agreeing to the first item of the questionnaire. Additionally,

83

all participants qualified as part of the target sample of Georgia educators by agreeing to

the second item clarifying that they had worked in education in the state of Georgia.

Research question 1

Data presented relevant to research question one comes from questionnaire items

that asked educators about their perceptions of autism, specifically which traits they

associate with autism, what they believe the cause of autism to be, what autism is

classified as, what they feel is most important educationally for children labeled as

having autism to learn, how they feel about labels, and what has had the biggest impact

on their understanding and perception of autism. Participant responses to these

questionnaire items answer the first research question, 'What are educators' perceptions

of autism?'

When asked, *Which trait is associated with autism?,* 53% of participants indicated

communication and language delays, 19% indicated being trapped inside themselves, and

13% indicated not understanding empathy or theory of mind (ToM). Further, only 7% of

participants indicated having emotional disturbances, 6% indicated being good with

math, computers, and systematic/ rote tasks, and only 1 participant indicated having

intelligent parents (see Table 1).

Table 1

Which Trait is Associated with Autism?

Statistic	Choice percentages	Choice count
Communication and Language delays	53.11%	145
Having intelligent parents	.37%	1
Having emotional disturbances	7.69%	21
Do not understand empathy of Theory of Mind	13.55%	37
Being good with math, computers, and systematic/ rote tasks	6.23%	17
Being trapped inside themselves	19.05%	52

Note. N = 273

When asked, *what is the cause of autism?,* 77% of participants correctly indicated that the cause is unknown. However, 4% of participants indicated that the cause of autism is vaccines, 1% diet, 2% environmental pollutants, 13% genetics, and <1% indicated detachment. It is important to note that 0% of participants indicated that the cause of autism is neglect (see Table 2).

Table 2

What is the Cause of Autism?

Statistic	Choice percentages	Choice count
Detachment	.37%	1
Vaccines	4.76%	13
Diet	1.1%	3
Environmental pollutants	2.56%	7
Genetics	13.92%	38
Neglect	0%%	0
The cause is unknown	77.29%	211

Note. N = 273

When asked, *what is autism?,* 65% of participants indicated that autism is a neurological difference, while 23% of participants indicated that autism is a developmental disorder. Only 9% of participants indicated that autism is an intellectual disability and <1% identified autism as a form of schizophrenia (see Table 3).

Table 3

What Is Autism?

Statistic	Choice percentages	Choice count
A developmental disability	23.81%	65
A form of schizophrenia	.37%	1
An intellectual disability	9.89%	27
A neurological difference	65.93%	180

Note. N = 273

When asked if an autism label is helpful in determining the needs, abilities, and limitations of students they teach, nearly 50% of participants strongly agreed, while over 40% somewhat agreed. Only 8% of participants somewhat disagreed, and 1% strongly disagreed that an autism label is helpful in determining the needs abilities and limitations of students (see Table 4).

Table 4

Are Labels Helpful in Determining Needs, Abilities and Limitations?

Statistic	Choice percentages	Choice count
Strongly agree	49.82%	136
Somewhat agree	40.66%	111
Somewhat disagree	8.42%	23
Strongly disagree	1.10%	3

Note. N = 273

When participants were asked, *what is educationally most important for individuals labeled as having autism to focus on?,* 49% of participants indicated that communication was most important. 46% of participants indicated that functional skills were most important, and 3% indicated that behavior was educationally most important (see Table 5).

Table 5

What is Educationally Most Important?

Statistic	Choice percentages	Choice count
Communication	49.82%	136
Functional skills	46.89%	128
Behavior	3.3%	9

Note. N = 273

When asked, *what has had the biggest impact on understanding of autism?,* 61% of participants indicated that personal experience had the biggest impact on their understanding of autism. Only 14% of participants indicated professional development as having the biggest impact on their understanding of autism, while 2% indicated reality TV, 3% documentaries, 5% non-fiction texts, 2% Internet media, 3% support groups, and <1% memoirs (17.92% for all media types). Interestingly, 0% of participants noted that novels had the biggest impact on their understanding, and 6% of participants indicated that something else had the biggest impact on their understanding of autism (see Table 6).

Table 6

Biggest Impact on Educators Understanding Autism

Statistic	Choice percentages	Choice count
Reality TV	2.2%	6
Documentaries	3.66%	10
Personal experience	61.17%	167
Professional development	14.65%	40
Novels	0%	0
Non-fiction literature (text books, journals, etc.)	5.86%	16
The internet	2.93%	8
Parent/family support groups	2.93%	8
Memoirs	.37%	1
(Media aggregate)	*(17.92%)*	*(49)*
None of these N/A	6.23%	17

Note. N = 273

When asked about their perceptions of autism, the majority of participants indicated that they associate communication deficits with autism (53.11%). In like manner, they believed that the most important area to focus instruction for students labeled as having autism is communication (49.82%). The majority of participants also indicated that the cause of autism is unknown (77.29%) and that autism is a neurological difference (65.93%). Participants also noted that an autism label helped them determine

students' abilities, limitations and needs (>90%). Additionally, only 17.92% of educators

attributed their understandings and perceptions about autism to some form of media; the

majority of participants (61.17%) noted that the biggest impact on their understanding

about autism was personal experience. The relationships between educators' media usage

and other variables is addressed with research question two.

Research question 2

What is the relationship between media usage and educators' perceptions of

autism? According to the results of this study there was not a statistically significant

relationship among educators' media usage and (a) knowledge of autism, (b) knowledge

of best practices for students labeled as having autism, (c) identification with popular

media representations of autism, or (d) perceived accuracy of popular media

representations of autism. Statistical analysis reveals that media usage is positively and

statistically related at the .05 level of significance, to educators' perception of the

positivity of popular media representations of autism. These results indicate that

educators who report higher levels of media usage also perceive popular media to

represent autism more positively (see Table 7).

Table 7

Correlation Matrix

Statistic		ID w/ Pop Media	Media usage	Realism/ accuracy	Positivity	Best Practices	Knowledge/ Perceptions
ID w/ Pop Media	Pearson Correlation	1	-.086	.110	.069	.216**	-.411**
	Sig. (2-tailed)	-	.157	.070	.254	.000	.000
Media usage	Pearson Correlation	-.086	1	.095	.131*	.109	.088
	Sig. (2-tailed)	.157	-	.119	.031	.073	.148
Realism/ accuracy	Pearson Correlation	.110	.095	1	.783**	-.099	-.048
	Sig. (2-tailed)	.070	.119	-	.000	.102	.431
Positivity	Pearson Correlation	.069	.131*	.783**	1	-.073	-.011
	Sig. (2-tailed)	.254	.031	.000	-	.229	.855
Best Practices	Pearson Correlation	.216**	.109	-.099	-.073	1	.268**
	Sig. (2-tailed)	.000	.073	.102	.229	-	.000
Knowledge / Perceptions	Pearson Correlation	-.411**	.088	-.048	-.011	.268**	1
	Sig. (2-tailed)	.000	.148	.331	.855	.000	-

Note. $N = 273$; **correlation was significant at the 0.01 level (2-tailed); *correlation was significant at the 0.05 level (2-tailed).

According to these results there are no relationships among educators' media usage and knowledge of autism, knowledge of best practices for students labeled as having autism, identification with popular media representations of autism, or perceived accuracy of popular media representations of autism. However, there is a positive relationship among educators who report higher levels of media usage and their perceptions that popular media represents autism positively. Research question three

explores the relationships between educators' personal characteristics and their perceptions of autism.

Research question 3

What is the relationship between personal characteristics and educators' perceptions of autism? Current statistical analysis of this survey indicated that there are no statistically significant relationships found among educators perceptions of autism (including (a) knowledge of autism, (b) knowledge of best practices for students labeled as having autism, (c) identification with popular media representations of autism, (d) perceived accuracy of popular media representations of autism, or (e) perceived positivity of popular media representations of autism) and educators' highest level of education, the type of professional development educators received, educators' personal experience with autism, or the type of school which educators are employed. That is, when compared to educators' perceptions of autism there were no relationships found to have any positive or negative correlations among educators' education level, the type of professional development educators received, personal experience with autism, or the type of school which educators are employed. Due to the many areas being investigated in this study, the depth in each area of the questionnaire was limited; future studies with a more narrowed focus may be able to find some significant relationships in these areas with more questions investigating these areas.

In the area of knowledge of best practices for working with students labeled as having autism, statistical analysis revealed that educators who hold degrees in special education and education had significantly more knowledge of best practices than educators who held content area degrees (see Tables 9 &10). Additionally, educators

teaching 6-10, 11-20, and 20+ years had significantly more knowledge of best practices for working with children labeled as having autism than educators teaching only 0-3 years (see Tables 11 & 12). Finally, educators who work in inclusive classrooms and in various sites (such as resource rooms, community based instruction, therapy rooms, etc.) have significantly more knowledge of best practices for working with children labeled as having autism than educators working in general education classrooms (see Tables 13 & 14).

Table 9

Results for Analysis of Variance (ANOVA) for Degree Type & Best Practices

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.437	4	7.609	7.645	.000
Within Groups	265.765	267	.995		
Total	296.202	271			

Table 10

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Degree Type & Best

Practices

(I) Do you have a degree in special education, education, a content area or other? (Check all that apply).	(J) Do you have a degree in special education, education, a content area or other? (Check all that apply).	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Special education	Education	.49653	.17958	.061	-.0118	1.0048
	Content area	1.03632*	.23059	.000	.3836	1.6890
	Other professional area	.06410	.29620	1.000	-.7743	.9025
	Both Special Education and General Education	-.04196	.23598	1.000	-.7099	.6260
Education	Special education	-.49653	.17958	.061	-1.0048	.0118
	Content area	.53979*	.18540	.039	.0150	1.0646
	Other professional area	-.43243	.26256	1.000	-1.1756	.3108
	Both Special Education and General Education	-.53849	.19206	.054	-1.0821	.0052
Content area	Special education	-1.03632*	.23059	.000	-1.6890	-.3836
	Education	-.53979*	.18540	.039	-1.0646	-.0150
	Other professional area	-.97222*	.29977	.013	-1.8207	-.1237
	Both Special Education and General Education	-1.07828*	.24044	.000	-1.7589	-.3977
Other professional area	Special education	-.06410	.29620	1.000	-.9025	.7743
	Education	.43243	.26256	1.000	-.3108	1.1756
	Content area	.97222*	.29977	.013	.1237	1.8207
	Both Special Education and General Education	-.10606	.30393	1.000	-.9664	.7542
Both Special Education and General Education	Special education	.04196	.23598	1.000	-.6260	.7099
	Education	.53849	.19206	.054	-.0052	1.0821
	Content area	1.07828*	.24044	.000	.3977	1.7589
	Other professional area	.10606	.30393	1.000	-.7542	.9664

*. The mean difference is significant at the 0.05 level.

Table 11

Results for Analysis of Variance (ANOVA) for Teaching Experience & Best Practices

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.334	4	2.833	2.659	.033
Within Groups	285.575	268	1.066		
Total	296.908	272			

Table 12

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Teaching Experience & Best

Practices

(I) How many years of teaching experience do you have in your teaching career?	(J) How many years of teaching experience do you have in your teaching career?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-3 years	4-5 years	-.51894	.27693	.620	-1.3028	.2649
	6-10 years	-.74722*	.26092	.045	-1.4857	-.0087
	11-20 years	-.67321*	.23066	.038	-1.3261	-.0203
	20+ years	-.73833*	.25634	.043	-1.4639	-.0128
4-5 years	0-3 years	.51894	.27693	.620	-.2649	1.3028
	6-10 years	-.22828	.23658	1.000	-.8979	.4413
	11-20 years	-.15427	.20272	1.000	-.7281	.4195
	20+ years	-.21939	.23152	1.000	-.8747	.4359
6-10 years	0-3 years	.74722*	.26092	.045	.0087	1.4857
	4-5 years	.22828	.23658	1.000	-.4413	.8979
	11-20 years	.07401	.18024	1.000	-.4361	.5842
	20+ years	.00889	.21211	1.000	-.5915	.6093
11-20 years	0-3 years	.67321*	.23066	.038	.0203	1.3261
	4-5 years	.15427	.20272	1.000	-.4195	.7281
	6-10 years	-.07401	.18024	1.000	-.5842	.4361
	20+ years	-.06512	.17355	1.000	-.5563	.4261
20+ years	0-3 years	.73833*	.25634	.043	.0128	1.4639
	4-5 years	.21939	.23152	1.000	-.4359	.8747
	6-10 years	-.00889	.21211	1.000	-.6093	.5915
	11-20 years	.06512	.17355	1.000	-.4261	.5563

*. The mean difference is significant at the 0.05 level.

Table 13

Results for Analysis of Variance (ANOVA) for Class Type & Best Practices

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.751	3	6.917	6.705	.000
Within Groups	262.028	254	1.032		
Total	282.779	257			

Table 14

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Class Type & Best Practices

(I) Type of classroom you work in now.	(J) Type of classroom you work in now.	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
General education classroom	Inclusive Classroom	-.47029*	.15575	.017	-.8844	-.0561
	Self-contained classroom	-.61715	.23511	.055	-1.2423	.0080
	Various	-.64177*	.17285	.002	-1.1014	-.1821
Inclusive Classroom	General education classroom	.47029*	.15575	.017	.0561	.8844
	Self-contained classroom	-.14685	.25052	1.000	-.8130	.5193
	Various	-.17147	.19329	1.000	-.6855	.3425
Self-contained classroom	General education classroom	.61715	.23511	.055	-.0080	1.2423
	Inclusive Classroom	.14685	.25052	1.000	-.5193	.8130
	Various	-.02462	.26150	1.000	-.7200	.6707
Various	General education classroom	.64177*	.17285	.002	.1821	1.1014
	Inclusive Classroom	.17147	.19329	1.000	-.3425	.6855
	Self-contained classroom	.02462	.26150	1.000	-.6707	.7200

*. The mean difference is significant at the 0.05 level.

In the area of knowledge about autism, statistical analysis revealed that educators who work in inclusive classrooms and in various sites have significantly more general knowledge about autism than educators working in general education classrooms (see Tables 15 & 16).   In the area of identification with popular media representations of autism, statistical analysis indicated that educators aged 20-29 and 30-39 reported significantly less identification with popular media representations of autism than educators aged 50-59.

Table 15

Results for Analysis of Variance (ANOVA) for Class Type & Knowledge

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.801	3	6.934	4.254	.006
Within Groups	414.009	254	1.630		
Total	434.810	257			

Table 16

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Class Type & Knowledge

(I) Type of classroom you work in now.	(J) Type of classroom you work in now.	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
General education classroom	Inclusive Classroom	-.57086*	.19578	.023	-1.0914	-.0503
	Self-contained classroom	-.46526	.29553	.700	-1.2511	.3206
	Various	-.60163*	.21728	.036	-1.1794	-.0239
Inclusive Classroom	General education classroom	.57086*	.19578	.023	.0503	1.0914
	Self-contained classroom	.10559	.31491	1.000	-.7318	.9430
	Various	-.03077	.24297	1.000	-.6768	.6153
Self-contained classroom	General education classroom	.46526	.29553	.700	-.3206	1.2511
	Inclusive Classroom	-.10559	.31491	1.000	-.9430	.7318
	Various	-.13636	.32870	1.000	-1.0104	.7377
Various	General education classroom	.60163*	.21728	.036	.0239	1.1794
	Inclusive Classroom	.03077	.24297	1.000	-.6153	.6768
	Self-contained classroom	.13636	.32870	1.000	-.7377	1.0104

*. The mean difference is significant at the 0.05 level.

Several factors, which showed relationships with knowledge of best practices for teaching students labeled as having autism, were educator degree type, years of teaching experience, and work location. Specifically, educators with more knowledge of best

practices included educators with degrees in education and special education, educators who have been teaching for more than 6 years, and educators who work in inclusive settings and in various sites (such as community based settings, therapy rooms, resource rooms etc.).

   Additional findings. Although not identified as a research questions it is interesting to note that certain groups of educators reported significantly higher levels of media usage, noting that they more frequently viewed, read or interacted with popular media representations of autism (film, TV shows, documentaries, fiction literature, non-fiction literature, news stories, journal articles, internet media, advertisements) than other groups. Groups that reported higher levels of media usage included educators who hold special education degrees (see Tables 17 &18), educators who had the most professional development experiences, that is through college course work, trainings, conferences and workshops (see Tables 19 & 20), educators who had personal experiences with autism such as having a friend or family member labeled as having autism (see Tables 21 & 22), and special educators (see Tables 23 & 24).

Table 17

Results for Analysis of Variance (ANOVA) for Degree Type & Media Exposure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	275.519	4	68.880	6.584	.000
Within Groups	2793.246	267	10.462		
Total	3068.765	271			

Table 18

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Degree Type & Media

Exposure

(I) Do you have a degree in special education, education, a content area or other? (Check all that apply).	(J) Do you have a degree in special education, education, a content area or other? (Check all that apply).	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Special education	Education	2.67516*	.58218	.000	1.0273	4.3230
	Content area	2.99573*	.74756	.001	.8797	5.1117
	Other professional area	1.69712	.96026	.783	-1.0209	4.4152
	Both Special Education and General Education	1.26340	.76503	.998	-.9020	3.4288
Education	Special education	-2.67516*	.58218	.000	-4.3230	-1.0273
	Content area	.32057	.60107	1.000	-1.3808	2.0219
	Other professional area	-.97804	.85120	1.000	-3.3874	1.4313
	Both Special Education and General Education	-1.41175	.62266	.242	-3.1742	.3507
Content area	Special education	-2.99573*	.74756	.001	-5.1117	-.8797
	Education	-.32057	.60107	1.000	-2.0219	1.3808
	Other professional area	-1.29861	.97183	1.000	-4.0494	1.4522
	Both Special Education and General Education	-1.73232	.77950	.271	-3.9387	.4741
Other professional area	Special education	-1.69712	.96026	.783	-4.4152	1.0209
	Education	.97804	.85120	1.000	-1.4313	3.3874
	Content area	1.29861	.97183	1.000	-1.4522	4.0494
	Both Special Education and General Education	-.43371	.98533	1.000	-3.2227	2.3553
Both Special Education and General Education	Special education	-1.26340	.76503	.998	-3.4288	.9020
	Education	1.41175	.62266	.242	-.3507	3.1742
	Content area	1.73232	.77950	.271	-.4741	3.9387
	Other professional area	.43371	.98533	1.000	-2.3553	3.2227

*. The mean difference is significant at the 0.05 level.

Table 19

Results for Analysis of Variance (ANOVA) for Professional Development & Media

Exposure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	494.533	3	164.844	17.222	.000
Within Groups	2574.749	269	9.572		
Total	3069.282	272			

Table 20

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Professional Development

& Media Exposure

(I) Do you have any professional development experience regarding autism ?	(J) Do you have any professional development experience regarding autism ?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Only college level coursework	Only trainings, conferences or workshops	-1.68539*	.57556	.022	-3.2152	-.1556
	Both college coursework and trainings, conferences and workshops	-3.24343*	.58686	.000	-4.8033	-1.6836
	No professional development experience with autism	.03332	.56477	1.000	-1.4678	1.5344
Only trainings, conferences or workshops	Only college level coursework	1.68539*	.57556	.022	.1556	3.2152
	Both college coursework and trainings, conferences and workshops	-1.55804*	.51805	.017	-2.9350	-.1811
	No professional development experience with autism	1.71871*	.49289	.003	.4087	3.0288
Both college coursework and trainings, conferences and workshops	Only college level coursework	3.24343*	.58686	.000	1.6836	4.8033
	Only trainings, conferences or workshops	1.55804*	.51805	.017	.1811	2.9350
	No professional development experience with autism	3.27675*	.50604	.000	1.9317	4.6218
No professional development experience with autism	Only college level coursework	-.03332	.56477	1.000	-1.5344	1.4678
	Only trainings, conferences or workshops	-1.71871*	.49289	.003	-3.0288	-.4087
	Both college coursework and trainings, conferences and workshops	-3.27675*	.50604	.000	-4.6218	-1.9317

*. The mean difference is significant at the 0.05 level.

Table 21

Results for Analysis of Variance (ANOVA) for Personal Experiences & Media Exposure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	293.706	1	293.706	28.677	.000
Within Groups	2775.576	271	10.242		
Total	3069.282	272			

Table 22

Descriptive Comparison Results for Personal Experiences & Media Exposure

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Yes	165	7.1212	3.54894	.27628	6.5757	7.6667	.00	22.00
No	108	5.0000	2.57595	.24787	4.5086	5.4914	.00	15.00
Total	273	6.2821	3.35919	.20331	5.8818	6.6823	.00	22.00

Table 23

Results for Analysis of Variance (ANOVA) for Educator Classification & Media

Exposure

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	150.046	2	75.023	6.957	.001
Within Groups	2900.833	269	10.784		
Total	3050.879	271			

Table 24

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Educator Classification &

Media Exposure

(I) Are you currently a special educator or general educator?	(J) Are you currently a special educator or general educator?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Special educator	General educator	1.84274*	.49401	.001	.6526	3.0328
	Other education professional (therapist, consultant, psychologist, administration, etc.)	1.38067	.68864	.138	-.2783	3.0396
General educator	Special educator	-1.84274*	.49401	.001	-3.0328	-.6526
	Other education professional (therapist, consultant, psychologist, administration, etc.)	-.46207	.59391	1.000	-1.8928	.9687
Other education professional (therapist, consultant, psychologist, administration, etc.)	Special educator	-1.38067	.68864	.138	-3.0396	.2783
	General educator	.46207	.59391	1.000	-.9687	1.8928

*. The mean difference is significant at the 0.05 level.

The interests of particular participants could explain this. That is, simply participants who professionally and personally have reason to seek out media featuring autism may do so, more frequently than other educators. Additionally, another explanation that could explain this trend is that educators who are more familiar with autism either due to personal experiences or professional experiences (special educators, educators with special education degree, and educators with higher level of professional development regarding autism) may more readily recognize and be cognizant of autism in the media than educators who are less familiar with autism.

Findings Related to Previous Research

  Perceptions of autism. There is not a definite consensus among authors as to whether autism is represented positively or negatively in the media. Through critical analysis, many authors (Berger, 2008; Burks-Abbott, 2008; Holton, Farrell, & Fudge, 2014; Jones & Harwood, 2009; Loftis, 2015; Murray, 2008a; Sarrett, 2011) find that autism is culturally positioned negatively that is, as pathology, a deficit, a problem, and *something* broken in need of fixing. Additionally, the literature (Jones and Harwood, 2009; Loftis, 2015; Sarrett, 2011) notes that people with autism are portrayed in the media negatively, that is as mind-blind, rude, aloof, emotionless, cold-blooded, violent, aggressive, uncontrollable, and unloved; they are objectified as machines, puzzles, robots, and aliens.

  Alternatively, representations of autism can also be positive. Pronchow (2014) found that representations of autism in media were hyper-positive and unrealistic, there were no representations of people with severe autism, nor were there any depictions of hardships; thus ignoring disabling social and cultural forces and impacts of real

impairments people labeled with autism face. Further, the literature, (Baker, 2008; Loftis, 2015; and Murray, 2008b) notes that people labeled as having autism are often identified as having savant skills. Such portrayals over represent people labeled as having autism as also having savant skills, when in actuality the percentage is quite low. Only about 10% of people labeled as having autism also have savant skills (Hiles, 2002).

According to the results of this study, a significant number of educators did not associate autism with negative traits (see Figure 1). Only 7% of educators associated autism with an emotional disturbance, and 6% associated autism with being good at systematic rote tasks, math, and computer. 13% of educators associated autism with lacking Theory of Mind or empathy, and 19% associated autism with being trapped inside themselves. It would appear that although a few educators still associate autism with the rhetoric of Bettelheim's empty fortress (1972), the majority of educators have abandoned that association. Additionally, <1% of educators associated autism with having intelligent parents, one of Kanner's (1943) early designations about autism. It seems that the early literature about autism is beginning to have less influence on perceptions of autism today. Additionally, the results of this study indicate that the majority of participants are associating autism with communication and language delays, a current component of diagnostic criteria and eligibility.

Figure 1

Traits Educators Associate with Autism
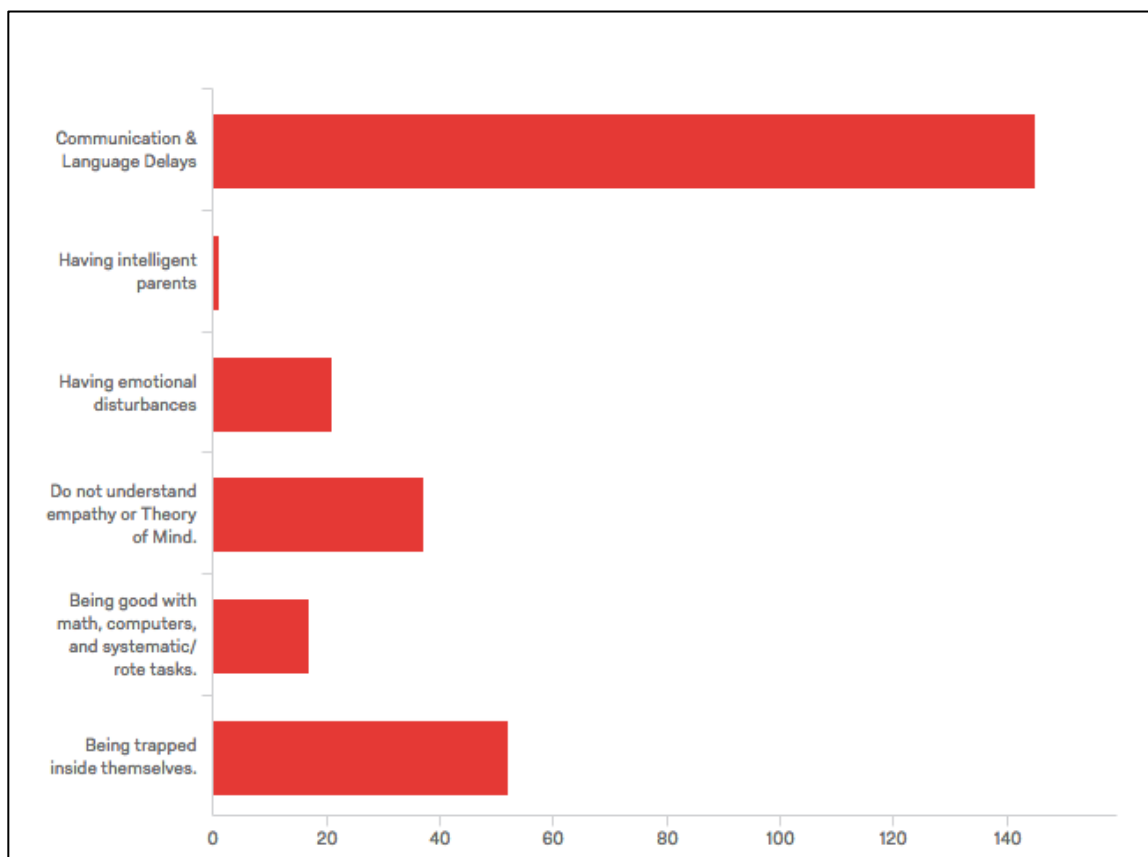
The concept of neurodiversity (Bascom, 2012; McGuire, 2016; Runswick-Cole, 2016) offers up an alternative way of framing autism, which is as a difference rather than a deficit. The concept of neurodiversity places value on acceptance rather than on a cure, and shuts out ablest practices. This study found that a significant number of educators, that is 65%, described autism as a neurological difference. While only 23% and 9% identified autism as a developmental disability or and intellectual disability, respectively (see Figure 2). The concept of neurodiversity celebrates difference and does not recognize disabling social or cultural forces. Further, it does not recognize real implications of associated impairments people labeled as having autism posses. This

ideology can become dangerous, as difference is located in the individual, thus any barriers one may experience are also individual barriers, and are not recognized as societal or systemic issues. Although the majority of educators identified autism as a difference rather than a disability, it is unclear if educators perceive this difference as a deficit. Further exploration is needed to determine if educators who perceive autism as a difference also recognize that autism carries with it disabling barriers in society. Although it would seem positive to view autism as a difference it, it could be dangerous if educators do not recognize the social forces, which couch autism as a disability. Without recognizing that people labeled as having autism are disabled perhaps only by social forces in certain situations, difficulties that students with autism face in school will be positioned within the individual, not within the system. This will cause intervention to be targeted at the student rather than disabling systemic factors. One of the limitations of the instrument is that it may measure educators' level of awareness regarding current language framing autism as difference; educators' perceptions and attitudes about autism may not in actuality align with the language of autism "as difference". The same is true regarding the use of "person-first" language, although people may know that it is more widely expected to use such verbiage, the attitudes which are carried along might not shift for some time.

Figure 2

Educators' Descriptions of Autism
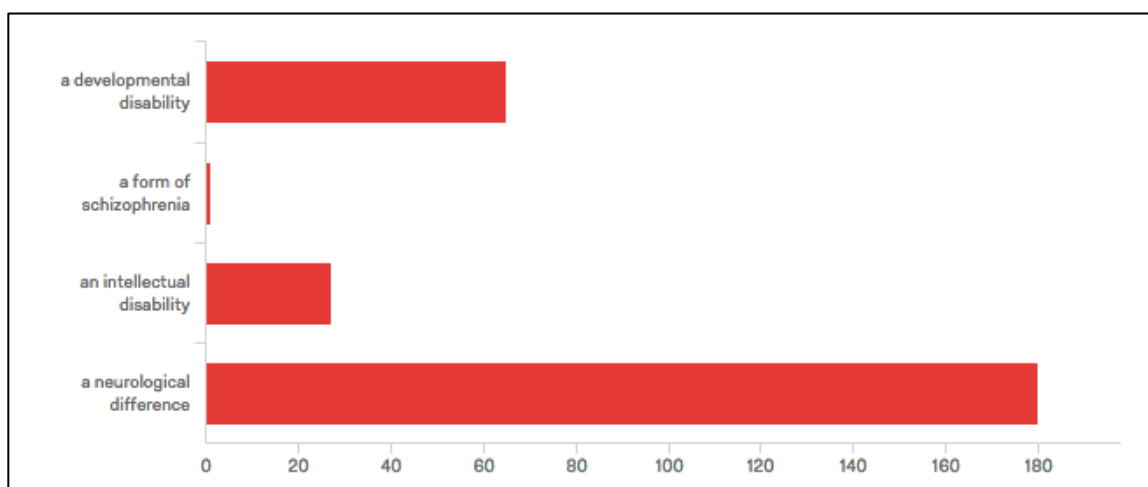
As knowledge and understanding of autism are continually shifting so too are the identified causes of autism. Eyal et. al. (2010) notes that some clinicians, therapists, parents and researchers believe that there are environmental factors that contribute to the symptoms of autism such as diet, vaccines, bacteria, etc. Research has shown that there are no significant relationships between environmental factors and the causation of autism (Eyal et. al., 2010; McGuire, 2016; Murray, 2012; Runswick-Cole, 2016). Additionally, genetics are thought to have some relationship to autism, however specific gene markers have yet to be conclusively identified (Just & Pelphrey, 2013; Timimi & McCabe, 2016). Further, early theories of autism causation posited by Kanner, Asperger, and Bettelheim positioned autism as a psychological disorder caused by detached, cold or even neglectful parents (McGuire, 2016). According to the results of this study, the majority of participants, that is 77%, identified the cause of autism as unknown. 13% identified the cause of autism as genetic, while only 4% identified vaccines as the cause of autism, 2% identified environmental pollutants, 1% diet, <1% detachment and 0%

indicated neglect as the cause of autism (see Figure 3). These results indicate that influences from early theories of autism are beginning to fade from educators' perceptions of autism.

Figure 3

Causes of Autism
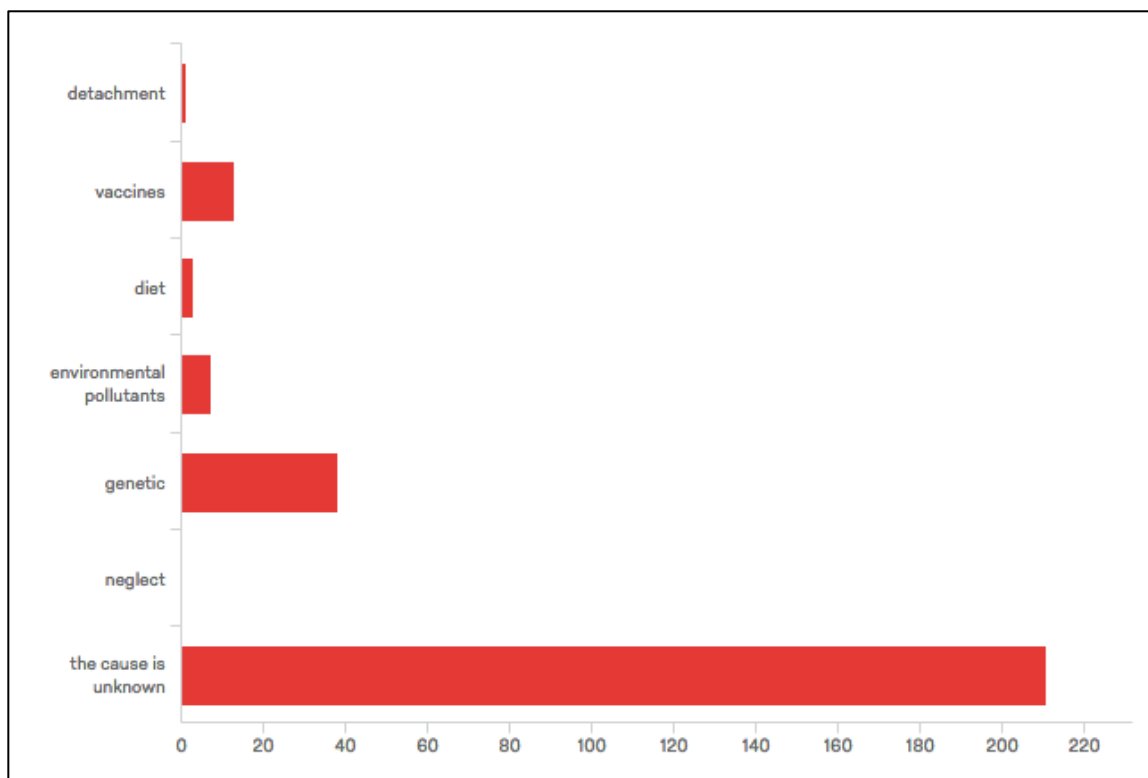
Best practices. The literature documents that the majority of schools do not have plans for general education access for students with disabilities (Agran, Alper & Weheymeyer, 2002; Witmwer & Ferreri, 2014); that educators believe that instruction should focus more on behavior, social / functional skills and communication (Cameron & Cook, 2013; McMullen, Shippen & Dangel, 2007; Sazak, Pinar, & Sucuoglu, 2011), and that students with disabilities should receive their primary academic instruction outside the general education setting from a special education teacher (Heiman, 2004;

Kieron, 2013; Sadioglu, Bilgin, Batu, & Oskal, 2013). The present study found that 49% of participants believe that education for students labeled as having autism should focus on communication and 46% of participants indicated that education should focus on functional skills. Only 3% of participants indicated that they believed educational focus for children with autism should be on behavior (see Figure 4). Additionally, this study found that 70% of participants indicated that students with autism should be educated with their non-disabled peers as much as possible, while only 22% indicated that students labeled as having autism should be educated in small classes with other students who have autism or disabilities (see Figure 5). Only 5% of participants indicated that they felt children labeled as having autism should be educated at a special school for students with autism or disabilities and 1% indicated students labeled as having autism should be educated in a vocational school or program. Georgia educators' beliefs regarding instructional focus were consistent with prior research. However, participants' beliefs did not fall in line with prior research regarding educational setting. Perhaps this can be attributed to the national inclusion initiative, where 90% of children labeled as having autism are mainstreamed at least part of their day in regular schools with non-disabled peers (U.S. Department of Education, National Center for Education Statistics, 2016).
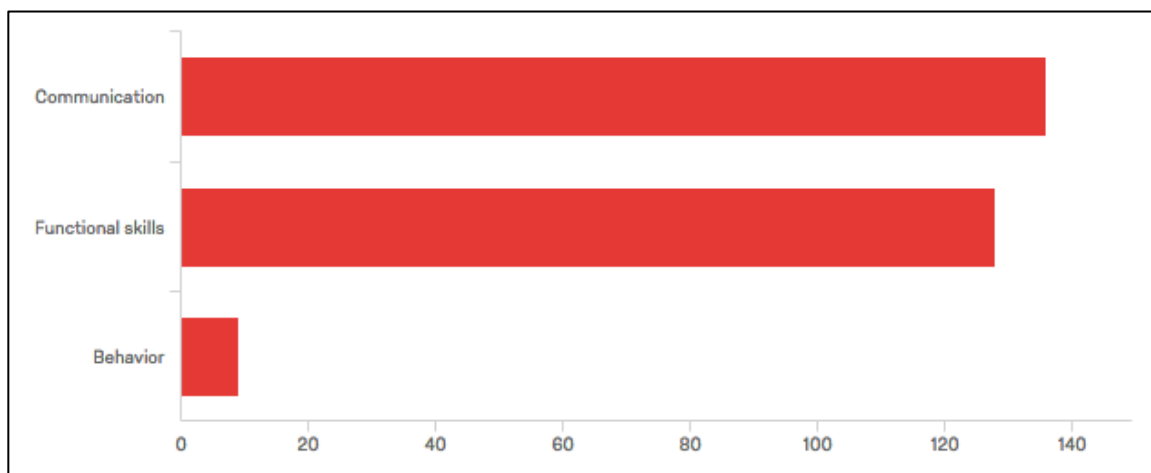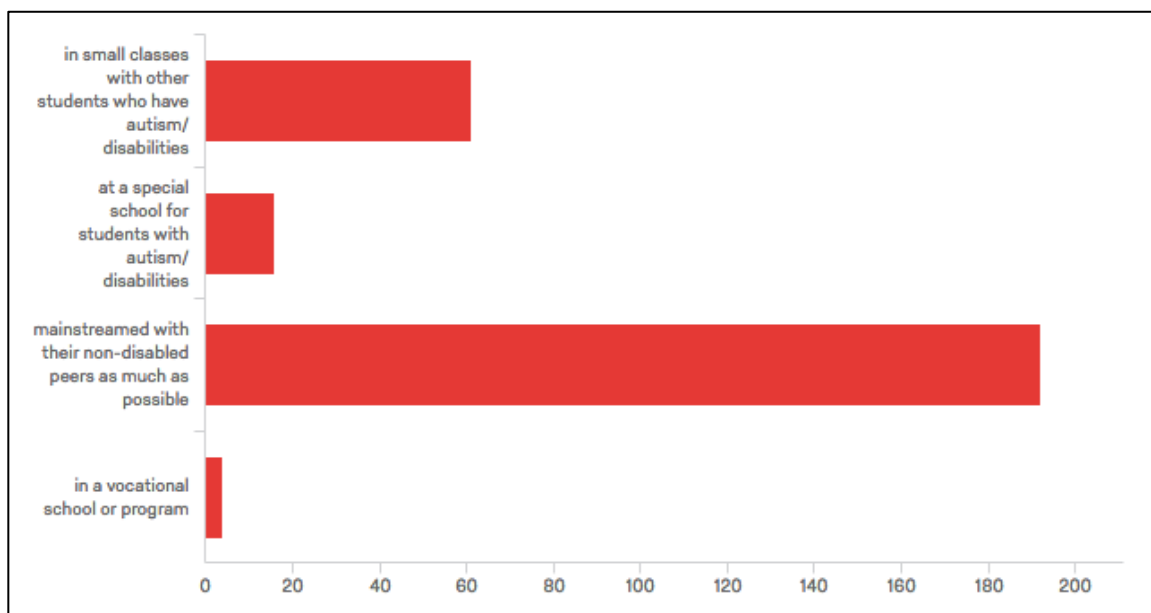
Figure 4

Educators' Beliefs about the Focus of Education for Students Labeled as Having Autism

Figure 5

Educators' Beliefs Regarding Educational Setting for Students Labeled as Having Autism

According to the literature, teachers have lower expectations for students labeled with disabilities than for students without a disability label (Shrifrer, 2013; Taylor, Smiley, & Ziegler, 1983). When asked if an autism label or diagnosis is helpful in

determining the needs, abilities and limitations of students they teach, 49% of participants strongly agreed that is was, while 40% somewhat agreed that is was helpful (see Figure 6). Only 8% somewhat disagreed and 1% strongly disagreed that an autism label or diagnosis was helpful in determining needs, abilities and limitations of their students. This is interesting because only 50% of participants correctly identified eligibility criteria for autism based on Georgia state rules (see Figure 7).

Figure 6

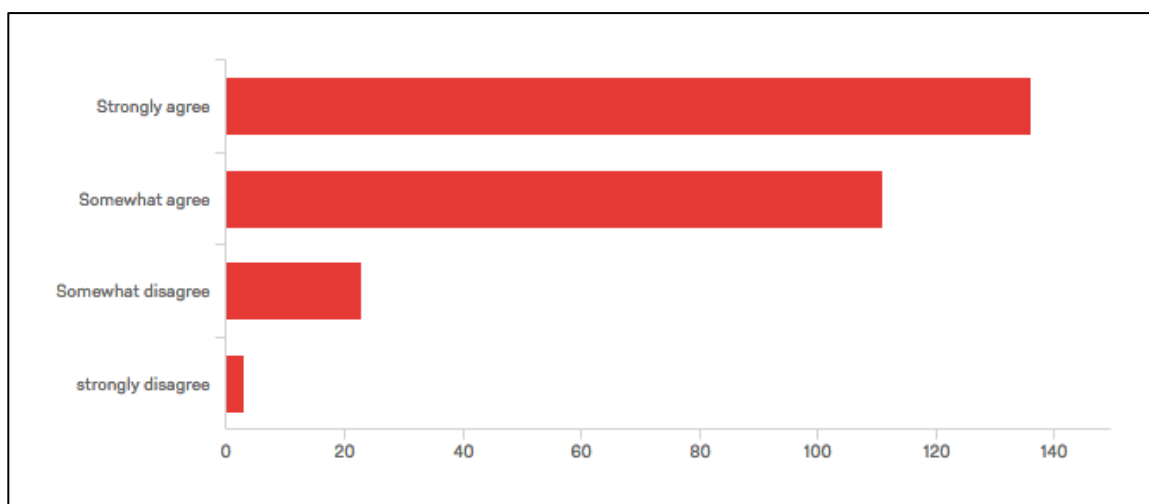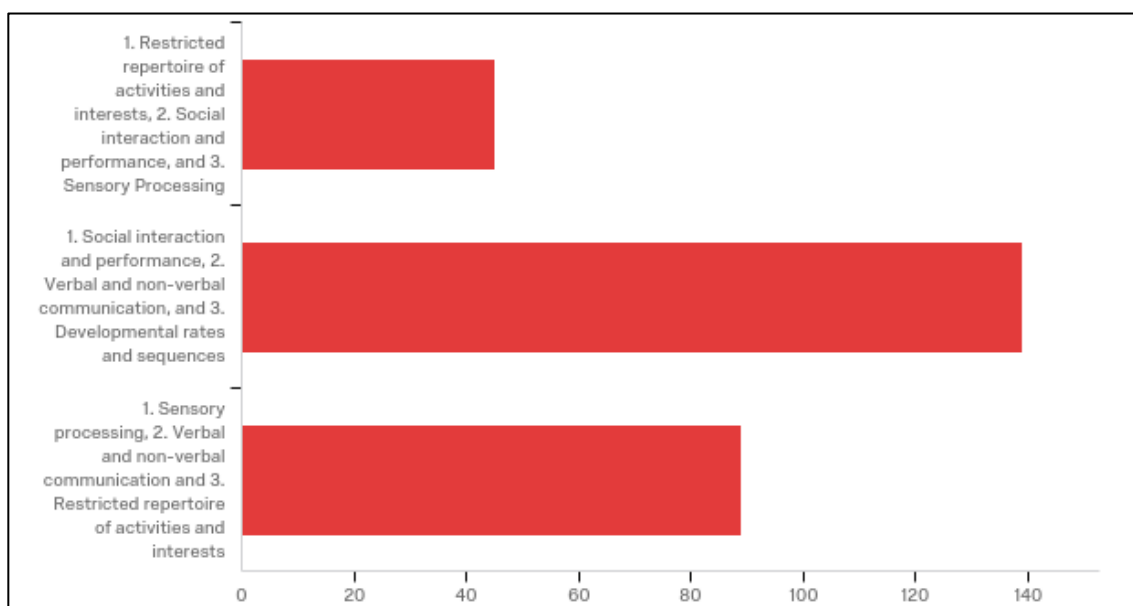*Educators' Beliefs about the Helpfulness of Labels*

Figure 7

Educators' Knowledge of Educational Eligibility Criteria for Autism

Without knowing the meaning of the label, such as which deficits are associated

with it, it is difficult to understand how the label could be helpful in determining

students' needs, abilities and limitations. Especially, as autism is such a broad spectrum a

label or diagnosis without an accompanying evaluation or report would prove to be very

shallow and vague, and yet 89% of educators surveyed maintained that the label is

strongly or somewhat helpful. Such perceptions could be attributed to some educators'

lack of knowledge and understanding about autism and best practices for teaching

students labeled as having autism. Best practice for specially designed instruction (SDI)

would dictate that instructional strategies be uniquely designed for individual student

needs. However, as this research has shown, teachers who do not have an education or

special education degree have less knowledge regarding best practices for teaching

students labeled as having autism, and would likely not have explicit knowledge of SDI

concepts leaving them to rely on a label to guide their practices. However, a label in isolation should not be taken into consideration when determining what a student's specific abilities and limitations are. More detailed investigation is needed to determine if there are any significant relationships between educator characteristics and those educators who believe labels are helpful in determining abilities, needs and limitations. However, it is clear that with 89% of educators from this sample indicating that labels are helpful in planning for students' instruction, there is an inconsistency between what educators say and what they do. That is, the majority of educators from this study (over 65%) believe that autism is a neurological difference, however and at the same time early 90% of educators from the sample adopt the shallow view that a label can prove helpful in determining students abilities, needs and limitations. If educators who reported that autism is a neurological difference practiced in-line with what they reported, they would recognize that as a neurological difference, no two people labeled as having autism are the same, have the same needs, abilities, or limitations. They would realize to plan differentiated instruction most effectively would require more than just reading a label, but in-depth evaluation of the student's abilities and weakness. In identifying autism as a neurological difference, educators may be using language to describe autism that they feel is expected or politically correct; however, their practices, knowledge and underlying perceptions of autism have not shifted to align with the values couched in the language they use. The practice of relying on a disability label for educational planning is ablest, this is indeed an area worth further study and messaging to the educational community.

Media influence. Arif, Naizy, Hassan, and Ahmed (2013) reported that 55% of participants (teachers) knew about autism only from the media, while only 9% had

learned about autism through professional development such as workshops or formal trainings. Additionally, Al-Shartbati et. al., (2015) and DeVilbiss and Lee (2014) discussed the influence of the media on teacher perceptions about autism. The present study found that the majority of educators learned about autism through personal experience and professional development, 61% and 14% respectively. Less than 18% of participants indicated that some form of popular media had the biggest impact on their understanding of autism (see Figure 8).

Figure 8

*Educators' Biggest Impact on Understanding of Autism*
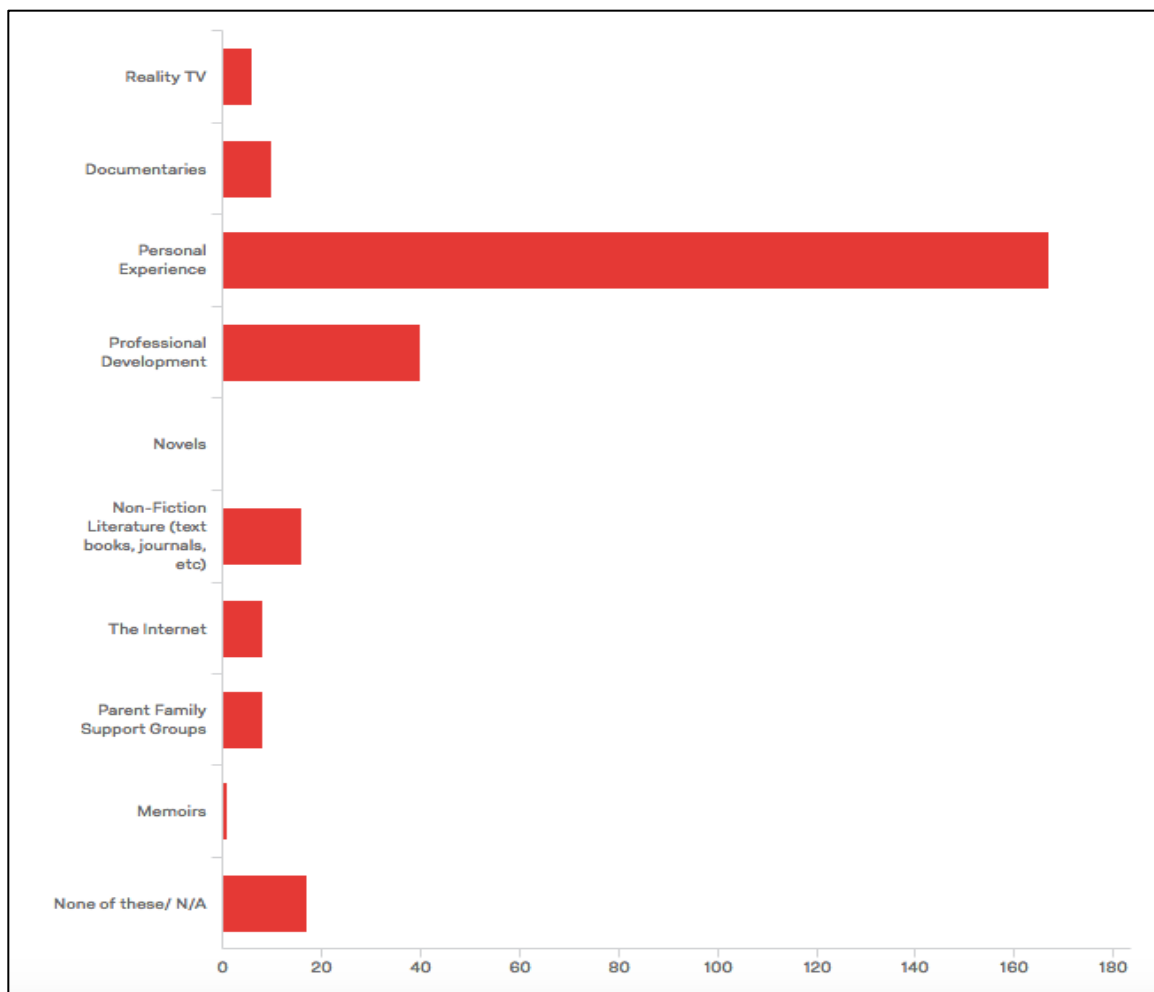
This discrepancy could be attributed to the target sample group; in Georgia, autism is the

6th most prevalent disability category out of 12 categories (U.S. Department of Education,

2016a), and nationally, autism is the 4th most prevalent category out of 13 disability

categories (Georgia does not utilize the category 'multiple disabilities') (U.S. Department

of Education, 2016a). For this reason, Georgia educators, as well as most educators in

the U.S. would have more experiences educating students labeled as having autism than

educators surveyed internationally, especially given the fact that about 90% of children

with autism are mainstreamed in regular educational settings for at least part of their day

(U.S. Department of Education, 2016b). Additionally, this study found that educators

who reported more media exposure regarding autism were already likely to have

knowledge about autism (held a special education degree, reported personal experiences,

were a special educator, and had more professional development regarding autism). For

this reason, it is uncertain whether or not teachers were reluctant to report that media was

their biggest influencer regarding autism, or whether some educators might not identify

particular media representations as representing *autism* and may identify these as some

other "*developmental delay*." Those with more knowledge about autism would likely

recognize the representations of autism in the media, while educators with less

knowledge about autism may not recognize the representations of autism.

Knowledge of autism. Syriopoulou-Delli, Cassimos, Tripsianis, &

Polychronopoulou (2012) found that teachers who had specialized training regarding

autism and experience working with students labeled as having autism had more accurate

knowledge of autism. The present study's findings were consistent with the study done

by Syriopoulou-Delli, Cassimos, Tripsianis, & Polychronopoulou (2012); as educators

who hold degrees in special education and education had significantly more knowledge of best practices (see Tables 9 & 10). Additionally, educators with more teaching experience (i.e., 6-10, 11-20, and 20+ years) had significantly more knowledge of best practices for working with children labeled as having autism (see Tables 11 & 12). There is not a positive correlation among the groups to indicate that as years of service increase so do knowledge of best practices scores increase. Finally, educators who work in inclusive classrooms and in various sites (such as resource rooms, community based instruction, therapy rooms, etc.) have significantly more knowledge about autism and knowledge of best practices for working with children labeled as having autism than educators working in general education classrooms (see Tables 13, 24, 14 & 16).

Al-Shartbati, et.al. (2015), Arif, Naizy, Hassan, and Ahmed (2013), Johansson (2014), and Yingna, et. al. (2016) found limited awareness and knowledge about autism among educators. The present study found that participants' knowledge about autism scores fell into a standard bell curve. The standard deviation was 1.30, and participants mean knowledge score was 3.72 with a possible maximum score of 7.00 and minimum score of 0.00. Only 2 participants had a knowledge score of 7.00, while 22 scored 6.00, 50 scored 5.00, 80 scored 4.00. That is, 56% of participants correctly answered more than half of the survey items about knowledge of autism.

Figure 9

Educators' Knowledge about Autism
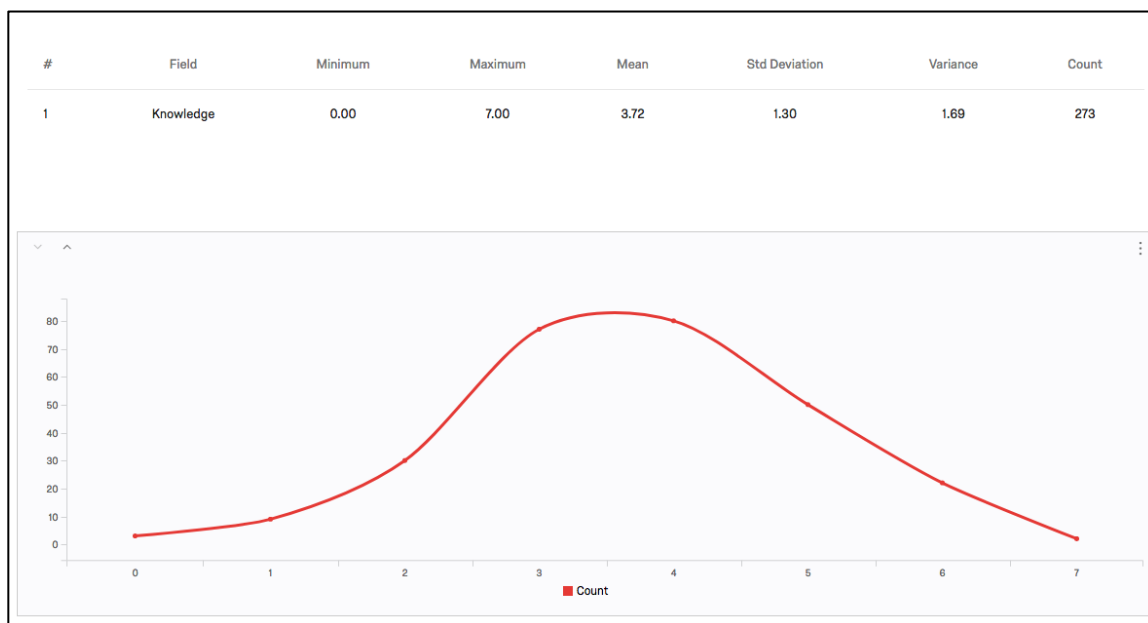
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Knowledge	0.00	7.00	3.72	1.30	1.69	273

Hendricks (2011) found that special educators who serve students with autism have low to intermediate levels of knowledge regarding autism and effective instructional strategies. The present study found that educators' knowledge of best practices for teaching students with autism scores fell into a standard bell curve. The standard deviation was 1.04, and participants' mean knowledge of best practices score was 2.16 with a possible maximum score of 4.00. That is, 73% of participants correctly answered at least half of the survey items about knowledge of best practices for teaching students labeled as having autism. Additionally, the present study found that special educators had significantly higher scores regarding knowledge of best practices for students labeled as having autism than general educators and other education professionals.

Figure 10

Educators' Knowledge of Best Practices for Teaching Students Labeled as Having ASD

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	best Practices	0.00	4.00	2.16	1.04	1.09	273
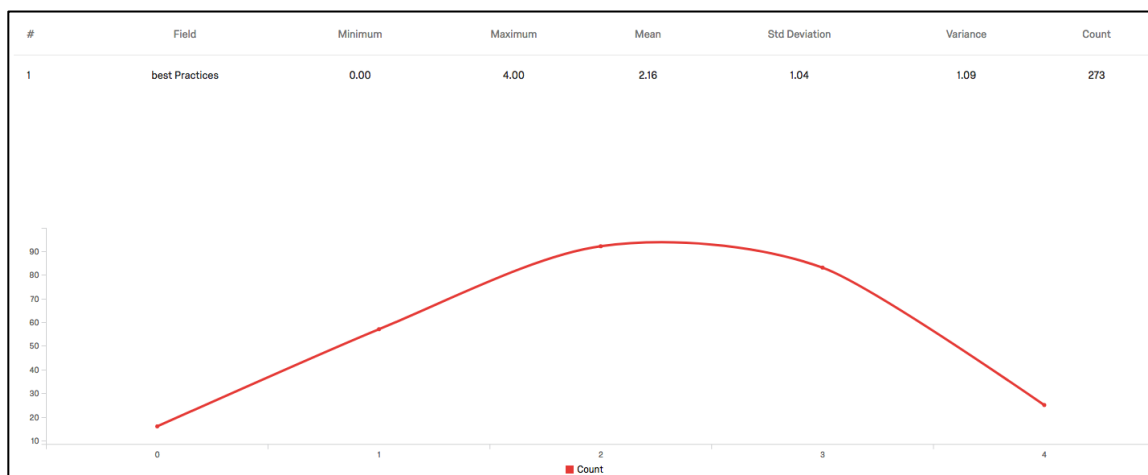
Quantitative Data Analysis

Variables. Data was analyzed using Statistical Package for the Social Sciences (SPSS). A Pearson correlation matrix (see Table 7) was generated to examine relationships between variables including total scores for educators' media usage, educators' identification with popular media representations of autism, educators' beliefs regarding the positivity and accuracy of media portrayals of autism, and educators' knowledge about autism and best practices for teaching students labeled as having autism.

Statistical analysis reveals that educators' identification with popular media was positively and statistically related, at the .01 level of significance, to educators' knowledge of best practices for students labeled as having autism, and negatively related with educators' knowledge about autism. Additionally, educators' perception of the positivity of autism portrayed in the media is positively and statistically related, at the .01

level of significance, to educators' perception of the accuracy of autism portrayed in the media. Further, educators' perceptions and knowledge about autism is positively and statistically related, at the .01 level of significance, to educators' knowledge of best practices for students labeled as having autism. There was not a statistically significant relationship between educators' media usage and (1.) perceived knowledge of autism, (2.) knowledge of best practices for students labeled as having autism, (3.) identification with popular media representations of autism, or (4.) perceived accuracy of popular media representations of autism. However, statistical analysis reveals that media usage is positively and statistically related at the .05 level of significance, to perceived positivity of popular media representations of autism. These results indicate that educators who have higher levels of media usage also perceive popular media to represent autism more positively.

Moreover, these results indicate that educators, who have higher scores for identifying with popular media representations of autism, also tend to have higher scores regarding their knowledge of best practices, but tend to have lower scores regarding their knowledge about autism. It is interesting that educators who identify with popular media representations of autism have less knowledge about autism. One explanation for this could be that popular media representations of autism do not always align with what we currently know to be true about autism. It was also quite interesting that educators who identified with popular media representations of autism had more understanding of best practices for teaching children labeled as having autism; further examination in this area is needed to understand this relationship.

Additionally, educators who believe media portrayals of autism are realistic, also tend to believe that media portrayals of autism are positive. This relationship is interesting as it does not align with much of the current literature regarding media portrayals of autism (Berger, 2008; Burks-Abbott, 2008; Holton, Farrell, & Fudge, 2014; Jones & Harwood, 2009; Loftis, 2015; Murray, 2008a; Sarrett, 2011). This relationship is significant for teacher educators, as they work to link critical disability studies with teacher preparation by working with teacher candidates' to critically examine perceptions of popular media portrayals of autism.

Also, educators who have higher scores for knowledge of autism tend to have higher scores regarding their knowledge of best practices for students labeled as having autism. This relationship shows that it is important for educators to have a good foundational understanding of autism in order to best provide educational services for children labeled as having autism. It is important to be sure that basic foundational knowledge of autism is taught as a part of teacher education programs and in professional development opportunities for available for teachers.

Finally, results indicate that educators who have higher levels of media usage also perceive popular media to represent autism more positively. Further examination in this area is needed to understand this relationship more thoroughly.

Personal information. Frequency tables were generated to determine if the response size to demographic item response categories were adequate to include in one-way ANOVA data analysis for each independent variable. Demographic item response categories with inadequate response sizes were excluded from one-way ANOVA data analysis, as statistically reliable analysis could not be obtained due to the small response

size. One-way ANOVA and Bonferroni Post-Hoc tests were conducted to determine if a

significant relationship existed between independent variables and dependent variables,

and if so, which significant differences existed among item response categories.

    Age. Statistical analysis of educators' identification with popular media

representations of autism show a statistically significant mean difference, at the .05 level,

among the age groups examined. A one-way ANOVA indicated a significant difference

($F(3, 260) = 5.477$, $p = .001$) among educators aged 50-59 and educators aged 20-29 and

30-39. Significant relationship was not found with regard to educators aged 40-49. Post-

Hoc [Bonferroni] analysis was conducted to explore the differences among the groups

and indicated educators aged 20-29 and 30-39 had significantly lower scores (indicating

less identification with popular media representation of autism) than those educators aged

50-59. This signifies that educators aged 50-59 identify more with popular media

representations of autism than younger educators. Perhaps this is due to popular media

representations of autism fitting the traditional medical model of disability, which much

of the historical media supporting this view may not be accessed by a younger group of

educators.

    Degree type. There was a statistically significant difference between groups at

the .05 level, as determined by one-way ANOVA ($F(4, 267) = 7.645$, $p = .000$; see Table

9). A Bonferroni Post-Hoc test revealed that educators who hold a content area degree

had significantly lower scores in knowledge of best practices for student labeled as

having autism than educators who hold degrees in special education or education (see

Table 10).

Additionally, there was a statistically significant difference between groups at the.05 level, as determined by one-way ANOVA ($F(4, 267) = 6.584$, $p = .000$; see Table 17). A Bonferroni Post-Hoc test revealed that educators who hold a special education degree reported more exposure to popular media representations of autism than educators who hold degrees in education or a content area (see Table 18). There were no statistically significant relationships found between dependent variables and educators who hold degrees in another professional area or educators who hold both education and special education degrees.

Highest level of education. Statistical analysis indicated that there were no significant relationships found between educators' highest level of education, and dependent variables (i.e., perceived knowledge of autism, knowledge of best practices for students who have autism, perception of positivity or accuracy of media portrayal of autism, popular media exposure, or identification with popular media representations of autism).

Years of teaching experience. Statistical analysis of educators' knowledge of best practices for students labeled as having autism show a statistically significant mean difference, at the .05 level, among the groups examined. A one-way ANOVA (see Table 11) indicated a significant difference ($F(4, 268) = 2.659$, $p = .033$) among educators teaching 0-3 years and educators teaching 6-10, 11-20, and 20 + years. Post-Hoc [Bonferroni] analysis was conducted to explore the differences among the groups and indicated educators teaching 0-3 years significantly lower scores (indicating less knowledge of best practices for students labeled as having autism) than those educators teaching 6-10, 11-20, and 20 + years (see Table 12). Generally, teachers with 3 and less

years of teaching experience are still given mentors and required to attend new teacher professional development trainings. Additionally, the Teacher Keys Evaluation System (TKES) of Georgia requires all teachers with 3 and less years of experience to have more observations by their administrators than teachers with more years of experience. It seems fitting that teachers with 3 and less year of experience would need extra support, especially given the results of this study which indicate that educators with 3 and less years of teaching experience have less knowledge of best practices for students labeled as having autism.

Professional development regarding autism. Statistical analysis found that there were no statistically significant relationships between professional development and educators' knowledge about autism, best practices for students labeled as having autism, educators' identification with popular media representations of autism, or perceptions regarding portrayal of autism in the popular media (positivity and realism).

Statistical analysis of reported exposure to popular media representations of autism show a statistically significant mean difference, at the .05 level, among the groups examined. A one-way ANOVA indicated a significant difference ($F(3, 269) = 17.222$, *p* = .000*)* among educators who had professional development experience through college course work, trainings, conferences and workshops and all other response groups (see Table 19). Post-Hoc [Bonferroni] analysis was conducted to explore the differences among the groups and indicated educators who had professional development experience through college course work, trainings, conferences and workshops had significantly higher scores (indicating more exposure to popular media representation of autism) than all other groups (see Table 20).

Personal experiences with autism. Statistical analysis found that there were no statistically significant relationships found between personal experiences with autism and educators knowledge about autism, best practices for students labeled as having autism, educators' identification with popular media representations of autism, or perceptions regarding portrayal of autism in the popular media (positivity and realism).

Statistical analysis of reported exposure to popular media representations of autism show a statistically significant mean difference, at the .05 level, among the groups examined. A one-way ANOVA indicated a significant difference ($F(1, 271) = 28.677$, $p = .000$) among educators who had personal experiences with autism and educators who have not had personal experiences with autism (see Table 21). Analysis revealed that educators who had personal experiences with autism reported significantly more exposure to popular media representations of autism than educators who have not had personal experiences with autism (see Table 22).

Type of school where employed. Educators were asked to identify the setting in which they work from among the choices: (a) elementary school, (b) middle school, (c) K-8 school, (d) high school, (e) vocational school, (f) special school, (g) post-secondary, (h) various, (i) community based, or (j) private setting. Statistical analysis indicated that there were no significant relationships found between the type of school educators worked in, and dependent variables, (i.e., perceived knowledge of autism, knowledge of best practices for students who have autism, perception of positivity or accuracy of media portrayal of autism, popular media exposure, or identification with popular media representations of autism).

Type of classroom where employed. Statistical analysis of educators' knowledge about autism shows a statistically significant mean difference, at the .05 level, among the groups examined. A one-way ANOVA indicated a significant difference ($F(3, 254) = 4.254$, $p = .006$) among educators who work in a general education classroom and educators who work in an inclusive classroom and in various class sites (see Table 15). Post-Hoc [Bonferroni] analysis was conducted to explore the differences among the groups and indicated educators who work in a general education classroom had significantly lower scores regarding knowledge about autism than those educators who work in inclusive classrooms and in various sites (see Table 16).

Additionally, statistical analysis of educators' knowledge of best practices for students labeled as having autism shows a statistically significant mean difference, at the .05 level. A one-way ANOVA indicated a significant ($F(3, 254) = 6.705$, $p = .000$) difference between educators who work in a general education classroom and educators who work in an inclusive classroom and in various class sites (see Table 13). Post-Hoc [Bonferroni] analysis was conducted to explore the differences among the groups and indicated educators who work in a general education classroom had significantly lower scores regarding knowledge of best practices for students labeled as having autism than those educators who work in inclusive classrooms and in various sites (see Table 14).

Educator Classification. Statistical analysis of educators' knowledge of best practices for students labeled as having autism shows a statistically significant mean difference, at the .05 level. A one-way ANOVA indicated a significant ($F(2, 269) = 9.974$, $p = .000$) difference between general educators and special educators and other education professionals (see Table 25). Post-Hoc [Bonferroni] analysis was conducted to

explore the differences among the groups and indicated general educators had

significantly lower scores regarding knowledge of best practices for students labeled as

having autism than those special educators and other education professionals (see Table

26).

Table 25

Results for Analysis of Variance (ANOVA) for Educator Classification & Best Practices

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20.496	2	10.248	9.974	.000
Within Groups	276.386	269	1.027		
Total	296.882	271			

Table 26

Results for Post-Hoc Multiple Comparisons (Bonferroni) for Educator Classification &

Best Practices

(I) Are you currently a special educator or general educator?	(J) Are you currently a special educator or general educator?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Special educator	General educator	.53130*	.15249	.002	.1639	.8986
	Other education professional (therapist, consultant, psychologist, administration, etc.)	-.10307	.21256	1.000	-.6151	.4090
General educator	Special educator	-.53130*	.15249	.002	-.8986	-.1639
	Other education professional (therapist, consultant, psychologist, administration, etc.)	-.63437*	.18332	.002	-1.0760	-.1927
Other education professional (therapist, consultant, psychologist, administration, etc.)	Special educator	.10307	.21256	1.000	-.4090	.6151
	General educator	.63437*	.18332	.002	.1927	1.0760

*. The mean difference is significant at the 0.05 level.

Additionally, statistical analysis of reported exposure to popular media representations of autism show a statistically significant mean difference, at the .05 level, among the groups examined. A one-way ANOVA indicated a significant difference ($F(2, 269) = 6.957$, $p = .001$) among general educators and special educators (see Table 23).

Analysis revealed that special educators reported significantly more exposure to popular media representations of autism than general educators (see Table 24).

Conclusions

There are several relevant findings by this study. First, there is no correlational relationship between media usage and knowledge of autism, knowledge of best practices for teaching students with autism, or identification with popular media representations of autism. This finding appears to contradict the author's (Al-Shartbati et. al., 2015; Arif, Naizy, Hassan, & Ahmed, 2013; DeVilbiss and Lee, 2014) qualitative theoretical assumptions and quantitative findings that media has a large influence over educators' knowledge and perceptions of autism. This relationship will be discussed further in chapter 5, however more research needs to be done to determine why the findings of this dissertation study differ from those findings published in 2014 and 2015.

Second, factors contributing to more knowledge of best practices for teaching students labeled as having autism include more years of teaching experience, specialized training, and working in inclusive or varied settings (such as a resource room or therapy room). It is reassuring that more years of experience and specialized training in the education field does lead to better practices among educators. Additionally, it is positive that educators, who work in inclusive settings, as well as various settings, also have better understanding of best practices for teaching students labeled as having autism since they are more considerably likely to teach students who have an autism label. However, there may be gaps in teacher education regarding best practices for teaching students who have an autism label, due to the fact that new educators' knowledge in this area is significantly lower than veteran teachers. Additionally, given that just over 50% of educators in this

sample could not correctly identify the core deficits associated with an autism eligibility, it is clear that even knowledge in the later years may not be "good enough" to adequately address students needs. Teacher education is needed to help educators recognize student needs that may be associated with their autism, and to empower students to learn with appropriate accommodations and specialized instructional strategies designed to meet their strengths and needs. Educators cannot rely on one-size-fits-all educational planning based on a disability label, especially one that they do not fully understand. Third, the majority of educators did not associate autism with negative traits, nor did they align with early theories of autism. Fourth, educators' beliefs about the most important focus of education aligned with prior findings, noting communication and functional skills as priority. Contrary to prior findings (Heiman, 2004; Kieron, 2013; Sadioglu, Bilgin, Batu & Oskal, 2013), educators believed that students with autism should be educated with their non-disabled peers as much as possible. Finally, the majority of educators learned about autism through personal experiences or professional development, not popular culture media.

The final chapter will provide a discussion of relevant findings including an interpretation of the results relative to the research questions. Additionally, implications resulting from this study regarding teacher preparation and educator professional development will be presented. Limitations of this study as well as and recommendations for future research will also be discussed.

CHAPTER 5

LEARNING FROM THE PUZZLE

Summary of the Research

The purpose of this study was to estimate the relationship between Georgia educators' personal characteristics, media usage and their perceptions of autism including knowledge about autism, best practices for teaching students labeled as having autism, perceived positivity and accuracy of popular media representations of autism, as well as participant identification with popular media representations of autism. In order to understand the correlation among these variables, a quantitative correlational design method was used. The study is designed to answer the research questions:

1. What are educators' perceptions of autism?

2. What is the relationship between media usage and educators' perceptions of autism?

3. What is the relationship between personal characteristics and educators' perceptions of autism?

Discussion of Findings

There are several relevant findings by this study. First, there is no correlational relationship between media usage and knowledge of autism, knowledge of best practices for teaching students with autism, or identification with popular media representations of autism. This finding contradicts the author's (Al-Shartbati et. al., 2015; Arif, Naizy, Hassan, & Ahmed, 2013; DeVilbiss and Lee, 2014) qualitative theoretical assumptions and quantitative findings that media has a large influence over educators' knowledge and perceptions of autism. Perhaps the educators in my sample have had more exposure to

autism than educators in other study samples. This would be plausible as autism is the 6th
largest special education eligibility category in Georgia (U.S. Department of Education,
n.d.), and because due to the national inclusion initiative, 90% students labeled as having
autism are educated in the general education setting for at least part of the day (U.S.
Department of Education, 2016b). This research has shown that live-in-person
experiences are more influential than simulated experiences such as those experienced
through media, however more research in this area is needed.

Second, factors contributing to more knowledge of best practices for teaching
students labeled as having autism include more years of teaching experience, specialized
training, and working in inclusive or varied settings (such as a resource room or therapy
room). Educators with 6 or more years of experience teaching had significantly more
knowledge of best practices for teaching students labeled as having autism than educators
teaching 3 or less years. The results indicate that greater experience provides educators
with a knowledge base of best practices. Additionally, educators who work in inclusive
or varied environments have greater knowledge of best practices for teaching students
labeled as having autism; perhaps this is due to the fact they these educators must
regularly teach diverse students, so they are more familiar with SDI. Further, specialized
training, that is a degree in education or special education, also provided teachers with
greater knowledge of best practices for teaching students labeled as having autism. This
finding demonstrates that specific training in education or special education better
prepares educators to teach diverse learners than only having a content area degree. This
is significant because due to the nationwide shortage of teachers, many states are
allowing for alternative routes to teacher certification, which do not require any

specialized education coursework to teach as a special education teacher. As a result school districts must work to provide the necessary professional development in educational strategies and specially designed instruction.

Third, the majority of educators did not associate autism with negative traits, nor did they align with early theories of autism. The results of this study indicate that negative popular media representations of autism are not influencing educators' perceptions. Educators did not associate autism with negative characteristics. Additionally, the majority of educators in this study did not associate autism or the causes of autism with historical frameworks of Asperger, Kanner, or Bettlehiem. That is, educators did not identify with key tenets previously taken as fact about autism such as having intelligent parents, a causation due to cold or detached parents, or that a child with autism is a normal child trapped inside himself. The results indicate that educators' understanding about autism is beginning to shift away from these historical frameworks influenced by classic works about autism, that have had long lasting effects on parents and family members of people labeled as having autism.

Fourth, educators' beliefs about the most important focus of education aligned with prior findings, noting communication and functional skills as priority. It is important to note that the area educators believed was the most important to focus on educationally was communication. This is significant because communication impairments are in fact part of the diagnostic criteria for autism outlined in the DSM-5, as well as a key element of eligibility criteria for special education services provided through autism outlined by the Georgia state rules and regulations. It is important that educators recognize impairments and work to accommodate and strengthen those skills

so students can more easily overcome barriers associated with autism related

impairments. Interestingly, functional skills were also identified as an area of importance

by some 46% of educators in this study. This implies that people labeled as having

autism need support functioning in their environment. Indeed educators recognize that

students labeled as having autism do face barriers in their environment that with

instruction could be minimized, thus increasing independence. As it is important for

educators to foster independence and success with all their students, so too is it important

to focus on improving functional skills. However, there is a fine line between providing

the skills to minimize disabling social factors and locating the disability within the

individual. Once the problem is located within the person, accommodations and attending

to systemic ableism stop being important, and all attention is focused on fixing the

problem of the child. This only reinforces systemic ableism and negatively impacts the

child. Educators need to be cognizant of why they believe what they do about

educational focus for students labeled as having autism, as well as understand the

implications of identifying educational focus within the medical model of disability.

Educators' beliefs about the focus of education should be grounded in fostering

empowerment and independence among their students. When the focus of education is

solely to minimize differences of the child and not to minimize disabling barriers,

education becomes normalizing and itself ablest. Although educators may understand

best practices for teaching students labeled as having autism it is important that they are

utilizing theses strategies for empowerment, rather than normalization. For these reasons

it is so important that both educator preparation (methods courses) and the critical

disability model be taught to educators.   It is the great responsibility of educators to

educate for an ethical purpose; more harm than good can be done if education is solely for the purpose of fixing the student's differences. Diversity needs to be celebrated and accommodated, not erased.

Contrary to prior findings, educators believed that students with autism should be educated with their non-disabled peers as much as possible. This finding is consistent with inclusion initiatives and Least Restrictive Environment (LRE) regulations of IDEA. Inclusive education is still relatively new in the education world; depending on the area inclusive education may have only been implemented in the last 10-15 years. Currently, in Georgia inclusion is the norm; veteran teachers have had some time to adjust, and inclusion is all that newer teachers know. Further, the federal government and the state of Georgia track students with disabilities and their involvement in the general education setting. Districts that are found to be disproportionately educating students with disabilities in more restrictive environments are fined 10-15% of the federal funding they receive from IDEA, for larger districts this can total to over a million dollars. Clearly, with public education funding tied to inclusion districts are invested in educating all students with disabilities including those labeled as having autism (6th largest eligibility area) in the most inclusive environment as possible. Perhaps what comes to mind regarding separate classrooms and separate educational facilities is what is most typical in Georgia; that is separate classrooms for medically fragile children, and separate educational facilities for children with severe emotional and behavioral disorders such as Georgia Network for Educational and Therapeutic Support (GNETS) in Georgia, or alternative settings for students who would otherwise be expelled for severe conduct issues such as bringing weapons or drugs to school. Clearly students labeled as having

autism do not fit the typical profile of students who are educated outside the general education setting. Additionally, as inclusion of students labeled as having autism is more and more common, educators may have had experiences teaching students labeled as having autism in their classes. Perhaps seeing students labeled as having autism being successful in general education environments has influenced their perceptions of what setting is most appropriate.

Finally, the majority of educators learned about autism through personal experiences or professional development, not popular culture media. This is significant for teacher educators as they plan field experiences, student teaching and professional development. It is important to remember that not all educators have backgrounds in education, therefore they may not have had the extensive field work experiences or student teaching experiences that traditional educators may have had. These experiences need to be carefully crafted to give teachers genuine, positive and pragmatic experiences teaching and meeting the needs of diverse learners, including those students labeled as having autism. For teachers on an alternative certification track, professional development needs to be experiential and authentic. Lemus-Hidalgo (2017) noted that, "teachers' teaching practices appear to be mainly supported by their experiential knowledge and driven by their core beliefs; beliefs that are grounded in experience" (p.447). Additionally, community based experiences working with students labeled as having autism are equally important so educators can see the real implications of impairment as well as the systemic barriers that people labeled as having autism face. Experiences of this type will give educators a context for their instruction; affording

insight into providing accommodations and teaching skills needed to foster independence.

Implications

       This study has many important implications for teacher educators. This study suggests that to improve teacher knowledge of best practices for teaching students with autism, teacher education experiences should include specialized training regarding autism and field experiences in inclusive and varied settings (i.e., resource rooms therapy room, community based etc.). Additionally, specific training and professional development regarding autism as well as field experiences with programs who serve people labeled as having autism should be a part of teacher preparatory programs. Because professional development and personal experiences were noted by participants to have the biggest influence on knowledge of autism (14% and 61% respectively), it is imperative that these experiences represent autism in positive, empowering, respectful, accurate and equalizing ways. Additionally, these experiences need to emphasize the importance of more than just communication and functional skills for students labeled as having autism. Educators should have high expectations for students labeled as having autism in the classroom and for adult life and post-secondary opportunities. Teacher expectations of their students effects educators' teaching practices as well as student outcomes. McKnown and Weinstien (2008) found that teachers tend to put forth more effort when they have high expectations for their students. Further, Warren (2002) found that teachers with low expectations for their students and a lack of efficacy lowered their teaching standards, put forth less effort and taught a "watered-down" curriculum which resulted in lower achievement for students. However, students of teachers who have

high expectations, challenge and support their students, often exceed their own expectations for what they believe they can achieve (Kuh, 2003).   Having high expectations for all students is extremely important; Rubie-Davis (2006) found that in only a single year students' self-perceptions of their abilities fall in-line with their teacher's expectations of them. Autism is such a vast spectrum, that to limit educational prospects based on perceptions associated with a label is harmful and disabling. The majority of educators in this research reported that an autism label is helpful in determining abilities, needs and limitations. Such a practice could prove to be harmful to students if teachers' expectations of students labeled a having autism are lowered. Additionally, although this study found that the majority of educators did not associate autism with negative characteristics, further research is still needed to determine how teachers conceptualize autism, that is, through which model of disability do they view autism and what are their expectations for students labeled as having autism. Such information will prove valuable to teacher educators as they plan specialized training and experiences for prospective teacher candidates.

Moreover, a critical disability model needs to be integrated into teacher education preparation. Disability studies and teacher education programs need not to be so disconnected. Prospective teachers need to be given the skills through the critical disability model to discriminate between ablest and normalizing forces present in the educational systems. They should be taught how to empower all students, including those labeled as having autism. That includes losing all assumptions that come with autism labels, and designing programming that is equalizing and meets the specific needs of unique students. To rely on autism label to determine goals, abilities, needs and

limitations is dangerous and truly disabling. Although educators in this study's sample do not report media as having the biggest influence over their perceptions of autism, it is important that they be able to discriminate ablest and normalizing views from those which are empowering for people with the autism label.

Finally, as the majority of educators believe that students with autism should be educated among their non-disabled peers as much as possible, it is important that educators do not try to impart normalizing practices on students labeled as having autism in efforts to help them conform to the norm. Educators need to be models in acceptance and accommodation in their schools. Dunn et. al. (1995) found that students who were accommodated with instructional interventions designed to meet their needs showed a statistically significant difference in achievement over students who were not accommodated. Moreover, Cornelius-White (2007) found that learner-centered teacher-student relationships had a positive association with cognitive, affective and behavioral outcomes.

Limitations

Limitations for this study included the reliability of responses based on participant sex. Statistically reliable analysis regarding sex could not be obtained due to the limited number of male respondents. There were 11 male respondents and 262 female respondents to this study's questionnaire, which is 4.03% and 95.97% respectively. Comparably, 20.3% of Georgia educators are male and 79.5% are female (Tio, 2017).

An additional limitation to this study is that it is impossible to know if educators are sincere in reporting their beliefs. Questions have been deliberately framed to reflect personal beliefs (i.e., knowledge about autism questions begin with 'In your opinion…')

in an effort to deflect responses that may not be genuine. A third, and closely related limitation, is that there may be differences between what teachers report as their beliefs regarding best practices for children labeled as having autism and what they actually practice in their classrooms.

Recommendations for Future Research

This study revealed questions that would be beneficial for further research to gain insight into representations of autism and educator practices. Further research could pose educators with various scenarios that could potentially occur in classrooms educating children labeled as having autism. Participants could then indicate their choice of teaching action responses to the specific scenarios. This would glean a deeper, more meaningful measure of educator understanding of best practices for teaching students labeled as having autism. Further, investigation of teacher expectations of children labeled as having autism and educators' conceptualization of autism with regard to disability models is needed to learn where educators locate disability (within the individual or society). Such investigation would also highlight if educational practices teachers use align with their conceptualizations of disability and autism. It is important for educators to challenge dominant discourses of normalization in schools, thus additional research is needed to learn about educators' abilities to discriminate empowering discourses of autism from those that are normalizing and ablest.

Learning from the Puzzle

It was surprising that popular culture media was not found to have a significant impact on educator perceptions of autism, knowledge of autism, or knowledge of best practices for teaching students labeled as having autism. Further investigation needs to

be done to confirm this finding. Additionally, it should be noted that the accuracy of educators' reporting regarding the amount of media exposure they have to autism may be inaccurate as they may not recognize each instance in which representations of autism are incorporated into popular media.   For example, educators may report they have seen 1-4 movies with autism portrayed when in actuality they have seen 25 or 30, but don't recognize that the characters could be labeled as having autism. Sometimes media may feature autism explicitly, however, autism may also be more subtly implied through character traits that may or may not be recognized or interpreted as autism.

Additionally, it was surprising that popular culture media was not identified as having a significant influence on educators' understanding of autism. Although these findings are not consistent with previous literature discussed internationally and nationally, they inform educational practice and further research for the regions in which this study was conducted. This contradiction could possibly be attributed to the fragmentation of today's popular culture; there is seldom a common popular culture as media is customized and tailored to meet individuals' interests, specifically through Internet media and the vast television and film options available. It should be noted that educators in Georgia or more generally, the south could be reluctant to note that they have learned about autism through popular culture media artifacts.

The results of this study filled a gap in the literature; quantitatively investigating popular culture media's impact on educators' perceptions of autism. Popular media representations of autism were not perceived by educators to have a significant impact on their understanding of autism, nor did exposure to popular culture media correlate with knowledge about autism or best practices for teaching students labeled as having autism.

Moreover, educators with more exposure to popular culture media did not identify with popular representations of autism put forth by various forms of media. In an age of technology and constant media input it is reassuring that educators do not gain understanding about autism or teaching practices for students with an autism label from popular media, but rather experiences and professional development. Such findings have valuable implications for teacher educators and educator preparatory programs.

As an educator and administrator for public school special education programs this project showed me that perceptions regarding autism among public school educators are mostly positive and accurate however, there is room grow. Educators with education and special education degrees have the highest scores regarding knowledge about autism and best practices for teaching students with an autism label; however, educators with content area degrees will surely be working with students labeled as having autism as well as 90% of students with autism are educated in the general education setting for at least part of the day (U.S. Department of Education, 2016). For this reason, it is important to increase the knowledge of autism and best practices for teaching students with autism labels among all educators. Additionally, educators' knowledge of autism and best practices for teaching students labeled as having autism could also be improved as the knowledge and best practices scores fell into standard bell curves. This shows that there are still some educators who do not have adequate knowledge to appropriately teach students labeled as having autism.

This study confirmed some of my personal experiences regarding teacher preparation and teaching students labeled as having autism. Personally, most of what I know about autism, I learned on the job, working with students, and learning from more

experienced educators in a specialized setting for students labeled as having autism. Additionally, many of the student teachers that I mentored working as an autism teacher graduated and went on to work in our district as special educators. These teachers have managed challenging behaviors and gone on to teach and grow students with diverse needs and abilities. Such experiential learning proved to be a benefit to these new teachers.

Having the knowledge from this study helps me as an administrator for special education programs as I plan professional development for educators in the schools I supervise as well as a part of district-wide trainings. I learned when planning trainings for educators that it is important to include experiential learning components. Additionally, it will be important to stress that a disability label should not be the main information source used to plan instruction. It must be stressed that autism is a vast spectrum and students with autism labels have diverse strengths, needs, abilities and limitations that are not determined solely by their label. An additional component that will be essential to any professional development is the importance of high expectations for all students. Further research will be important in learning about educators' beliefs regarding models of disability and where their perceptions of autism are couched. Educators do not have negative perceptions of autism, however, it is important to learn if they see autism as a medical deficit, a social disability or as a combination of impairment effects and social barriers. Professional development should be framed to help educators recognize ablest and disabling social forces, normalization, and accommodation of associated impairments.

Autism is in the public view with heightening coverage in popular culture media. Representations of autism in media portray various images of autism, families, and people labeled as having autism. Students labeled as having autism are increasingly included in general education settings. Educators must gain the appropriate knowledge and training about autism to be able to teach students with ASD labels at high levels. This dissertation informs teacher educators, fills a gap in the literature and exposes areas where additional inquiry is needed.

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APPENDIX A

QUESTIONNAIRE

I. Consent

College of Education

Department of Curriculum, Foundations, and Reading

Dear Teachers,

I am a doctoral candidate in Georgia Southern University's Curriculum Studies program, researching special educators' understanding about autism. I will be conducting a research project as a requirement for completion of my dissertation at Georgia Southern University.

The purpose is learn about teachers' understanding and perceptions regarding autism. The information generated will be used for academic research and dissertation publication. All information obtained will be treated confidentially. Personal information will remain anonymous.

The following information is provided in accordance with the Institutional Review Board (IRB) of Georgia Southern University, The U.S. Department of Health and Human Services' Ethical Principles and Guidelines for the Protection of Human Subjects of Research. The GSU IRB committee has approved this project, " Educators' perceptions of autism and the influence if media representations."

 You will be involved in the project by way of the following:

1. Data collected from 1 questionnaire.

Certainly, there are no risks you whether you choose to participate or opt out. In addition, you can choose to withdrawal from the project at any time without any consequences. The results published will not disclose any identifying information.

The purpose of this form is to allow you to participate in the project and to allow the researcher to analyze data obtained from the project to determine outcomes. Consent for this project is voluntary.

If you have any questions regarding this project, the rights of participants, or any potential concerns, please contact me, Mrs. Vanessa Keener at vk00451@georgiasouthern.edu, or the supervising faculty, Dr. D. Liston at ListonD@georgiasouthern.edu

Thank you in advance for your time and consideration regarding this matter.

Sincerely,
Vanessa Keener, M.Ed.

You may print a copy for your records.
Researcher name: Vanessa Keener

For questions or problems about your rights please call or write: Compliance Coordinator, ORSSP, Georgia Southern University, Box 8005, Statesboro, Georgia 30460, Telephone (912) 478-5465 E-Mail Address irb@georgiasouthern.edu

This project has been reviewed and approved by the GSU IRB under tracking number **H17431**.

1. I HAVE READ AND UNDERSTAND THE INFORMED CONSENT FORM, AND I AGREE TO PARTICIPATE.

☐ Agree
☐ Disagree

II. Background information

2. Are you or have you ever been an educator practicing in the state of Georgia?

☐ Yes

☐ No

3. Indicate your sex.

☐ Male

☐ Female

4. Indicate your age.

☐21-29 ☐30-39 ☐ 40-49 ☐50-59 ☐60-69 ☐70-79 ☐80+

5.Indicate your highest level of education.

☐ High School

☐ Associates Degree

☐ Bachelors Degree

☐ Masters Degree

☐ Specialist Degree

☐ Doctoral Degree

☐ Other Professional Certificate

6. Do you have a degree in special education, education, a content area or other?

☐ Special education

☐ Education

☐ Content area

☐ Other professional area

7. How many years of teaching experience do you have in your teaching career?

☐ 0-3 years

☐ 4-5 years

☐ 6-10 years

☐ 11-20 years

☐ 20+ years

8. Are you currently a special educator or general educator?

☐ Special educator

☐ General educator

☐ Other education professional (therapist, consultant, psychologist, administration, etc.)

☐ Itinerate Teacher

9. Do you have any professional development experience regarding autism?

☐ Only college level coursework

☐ Only trainings, conferences or workshops

☐ Both college coursework and trainings, conferences and workshops

☐ No professional development experience with autism

10. Do you have any personal experiences with autism? (such as having a family member or a friend who has autism).

☐ Yes

☐ No

11. Type of school you work in now?

☐ Elementary school

☐ Middle school

☐ K-8 school

☐ High school

☐ Vocational school

☐ Special School

☐ Post-secondary

☐ Various

☐ Community based

☐ Private Setting

12. Type of classroom you work in now.

☐General education classroom ☐Inclusive Classroom

☐Self-contained classroom ☐Resource room ☐Various

☐Community Based ☐Private setting

III. Media Usage

13. How many movies have you seen with autism portrayed?

☐0 ☐1-4 ☐5-10 ☐11-20 ☐More than 20

14. How many novels, fiction books, or memoirs have you read about autism?

☐0 ☐1-4 ☐5-10 ☐11-20 ☐More than 20

15. How many educational texts, non-fiction books or journal articles have you read about autism?

☐0 ☐1-4 ☐5-10 ☐11-20 ☐More than 20

16. How many different TV shows have you seen with autism portrayed?

☐0 ☐1-4 ☐5-10 ☐11-20 ☐More than 20

17. How often do you see advertisements about autism?

☐very rarely / almost never ☐a few times a year ☐monthly ☐weekly ☐daily

18. How often do you read/ watch a news story about autism?

☐very rarely/ almost never　　☐a few times a year　☐monthly　　☐weekly　　☐daily

19. In your experience, how do NEWS STORIES tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐accurately ☐Somewhat inaccurately ☐Not accurately at all

20. In your experience, how do INTERNET MEDIA such as blogs, social media, and educational/ advocacy sites tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐accurately ☐Somewhat inaccurately ☐Not accurately at all

21. In your experience, how do ADVERTISEMENTS tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐accurately ☐Somewhat inaccurately ☐Not accurately at all

22. In your experience, how do FICTION BOOKS tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐☐accurately ☐ Somewhat inaccurately ☐Not accurately at all

23. In your experience, how do NON-FICTION BOOKS tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐ Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐accurately ☐ Somewhat inaccurately ☐Not accurately at all

24. In your experience, how do TV SHOWS tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐ Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐☐accurately ☐ Somewhat inaccurately ☐Not accurately at all

25. In your experience, how do DOCUMENTARIES tend to portray individuals with autism?

A.

☐Extremely positive ☐ ☐☐☐☐☐☐☐☐☐☐☐☐☐e ☐ Somewhat negative ☐Extremely negative

B.

☐Extremely accurately ☐☐☐☐☐☐☐☐☐accurately ☐ Somewhat inaccurately ☐Not accurately at all

26. I learned about autism through (check all that apply):

☐ Reality TV

☐ Documentaries

☐ Personal experience

☐ Professional development

☐ Novels

☐ Non-fiction literature (text books, journals, etc)

☐ The Internet

☐ Parent/ family support groups

☐ Memoires

☐ Something else

☐ Knowledge & understanding

27. Which has had the biggest impact on your understanding of autism?

☐ Reality TV

☐ Documentaries

☐ Personal Experience

☐ Professional Development

☐ Novels

☐ Non-Fiction Literature (text books, journals, etc)

☐ The Internet

☐ Parent /Family Support Groups

☐ Memoirs

☐ None of these/ N/A

IV. Knowledge of Autism

28. In your opinion…

Students with autism should be educated...

☐ in small classes with other students who have autism/ disabilities

☐ at a special school for students with autism/ disabilities

☐ mainstreamed with their non-disabled peers as much as possible

☐ in a vocational school or program

29. In your opinion…

Educationally, it is most important for individuals labeled as having autism to focus on...

☐Communication   ☐Functional skills   ☐Behavior

30. In your opinion…

An Autism label or diagnosis is helpful in determining needs, abilities, and limitations of the students I teach.

☐ Strongly agree

☐ Somewhat agree

☐ Somewhat disagree

☐ Strongly disagree

31. In your opinion…

Elements of effective program for teaching children with autism DO NOT include

☐ Psychoanalysis

☐ Applied Behavior Analysis

☐ Auditory methods

☐ Visual methods

☐ Computer-based instruction

☐ Structured environment

32. Autism is...

☐ a developmental disability

☐ a form of schizophrenia

☐ an intellectual disability

☐ a neurological difference

33. **In your opinion…**

The cause of autism is …

☐ detachment

☐ vaccines

☐ diet

☐ environmental pollutants

☐ genetic

☐ neglect

☐ the cause is unknown

34. In order to receive special education through autism eligibility a child must meet this criteria

Adverse effect on a child's educational performance documented and minimally based on affected:

☐ 1. Restricted repertoire of activities and interests, 2. Social interaction and performance, and 3. Sensory Processing

☐ 1. Social interaction and performance, 2. Verbal and non-verbal communication, and 3. Developmental rates and sequences

☐ 1. Sensory processing, 2. Verbal and non-verbal communication and 3. Restricted repertoire of activities and interests

35. In your opinion…

Which trait IS associated with autism?

☐ Do not understand empathy or Theory of Mind.

☐ Being trapped inside themselves.

☐ Being good with math, computers, and systematic/ rote tasks.

☐ Having intelligent parents.

☐ Having emotional disturbances.

☐ Communication and language delays.

36. In your opinion…

Funding for autism is most important for...

☐ finding a cure for autism.

☐ finding the cause of autism.

☐ helping accommodate the environment for autistic people.

☐ providing support to family members of people with autism.

☐ raising acceptance/ awareness.

37. In your opinion…

The best way to advocate for autism is...

☐ Donate to national organizations (such as Autism Speaks, National Autistic Society, etc).

☐ Support and encourage local advocacy.

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APPENDIX B

LIST OF TABLES