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Affecting Teen Attitudes Through Positive Media Portrayals of Teens with Autism Spectrum Disorder

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Abstract

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MS, Rush University, 1989

BS, University of Illinois, 1987

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

A lack of knowledge about individuals with autism spectrum disorder (ASD) can create stereotypes, which serve as barriers to interaction. Television is a component in the development of social attitudes in teenagers. Using social learning theory as a framework, the purpose of this quantitative 2-group, posttest only, experimental design was to determine whether observational learning could be effective in generating positive teen attitudes toward peers with ASD. Senior high school students ($N = 130$) completed the Attitude Toward Disabled Persons (ATDP) Survey to determine whether observing a video clip can positively affect the attitudes of teens about their peers with ASD. A t test for independent sample groups was used to compare mean scores on the ATDP. According to study findings, 18-year-old students who watched a video clip of a panel of teens with ASD had more positive attitude scores ($M = 74.91$, $SD = 8.4$) than did the 18-year-old students who watched an innocuous video clip ($M = 48.57$, $SD = 9.1$), $t\ (128) = 17.14$, $p < .0001$. This finding was in alignment with the research on the impact of media on teen attitudes. The media representation of persons with disabilities may facilitate social change by helping to reduce negative stereotypes and to promote positive attitudes about person with specific disabilities. Positive attitudes toward teens with ASD can lead to positive social interactions between teens with and without ASD. In addition, this research may produce social change by fostering social experiences and opportunities for teens with ASD to learn social behaviors and social language by modeling their typical peers.

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Dedication

To Daniel, my son, with autism and who reminds me that life is to be lived simply, love should be given unconditionally, and happiness is about balancing fun with reflection. I love you Daniel. I am because of you, son.

Acknowledgments

I would like to thank my father for the passion to live each moment of each day as if it were my last. Dad, you were right, I could do it. I would like to thank my mother for the strength to survive all the bumps and bruises along the way. Our long talks kept me honest with myself. My five children have been my inspiration through this process. You remind me that God is great and exemplify courage, strength, passion, kindness, and laughter. You will change the world in which we live.

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Chapter 1: Introduction to the Study

Teens develop attitudes about the world around them from the contacts that they have with others. Socialization is a type of social learning based on contact. Family and friends are important in socialization and in creating a teen's attitudes and belief system (Arnett, 1995). Attitudes about a person can be described as what an individual knows about that person, how that person makes the individual feel, and the individual's intention to interact with that person (Bandura, 1989). Attitudes are functions of cognitive, affective, and behavioral components. Contact is influential in the development of teens' attitudes toward persons with disabilities. Stalker and Connors (2004) found that teens who grew up with a sibling who had a disability were able to identify the positive impact that this contact had on their attitudes toward their sibling, illustrating the positive impact that contact can have on attitude development (Ison et al., 2010; McDougall, DeWit, King, Miller, & Killip, 2004).

According to social learning theory, learning can occur not only through direct contact and experience, but also through watching others (Katz, Hass, & Bailey, 1988). In social learning theory, such vicarious contact can lead to learning, reinforcement, and imitation (Bandura, 2001). Viewing interactions can provide the modeling of a behavior, thus affecting a person's attitudes and perceptions about an event, person, or group. The simple act of observing something or someone can change attitudes and create biases (Baron, Byrne, & Branscombe, 2006).

The media provide the means of vicarious types of contact and might be especially influential for teens. In a national survey of 8- to 18-year-olds about media use, the Kaiser Family Foundation (2009) indicated that teens spend approximately 4 hours a

day viewing television. As a socialization agent for teens, television has the potential to provide positive vicarious contact with peers who represent various groups.

When applying social learning theory to the vicarious nature of media, media can affect the attitudes of viewers about outgroups. Joyce and Harwood (2012) studied the impact of television on the attitudes of 18- to 28-year-olds about illegal immigrants and found that viewing positive intergroup interactions resulted in more positive attitudes toward illegal immigrants; however, viewing negative intergroup interactions did not result in significant negative attitudes toward immigrants. In fact, negative media conditions and control conditions did not have an effect on prejudicial attitudes about illegal immigrants. Viewing positive experiences that involve persons with disabilities and accurate character representations of persons with disabilities in film and television programming can help individuals develop positive attitudes about persons with disabilities (Slater & Janin, 2011). Through such vicarious learning, television shows might increase the contact of teens with individuals with disabilities. The Gay and Lesbian Alliance Against Defamation (GLAAD, 2013) reported that fewer than 1% of the characters on television had disabilities; GLAAD suggested that an opportunity was missed to use television to increase the contact of viewers with persons with disabilities. It is possible to reinforce the positive socialization of teen viewers concerning teens with autism by using media as a socialization tool to model positive attitudes.

Television might positively affect teens' attitudes toward autism by including representations of television characters with ASD in popular programming. Although increasing numbers of individuals with ASD are being reported, there is a lack of research regarding the impact of observation learning through television on the attitudes

of teen viewers about autism. In an effort to fill this gap in the literature, I drew on social learning theory and contact theory to examine the impact of exposure to television characters with autism on teens' attitudes toward peers with ASD.

Background

Definition and Incidence of Autism

The criteria for autism presented in the American Psychiatric Association's (APA, 2013) fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), includes deficits in social communication and social interactions; the presence of restricted and repetitive patterns of behaviors, interests, or activities; and an onset early in the developmental period. Deficits in social communication include difficulty in social approach and response to social engagement. These challenges, along with restricted interests, interfere with the initiation of social interaction and peer relationships (APA, 2013). The symptoms and characteristics of ASD vary from person to person, but include deficits in social functioning that can lead to isolation.

The prevalence of teens with a diagnosis of ASD has increased by 78% over 5 years (CDC, 2012). The Centers for Disease Control and Prevention (CDC, 2007) reported that in 2002, 1 in 150 children had been identified with autism. Five years later, the CDC (2012) released information from 2008 on the rates of autism in the United States, which indicated that 1 in 88 children had been identified. These data represent a 78% increase in the prevalence of autism in children. Autism currently affects 55,000 18-year-olds, and the most recent CDC (2012) report on the prevalence of ASD suggests that 1 in 88 teens will carry a diagnosis of ASD by the year 2018. These numbers equate to 1.5 million people in the United States living with ASD.

Social Interactions Between Teens With and Without Autism Spectrum Disorder

Typical teens, who are unfamiliar with the social and communication difficulties of autism, might be unable to engage successfully with an individual with autism because of their own insecurities and lack of understanding. The ability to process social information about people and social events is called social cognition (Baron et al., 2006). Social cognition in adolescence can be explained by the gaps in emotion, cognition, and behavior in adolescent development (Dahl, 2004). The cognitive functions required for social cognition, including perspective taking, are immature in adolescents, as indicated by the neural development of the prefrontal cortex (Blakemore & Choudhury, 2006). With that being said, the world that teens experience influences them directly and vicariously (Slater & Jain, 2011). Observing others interact and the responses to those interactions can support social cognition and perspective taking.

Interactions during adolescence can deepen a teen's perspective and sense of self, which can foster further relationships (Locke, Rotheram-Fuller, & Kasari, 2012). Positive contact can shape the attitudes of typically developing adolescents toward their peers with ASD (Kalymon, Gettinger, & Hanley-Maxwell, 2010; Vignes et al., 2009). Indirect and direct reinforcement from these interactions can positively affect the attitudes of typically developing adolescents and create social opportunities for teens with autism to promote their own social competence. These social competencies can positively affect the integration of teens with and without disabilities in the community.

The media play a role in a teen's life and influence the attitudes of teens toward persons, places, and things (Pinkleton, Austin, Chen, & Cohen, 2012; Stern, 2005). Television programming allows vicarious types of contact to demonstrate attitudes and

behaviors, which teens might then adopt or imitate (van Hoof, de Jong, Fennis, & Gosselt, 2009). Through media, teens can gain a greater social awareness of ASD and develop attitudes that are more positive toward their peers with autism. When teens see positive behaviors between teens with and without autism on television and then imitative these behaviors, supportive teen relationships might develop.

Television's Potential for Impacting Teens' Attitudes Toward Autism Spectrum Disorder

The characteristics of autism can exacerbate victimization rates of bullying (Humphrey & Symes, 2010). Sterzing, Shattuck, Narendorf, Wagner, and Cooper (2012) showed that approximately 46% of teens with ASD were victims of bullying. Ritualistic behaviors can set teens with ASD apart and create opportunities for teasing. Poor emotional regulation may result then in an exaggerated response and melt down by a teen with ASD being teased. There is a need for research regarding the impact of television on the attitudes of teens with ASD to prevent bullying and to support the social integration of teens with autism.

Television programming can be influential in raising teens' awareness of ASD by providing accurate representations of teenagers with ASD. The inclusion of characters with disabilities, including ASD, in television programming can provide insight, dispute biases, and remove the stigma that can be present for a person with a disability (Connor & Bejoian, 2006; Hall & Minnes, 1999). Television programming can provide vicarious contact with teens with ASD and serve as an educational tool. Accurate representations of ASD can affect how teens perceive, accept, and interact with peers with ASD (Murray, 2006).

Researchers have addressed the role of media in shaping attitudes and behavior. In research on the attitudes of youth toward their peers with autism, Swaim and Morgan (2001) focused on younger children within the context of awareness programs. Although the impact of television on teen attitudes has been identified in the literature, researchers have focused the attitudes of teens toward sex, violence, alcohol, and drugs. In addition, in research on the positive effects of television on attitudes, Stern (2005) concentrated on affecting the maladaptive and self-destructive behaviors of teens.

Nearly 2 decades have passed since the first wave of autism diagnoses in children (CDC, 2012). Most autism-related research during this time has focused on children in early childhood and elementary school. As these young adults transition from high school into college, work, or vocational programs, obstacles to successful transition are being identified, including attitudes of peers. Using a video clip, I determined whether observational learning could be effective in generating positive attitudes toward teens with ASD. Videos have been used as intervention tools to affect awareness and learning; however, no studies using video clips to change teen attitudes about autism were located.

Problem Statement

Teens are influenced by the world in which they live. Their interactions and experiences with their peers allow for the maturation of social awareness and schemas. (Slater & Jain, 2011). This awareness can bridge relationships and build social networks for teens. Conversely, a lack of knowledge about a group of individuals, such as those with specific disabilities like ASD, can create stereotypes that serve as barriers to interaction (Murray, 2006). These social barriers, coupled with a lack of social

relatedness, can isolate those with autism and interfere with their community integration and transition into adulthood.

Vicarious contacts with individuals with disabilities through television can positively influence the attitudes, beliefs, and knowledge of viewers. Television is a component in the development of social attitudes in teenagers (Jordan et al., 2010). Television programs that include characters with autism might affect the social attitudes of television viewers. Scholars have not measured the impact of television shows on teen attitudes toward peers with ASD.

Purpose of the Study

In this study, I investigated whether observational learning could be effective in generating positive changes in teens' attitudes toward other teens with ASD. Prior to completing the Yuker's (1970) Attitude Toward Disabled Persons (ATDP) Survey, an experimental group of senior high school students viewed a short video that included a panel of teens with ASD. A comparison group of high school seniors completed the ATDP survey after viewing a video that included a panel of teens without ASD. A quantitative analysis was used to measure whether exposure to a single video clip, that included teens with ASD, could positively influence the attitudes of 18-year-old teen viewers about ASD.

Research Question and Hypotheses

My intent in this study was to conduct a quantitative analysis to measure whether a single exposure to a short video could positively influence the attitudes of teen viewers about ASD. I wished to determine whether observational learning could be effective in

generating positive changes in teen attitudes toward teens with ASD. The research question was as follows:

1. Can a short video that includes a panel of individuals with ASD positively affect the attitudes of teen viewers about ASD?

The following hypotheses were investigated:

$H_0$1: Teen viewers will not report on the ATDP attitudes that are more positive regarding their peers with ASD after viewing a short video clip of a panel of individuals with ASD as compared to teen viewers who watched a similar video clip that did not contain a panel of individuals with ASD.

H_a1: Teen viewers will report attitudes that are more positive on the ATDP regarding their peers with ASD after viewing a short video clip of a panel of individuals with ASD compared to teen viewers who watched a similar video clip that did not contain a panel of individuals with ASD.

Theoretical Base

In social learning theory, Katz et al. (1988) stated that learning could occur by watching the behavior of others. In addition, Bandura (1989) claimed that behavior could be reinforced directly and by observation of the behavior shown by others. This assumption of expectancy in social learning is in contrast to classical and operant learning theories. The assumption of expectancy is that reinforced behavior will be chosen over another behavior without direct reinforcement. Proponents of the theory of broad and narrow socialization identify the media as one of the seven principle sources of socialization for adolescents along with family, peers, school, community, the legal system, and cultural belief systems (Arnett, 1995). Furthermore, Arnett (1995)

demonstrated that media have become part of the social environment of adolescents and have a role in the development of personal identity and their values, norms, and attitudes.

Social psychologists have studied attitudes as a means of understanding and changing behavior. Specifically, social psychologists studied attitude formation as a central component to an individual's thoughts and behaviors (Baron et al., 2006). In social learning theory, Bandura (1989) identified the importance of observation and imitation on the development of attitudes and behaviors. In social learning, Bandura explained how attitudes develop attitudes through interaction with their social environment. Bandura, Ross, and Ross (1963) conducted the "Bobo doll" experiment. In this experiment, a group of children watched a video in which a person aggressively hit a doll. After the video, the children were placed in a room with toys, but were not allowed to play, resulting in heightened frustration. The children were then exposed to the same toys used in the video to determine whether viewing a video of aggressive behavior would affect their behavior. The majority of the children reproduced the aggressive behavior that they had seen on the video. They, in fact, had modeled the behavior they observed and learned as decribed in social learning theory.

Bandura (1963) conducted many studies on modeling, and learning by observation. The modeling process consists of four factors including attention, retention, reproduction, and motivation. In research on contact, Bandura (2001) suggested that people learn by observing behaviors and their outcomes. Accurate representation of diverse groups of characters is important to prevent prejudice and bias and to introduce unfamiliar cultures, disabilities, and behaviors (Mazziotta, Mummendey, & Wright, 2011). Modeling impacts cross-group relations that identify the factors that support

positive intergroup attitudes and willingness to engage in direct cross-group contact after observing successful interactions between ethnic groups (Mazziotta et al., 2011). In one study, video clips where shown to German university students to determine whether vicarious contacts could affect attitudes toward out-group contacts. A video of a German and Chinese student engaging in interactive social activities represented positive social schemas between cross-group members (Mazziotta et al., 2011). These social schemas between the students of different ethnicity included modeled behaviors that positively affected the viewer's attitude toward the out-group and their willingness to engage in interactions (Mazziotta et al., 2011). Mazziotta et al. (2011) indicated that when age, sex, and similarity are matched to the observer, video modeling could alter attitudes and behavior.

Nature of the Study

Teens acquire social attitudes about the world through contact. The social limitations of those with autism can limit their contact with typical peers, which can lead to misinformation and negative attitude toward autism (CDC, 2012). Currently, 1.5 million live people with ASD, which points to the importance of contact for learning positive attitudes toward individuals with autism (CDC, 2012). Television allows for vicarious learning of modeled attitudes and behaviors demonstrated by characters. In this study, I examined the impact of observational learning on positive attitudes about ASD. The ATDP Survey has historically been used to measure attitudes toward persons with disabilities (Yuker, 1970).

In this quantitative study, I compared the scores on the ATDP Survey of two groups: a control group and an experimental group. The experimental group viewed a

short video, which included a teen character with ASD, prior to completing the ATDP Survey. The control group completed the ATDP Survey after watching a short video that did not include a character with a disability. Independent samples *t*-test was performed to compare the mean attitude scores of the two groups to determine whether the observational learning affected attitudes toward persons with disabilities, specifically autism.

Definition of Terms

Autism spectrum disorder (ASD): The APA (2013) described features of ASD as persistent impairment in reciprocal social communication and social interaction along with restricted, repetitive patterns of behavior, interests, or activities. These symptoms begin in early childhood and continuing into adulthood while limiting everyday functioning

Attitude: An attitude is an evaluation, either positive or negative, of a person, event, or idea. Social psychologists describe attitudes in terms of three components: affective, behavioral, and cognitive. The affective component of an attitude is how an individual feels about a person or topic. The behavioral component is the intention to act or interact. The cognitive component of an attitude is the overall belief or knowledge of an individual or topic (Bandura, 1989).

Direct contact: Direct contact is interacting with someone in person (Mazziotta et al., 2011).

Inclusion: The National Center on Educational Restructuring and Inclusion (NCERI; 1994) described inclusion as providing all students, including those with significant disabilities, equal opportunities to receive effective educational services, with

the needed in age appropriate classrooms in their neighborhood schools, to prepare students for productive lives as full members of society (p. 15).

Modeling: A demonstration of attitudes or behaviors (Schultz & Schultz, 2006).

Observational and vicarious learning: A type of learning in which a person learns new information and behaviors by observing the behaviors of others (Bandura, 1989).

Social learning: In the social learning, Bandura (1989) described how attitudes and behaviors are acquired in situations in which behavior is modeled directly or indirectly.

Social schema: Social schemas are mental structures that help organize social information and aid future social experiences. Social schemas influence social thought and impact attention, encoding, and retrieval of social information (Howard & Renfrow, 2006).

Symbolic modeling: A character portrayed in media such as television, video, Internet, or books (Bandura, 2001, p. 265).

Assumptions

A number of assumptions are included within this study. First, I assumed that the ATDP Survey accurately measures the attitudes of high school seniors toward ASD. To provide clarity to those completing the survey, the words "disabled persons" was substituted with the words "teens with autism (ASD)." I assumed that the wording would be interchangeable, and that the new words would not affect the validity of the measure. Yuker and Block (1986) reported that changing the phrase disabled person with a specific disability should have only a small effect on validity. Random assignment of participants to the experimental and control group addressed selection bias.

Limitations

Limitation 1 was that the results of the survey were not generalizable beyond students in Ventura County, California, because a convenience sampling was used to acquire participants. The sample was drawn from 18-year-old students outside of sporting events, which omitted those 18-year-olds who did not frequent sporting events. The ATDP was found to provide a valid measure of attitudes toward disabled persons, although it was not specifically designed to measure about autism. No Likert scales were available to measure attitudes toward individuals with autism specifically.

Scope and Delimitations

Teens acquire social attitudes about the world through contact. The participants of the study were 18-year-old public high school students in Conejo Valley, California. No private school seniors were studied. The study was limited to students in their senior year to optimize the sample of 18-year-olds. The convenience sampling was obtained outside sporting events, which might have limited the diversity of participants. In the event that the minimum sample size could not be achieved, the 18-year-old graduates outside the sporting events at the local community college would have been recruited.

Significance of the Study

The information drawn from this study gave insight into the social attitudes of teens about ASD that might interfere with social networking. In the study results, I identified the effect that television has on modeling attitudes that support the development of relationships between teens with and without disabilities. I intended to investigate the role that television programming might play in developing positive attitudes about ASD in teen viewers. Teens watch television approxiamtely 4 hours a day,

because of its availability on mobile and Internet platforms (Nielsen, 2012). Television exposes viewers to teen issues of pregnancy, homosexuality, and drug abuse along with issues of AIDS, abortion, eating disorders and suicide in an attempt to increase awareness and prosocial behaviors. The use of television to support prosocial attitudes is also the focus of entertainment education campaigns (Slater & Jain, 2011).

According to the social learning theory, teens learn not only from direct experiences, but also from observing the attitudes and behavior of other people (Katz et al., 1988). A component of vicarious learning includes observing the vicarious reinforcement of a demonstrated attitude, which might serve to motivate the viewer to imitate it (Buckley & Malouff, 2005). In the same way, the accurate representation of characters with ASD in teen television programming might affect the attitudes of typical adolescents about ASD by increasing their awareness of ASD and eliminating stigmas about ASD. Including teens with ASD in television programming might lead other teens to model the behaviors and attitudes that teen characters demonstrated to individuals with and without disabilities by including positive portrayals of teens with ASD. Social learning theory proponents suggest that depicting positive social experiences between teens of all abilities, along with positive social messages about ASD, might positively affect teen attitudes about ASD. These social proficiencies can assist teens interacting with their peers with ASD creating positive experiences.

Nearly 50% of students with ASD will go on to postsecondary education with their typical peers (Taylor & Seltzer, 2011). Many individuals with autism will work alongside typical young adults. Taylor and Seltzer (2011) showed that 18% of the young adults with autism investigated were employed in competitive or supported employment

in the community with typical young adults. The success of postsecondary education and employment of young adults with ASD will require the support of the nondisabled community. Positive attitudes towards autism are essential for the successful transitions of all teens into postsecondary life. Positive attitudes can allow for additional direct contact to further support positive attitudes about ASD. These positive social opportunities lead to healthy social emotional development for teens with and without ASD.

Implications for Social Change

Positive social attitudes about teens with ASD will lead to further positive contact between teens with and without ASD in the community. The CDC (2012) report stated that 1 in 88 18-year-olds will carry a diagnosis of ASD by the year 2018. Those numbers have implications for parents, teachers, and teens as teens transition into the community as young adults. Typical teens will require positive social attitudes, awareness, and social schemas to live, work, and play side by side with their peers with ASD. Teens with ASD will require social networks to transition successfully into adult life. In this study, I investigated whether observational learning could be effective in generating positive changes in teens' attitudes toward other teens with ASD.

Summary

Social learning theory proponents propose that teens acquire social attitudes through contact with the world around them. The media is a socialization agent for teens, and it allows for observational learning to occur (Brown & Bobkowski, 2011). Television influences teens' prosocial attitudes, including attitudes toward teen pregnancy drugs and alcohol use (De Graaf, 2013). Observing someone or something could affect a person's

attitudes, suggesting that contact with persons with disabilities could lead to positive perceptions of them (Causton-Theoharis & Malmgen, 2005; Rimmerman, Hozmi, & Duvdevany, 2000). The media can provide the vicarious contacts of teen characters with individuals with ASD.

In this quantitative study, I examined whether observational learning had an impact on teen attitude toward ASD. The research on the media's impact on attitude formation and the use of media to affect prosocial attitudes was investigated. The literature review in Chapter 2 contains information on the historical use of media to raise awareness of disabilities, the recent increase of the prevalence of ASD, and a discussion on the use of television to promote prosocial attitudes.

Chapter 2: Literature Review

Introduction

In this quantitative study, I sought to determine whether television programming could positively affect the attitudes of teen viewers about teens with ASD. De Graaf (2013) indicated that television influences teens' attitudes about people, topics, and events. Television programming portrays social scenes; demonstrates social attitudes; and exposes teens to people, places, and cultures vicariously that they might not have the opportunity to experience directly. Currently, representations of television characters with disabilities are limited in shows targeted to teen audiences (Schwartz et al., 2010). When television characters with autism are included in a television show or movie, they are often sensationalized as heroes or depicted as victims with emphasis on their challenges, which enforces stigmas and stereotypes of persons with ASD (Englandkennedy, 2008).

The success of post secondary education and employment opportunities for teens with ASD will require the support of the nondisabled community. The prevalence of teens with a diagnosis of ASD has increased by 78% since 2002 (CDC, 2012). Many individuals with ASD live and work in a community where they continue to struggle with social relationships, which might limit the spontaneous contact that they have with other members of the community. Using media with accurate representations of ASD to provide vicarious contacts with individuals with ASD might positively affect the attitudes of teens toward individuals with ASD, thereby leading to more positive interactions between teens with and without autism.

The proponents of contact theory applied Bandura's social cognitive theory and suggested that viewing the successful interactions of groups can influence attitudes. Brown and Bobkowski (2011) indicated that television programming influences teen attitude development. Similarly, Englandkennedy (2008) and Farnall and Smith (1999) identified the significance of social learning theory and the influence of contact on a person's attitude. Inclusion researchers identified negative attitudes and behaviors toward individuals with disabilities as being obstacles for persons with disabilities (Alghazo, Dodeen, & Algaryouti, 2003; Lieberman, James, & Ludwa, 2004; Pace, 2003; Palmer, Redinius, & Tervo, 2006).

The media play a role in the socialization of teens, and researchers have demonstrated the media's potential impact on attitudes and behaviors (Collins, Elliott, Berry, Kanouse, & Hunter, 2003; L'Engle, Brown, & Kenneavy, 2006; Stern, 2005). The proponents of developmental theory support the idea of using television programming to raise awareness of ASD and to model social interactions between teens with and without ASD. Researchers identified the strength of video modeling as a tool for teaching skills and influencing attitudes and behaviors (Buckley & Malouff, 2005). Television programming can be used to raise disability awareness and to provide positive messages about autism (Murray, 2006). Positive representations of teens with ASD can reduce stereotypes and anxiety about the disorder and positively affect attitudes toward individuals with autism. In this section, the relevant literature on television's impact on attitudes, teen use of television, and the increase of teens with ASD will be reviewed.

In the literature review in Chapter 2, I discuss the historical theoretical contributions to understanding attitude development and the impact that social learning

has on attitude development, especially during adolescent socioemotional development. The media plays a role in a teen's life and expresses the current, relevant social issues in society. I discuss television's role in teen development and present the content of television programming that affects social attitudes. I demonstrate that current diagnostic criteria, recent prevalence statistics, and current representation of ASD in media show the need for future studies on the use of media to affect positively ASD awareness.

Literature Search Strategy

Sources for the literature review included peer-reviewed articles, dissertations, and statistics and articles from the Autism Source Research Database. The following databases were used: Academic Search Premier, ERIC, Communication and Mass Media Complete, Sage Journals Online, PsycInfo, PsycArticles, EBSCO, Proquest, Google Scholar, and Thoreau Search of multiple Databases. The terms *media*, *media psychology*, *attitudes and media*, *media and communication, attitudes and television*, *teens and television*, *teens and disabilities*, *attitudes and disabilities*, *inclusion and attitudes toward disabilities*, *disability awareness*, *prosocial attitudes and teens*, s*ocial interactions and attitude development*, *adolescent development*, and *media and prosocial attitudes*. Studies on disabilities were reviewed from 1995 to the present. Media studies from the last 10 years were also reviewed. Adolescent socialization and development theories were reviewed from 2008 until the present. A review of social theory from 1980 until the present was required because of the minimal research found on teens and observational learning. Most observational learning research was focused on children.

Theoretical Framework

Developmental theories have influenced the study of the media's role in the formation of social attitudes and behaviors. This study was informed by Erikson's psychosocial theory of development (1959), Vygotsky's sociocultural theory (1962), Bandura and McClelland's (1977) observational learning theory, and recent works in neural behavioral aspects of development (Dahl, 2004).

In the psychosocial theory of development, Erikson (1959) identified eight stages of development over a lifespan. Adolescence is the stage in which a person develops a sense of self and personal identity. Social relationships assist teens in viewing themselves in relationship to the world in which they engage. In psychosocial theory, Erikson demonstrated the role that friendships have in adolescent development (Moore & Boldero, 1991).

In sociocultural cognitive theory, Vygotsky emphasized the importance of socialization on cognitive development (as cited in Lantolf, 2000). Culture, peers, and family serve to teach and model interactions for cognitive learning. Vygotsky discussed the theoretical role of social interactions in providing active learning opportunities for the development of thought and reasoning. Current teen culture includes media and affects the socialization of teens. Vygotsky's cognitive theory reflected the contributions of society to influence learning. Vygotsky's views on higher mental functions included executive functions developed through social interactions. These interactions are essential to acquiring cultural tools for regulating behavior (Bodrova, Leong, & Akhutina, 2011). Bandura (1977) followed Vygotsky's social development theory by examining the interactions that affect social learning.

In the observational learning theory, Bandura's (1986) proposed that there are reciprocal interactions between cognitive, behavioral, and environmental influences. Bandura's theory of social learning includes four components. Each component plays a role in the acquisition of information or the integration into behavior. Initially, in Component 1, the observer attends to an event to be modeled. The event can be actual or symbolic in nature. Bandura determined that attention is affected by the attractiveness of the model, as well as the media used to view the behavior. Next, in Component 2, the coding and storing of the information from the event occurs. Components 3 and 4 of learning are the reproduction, motivation, and incentive to perform. Bandura suggested that observational learning could be enhanced when the observer believes that the person demonstrating the behavior is similar to himself or herself (Bandura & McClelland, 1977).

Bandura (1963) was best known for the study on aggression in the Bobo doll experiment. In this experiment, a group of children watched a video in which a person aggressively hit a doll. It was noted that the majority of children reproduced the aggressive behavior that they had been previously exposed to in the video (Bandura et al., 1963). Bandura and McClelland (1977) conducted many studies on modeling and learning by observation. The modeling process consists of four factors including attention, retention, reproduction, and motivation. In the research on indirect intergroup contacts, Bandura and McClelland suggested that people learn by observing others, including observing the behaviors and the consequences of those behaviors. Social cognition includes how a person would think of others and the influence it will have on behaviors, attitudes, and social interactions.

The prefrontal cortex serves to modulate emotion, plan, and organize thought (Amodio & Frith, 2006). The neural behavioral aspects of development during adolescence were studied in research about substance abuse and social maturation (Dahl, 2004). The prefrontal cortex is one of the last regions of the brain to develop. The prefrontal cortex in adolescence is responsible for cognitive analysis as well as the regulation of emotion (Amodio & Frith, 2006). This region of the brain operates the executive functions, including inhibition for delayed short-term gratification, impulse control, and management of intense emotions (Blakemore & Choudhury, 2006). Adolescents are driven by emotional shaped messages and behaviors.

The amygdala places a role in emotional memory as well as stereotyping (Hart et al., 2000). Hart et al. (2000) noted amygdala activation to out-group members. Black and White participants judged the gender of White and Black faces (Hart et al., 2000). Faces of the same race habituated while the amygdala continued to activate for out-group members. Social cognitive neuroscientific researchers found that changes in the adolescent brain, specifically the prefrontal cortex, influence social schema, selective attention, processing, and inhibition, which influence a teen's attitudes and behaviors (Blakemore & Choudhury, 2006. These changes in social cognition include the ability to adopt the perspective of someone else. A person's perspective influences emotions, stereotyping and attitudes (Di Giunta et al., 2010; Ochsner & Lieberman, 2001). Television can provide the vicarious experience of attitudes and empathy to positively affect teen attitudes toward their peers with ASD.

Attitude Formation

Attitudes can be described in three components: affective, behavioral, and cognitive (Bandura, 1989). The cognitive component of an attitude is the overall belief or knowledge of an individual or topic (Bandura, 1989). The affective component of an attitude is how an individual feels about a person or topic, and the behavioral component is the intention to act or interact (Bandura, 1989). Attitudes aid in the interpretation of new information and influence behavior. Negative attitudes can serve as barriers and obstacles to contact and interactions. Vicarious contact with positive attitudes, which can be created in the media, can positively affect teens' views about the world in which they live and interact.

Teenagers learn about their world from direct and vicarious influences. Life experiences, family traditions, and relationships with friends and communities create perceptions of the life they live and the role that the teen enjoys within it. Teachers and parents explain and model sharing, courtesy, attitudes, and honesty to children to encourage positive social behaviors (Salisbury, & Gallucci, 1995). Attitudes provide meaning and predict behavior. Attitudes also affect how a child feels toward the attitudes they acquire. As children age, attitudes about social behaviors assist them in forming friendships and social groups (Bodrova, Leong, & Akhutina, 2011). Students are more likely to demonstrate positive attitudes concerning their peers following contact (Hall & Minnes, 1999). Negative attitudes about other others can result in teasing and bullying. Contact in adolescence extends far beyond family and includes the media as a primary socialization source. Recent broadcast media emphasizes the strength of media influence on teen culture (L'Engle et al., 2006; Lenhart, 2008; Roberts, 1993).

Teen Attitudes Toward Peers With Disabilities

Disability awareness programs are used to increase people's contact with persons with disabilities to positively affect their attitudes toward disabilities (Rillotta & Nettelbeck, 2007). Researchers have studied the effect of disability awareness programs on attitudes toward individuals with physical disabilities with children (Ison et al., 2010). Ison et al., (2010) revealed that 9-to 11-year-olds' attitudes about disabilities were more positive when the children also interacted with the copresenter with cerebral palsy. However, the adult might have overly influenced the children and might not have been an accurate measure of contact importance (Ison et al., 2010). Disability awareness was also shown to increase stereotyping when the challenges and differences of the disabilities were emphasized (Aboud & Levy, 2000). Other researchers who investigated attitudes toward individuals with physical disabilities also supported the importance of contact in influencing attitudes about physical disabilities. Fichten, Schipper, and Cutler (2005) studied volunteers working with children who had physical disabilities and intellectual disabilities and the positive impact on social distance and self-focused components of attitudes toward adults. Researchers studied the inclusion of children with disabilities in general education and supported the need for contact and awareness (Salisbury & Gallucci, 1995)

According to the inclusion model, children with disabilities should be included in typical classrooms because inclusion facilitates social benefits for the students with and without disabilities resulting in positive attitudes toward disabilities. The simple act of observing something or someone can change attitudes or even create biases (Baron et al., 2006). The attitudes of teens about disabilities can affect how they feel about a peer with

a disability, the intention to interact with the peer with a disability, and their belief about the teen with the disability. Researchers suggested that contact with students with disabilities might lead to positive attitudes at those disabilities (Lieberman et al., 2004). Student interactions are a goal of structured activities in classrooms to support positive contacts with students with disabilities (Lieberman et al., 2004). Positive interactions help students gain an understanding about peers with disabilities and provide opportunities for students with and without disabilities to interact. Salisbury and Gallucci (1995) discussed the inclusion of students with disabilities in classrooms and its impact on positive attitudes toward children with special needs. However, poor social and emotional reciprocity and immature social behaviors among students with special needs might reinforce pre-existing stigmas affecting the intention of typical teens from interacting with their peers on the autism spectrum (Müller, 2009).

Researchers have discussed the social benefits of the inclusion of children with disabilities in classrooms with typical developing children. Salisbury and Gallucci (1995) identified the impact of inclusion on the development of positive attitudes toward children with special needs. Students without disabilities gain greater understanding and acceptance of students with disabilities when they are in the inclusion program (Kochhar, West, & Tayman, 2000). The National Center on Educational Restructuring and Inclusion (NCERI) (1994) developed a working definition of inclusion:

> Providing to all students, including those with significant disabilities, equitable opportunities to receive effective educational services, with the needed supplementary aids and support services, in age appropriate classrooms in their

> neighborhood schools, to prepare students for productive lives as full members of society. (p. 15)

Attitude formation toward disabilities is the result of direct experiences and vicarious learning. Inclusion of children with disabilities in general education allows them access to general education, higher expectations, peer models, and increased social relationships Salisbury & Gallucci, 1995). Within inclusive classrooms, students might serve as peer tutors or peer helpers to model social skills for their peers with autism (Rogers, 2000). Peer helpers are taught to model appropriate behaviors and to initiate social exchanges with their peers who have autism (Pierce & Screibman, 1995). The reinforcement of the teacher, along with successful exchanges with their peers with ASD, promotes further positive behaviors and attitudes toward ASD. Positive student relationships between peers with and without disabilities can have an impact on the awareness and positive attitude development about disabilities (Putnam, Markovchick, Johnson, & Johnson, 1996).

Cooperative learning conditions in the classroom between students with and without disabilities has been found to promote the acceptance of students with disabilities (Putnam et al., 1996). Limited experiences with individuals with disabilities can result in anxiety and stereotyped images, consequently, limiting contact between teens with and without disabilities (Mazziotta et al., 2011). McDougall et al. (2004) examined the attitudes of Grade 9 students toward their peers with disabilities and reported that over 20% of them had negative attitudes toward their peers with disabilities. Mazziotta et al., (2011) found a more positive attitude in the Grade 9 teens who had a friend or classmate with a disability. Female students held more positive attitudes toward their peers with

disabilities than their male counterparts did (Mazziotta, 2011). Rosenbaum et al. (1986) suggested that the female students might have perceived themselves as minorities; therefore, they might have been more likely to identify with the students with disabilities.

Anxiety about a disability can contribute to negative attitudes toward persons with disabilities (Brown, Ouellette-Kuntz, Lysaght, & Burge, 2011; Pettigrew & Tropp, 2006). Siperstein, Parker, Bardon, and Widaman (2007) found that contact with students with learning disabilities did not lead the middle school students to attitudes that were more positive about peers with learning disabilities. Contact and exposure to students with learning disabilities did provide opportunities to observe their competencies, which did affect the attitudes of the middle school students surveyed about inclusion of students with intellectual disabilities as well as intentions to interact with them (Siperstein et al., 2007).

Preschool and elementary school opportunities are plentiful within the inclusive model. Differences between the children with and without disabilities are less significant and opportunities for social engagement are adult-centered activities and play. The inclusion model for children with disabilities hopes to produce social benefits for all students. Researchers examining whether the inclusion of students with disabilities affects attitudes of typical students is debatable. Kochhar et al. (2000) reported that students without disabilities experienced growth in social cognition and developed a greater acceptance of students with disabilities after participating in the inclusion education model. Other research reported none or a negative impact of inclusion on attitudes of typical students toward their peers with physical and intellectual disabilities (Siperstein et al., 2007). Exposure alone did not appear to affect attitudes; instead,

secondary sources influenced perceptions and attitudes about students with intellectual disabilities (Siperstein et al., 2007). The characteristics of many disabilities include social and communication challenges, which affect initiation of social contact. Teens unfamiliar with the impact of those challenges might not initiate social contact because of poor social schemas. This might lead to limitations in social opportunities for teens with and without disabilities to interact and develop relationships, therefore, affecting attitudes toward peers with disabilities. Researchers examined student attitudes toward their peers with disabilities and suggested that contact with students with disabilities might lead to positive attitudes (Heinrichs, 2003).

A review of the research about attitude formation toward disabilities revealed studies, although limited, on siblings' perception of disabilities. A study by Stalker and Connors (2004) reported that children Ages 6–19 who had disabled siblings indicated that they were aware of the disability; however, they did not report negative perceptions about the disability. Instead, the children spoke of their siblings' experience with inequality and hostile attitudes of others. Familial contact influences the social attitudes of teens about disabilities along with the support the development of social schemas that support interaction between the typical teens and peers with disabilities (Leal & Cuttill, 2009; Stalker & Connors, 2004). Leal and Cuttill (2009) studied the perspective of teens growing up with siblings that had disabilities. Leal and Cuttill indicated that the teens displayed positive attitudes about their siblings with disabilities and their experiences with them. In this study, the high school teens reported that their siblings with disabilities influenced them positively, made them aware of their own strengths and limitations, and made them more responsible. They were able to identify the positive impact that a sibling

with a disability had on them. They also described the relationship with their sibling and the importance it had on their life. Having a sibling with a disability offers the opportunity for interaction and education about the disability. Consequently, these children are often more skilled in interacting with their peers with disabilities or at the very least less like to discriminate against them.

The proponents of contact theory applied Bandura's social cognitive theory and suggested that viewing the successful interactions of groups can influence attitudes. Friendships are key components for social experiences. As the shift in social experiences move from family to friends, in adolescents, opportunities for typical teens to interact with teens with autism diminish. Interests and skills differences, continued dependency, and social difficulties can segregate a teen with autism. Although typical teens rely on social systems to develop attitudes, define a sense of self, and attain social adaptability, the lack of direct exposure, experiences, and awareness affect attitudes toward teens with disabilities. Television can provide teens the vicarious contact with teens with ASD to affect positively attitudes toward ASD.

Media's Role in Socialization of Teens

Proponents of the theory of broad and narrow socialization identified seven principle sources of socialization: family, peers, school, community, media, legal system, and cultural belief system (Arnett, 1995). The world that teens experience influences them directly and vicariously (Slater & Jain, 2011). Significant relationships that are healthy greatly affect people and their ability to understand themselves and relate to others. In addition to the effect that relationships have on people, social media, schools, and a person's surrounding community also affect them (Arnett, 1995). The power of

media greatly affects teen beliefs, attitudes about socialization, and the world they live in (Arnett, 1995). Media affects what teens wear, buy, and imitate (Lauzen, Dozier, & Horan, 2008; McClure, Stoolmiller, Tanski, Worth, & Sargent, 2009). Electronic media is especially convenient to teens because it can be easily accessible and often difficult to monitor. Teens use media for entertainment, socialization, and to fantasize their ideals (Brown & Bobkowski, 2011).

Television programming has been studied for some time to determine its strength on influencing attitudes and its impact on modeling behavior. Kirkorian, Wartella, and Anderson (2008) determined that media could positively affect the school preparedness of youth. Children's programs expose very young children to social behaviors such as sharing and manners along with academic readiness skill (Hofferth, 2010). Educational programming focuses on school readiness behaviors as well as premathematics and prereading skills (Wright et al., 2003). Roberts (1993) reported that adolescents learn scientific problem-solving skills from media. Learning from television programming is vicarious in nature. Viewers watch how characters deal with issues and situations along with the consequences of their actions and for attitudes about those issues and situations.

Using television-viewing statistics, researchers suggested that this media allows for ample vicarious contact and subsequent modeling of attitudes and behaviors (Jordan et al., 2010). Researchers of multicultural television programming noted that the television character's strength in television programming affected the perceptions of ethnic threat. Müller (2009) noted that exposure to multicultural characters in a television drama reduced prejudice and ethnic threat. Watching positive intercultural encounters resulted in a sense of efficacy for those viewing (Müller, 2009). Television programming

that includes nonstereotypical representations of multicultural characters might positively affect viewers by eliminating prejudices (Müller, 2009). Müller, (2009) had 152 participants watch either a soap drama or a multicultural drama and found that the group that viewed the multicultural drama had diminished ethnic threat, which was correlated with identifying with the out-group. The result was the elimination of ethnic fear along with a familiarity of social schemas observed with the cross group. Affecting the viewer's knowledge, feelings, and behavior can result in attitude changes.

The media can reach teens everywhere with the presence of mobile devices. The media influences can be seen with copycat accidents such as those from the movie, "The Program," in which a college football player proved his toughness by lying on a busy freeway at night while traffic sped past him. An 18-year-old boy died, and two other teens were critically injured as they imitated that scene after seeing the movie (Arnett, Larson, & Offe, 1995). Televised sporting events and sport heroes also influence the behavior of children and teens. Daven, O'Conner, and Briggs (1976) reported the injuries sustain by children who attempted the motorcycle feats of Evel Knieval on their bicycles. These are just two of many copycat accidents that have followed the viewing of film and television shows.

An example of the media's powerful impact can be found in a study by L'Engle et al. (2006) who investigated adolescents who were exposed to sexual content. The findings indicated that adolescents who were more frequently exposed to more sexual content in the media and who perceived greater support from the media for sexual behavior demonstrated a greater intention to engage in sexual activity (Ward & Friedman, 2006). Television can also educate and include messages of prosocial

behavior. A television show, "Friends," was determined to have had a positive effect on young viewers because it included messages about the risks of having sex (Collins et al. 2003).

Fashion and trends can have an insidious effect on teenagers in that the media can sometimes be a more dominant presence in the cognitive development of a teen's thoughts than his or her parents could be. The media's emphasis on physical body size and shape affect attitudes about body image that result in unrealistic perceptions (Cattarin, Thompson, Thomas, & Williams, 2000). Adolescents see in the media ultramuscular men and below-weight women. Compulsive body image attitudes and restrictive eating behaviors pose risks for the development of anorexia and bulimia (Garner, Garfinkel, Stancer, & Moldofsky, 1976). The preoccupation and emotional attachment to such images set teens up for disordered eating habits (Kater, Rohwer, & Londre, 2002). Beauty and thinness have become synonymous to female teens because of advertisement, media messages, and fashion trends.

Bandura's (2001) research on indirect intergroup contact was central to the social cognitive theory in which Bandura stated that people learn by observing behaviors, and the outcomes of those behaviors. Bandura described behavior as learned responses that others observe, imitate, and model (Schultz & Schultz, 2006). Through social learning theory, Bandura (2001) indicated that teens would imitate the behavior of model teens in films and television programming if they are perceived as similar, attractive, and desirable. Teens who identify with model teens in mass media form attitudes about behaviors that are performed according to the consequences or reinforcements that result

from those behaviors. The proponents of social learning theory suggest that the vicarious learning will serve as a guide.

Stern (2005) reported that teen-centered programs teach teens that drug use is common and risk-free. Characters are often shown in appealing lifestyles with money and luxuries without negative consequences. The charismatic lifestyles of the drug dealers and users glamorize instead of detour crime and risk-taking behaviors. The prevalence of drug use in the mass media shows that drug use is an acceptable and typical behavior in the life of teens and young adults (McClure, Stoolmiller, et al., 2012). The media reflects the culture of present teenagers and models' attitudes and behaviors that guide the attitudes and behaviors of viewers. Embedding teen issues in television programming can be a way to educated teens about the issues of drugs, alcohol, and pregnancy.

Bandura (2001) further explored how children and adults integrate their social experiences into behaviors. The environment and behavior were shown to have a bidirectional influence. Environmental events (e.g., instruction, modeling, and social persuasion) affect the individual. The role of vicarious learning has been identified in the literature as a positive strategy for improving intergroup relations (Pettigrew & Tropp, 2006). Cross-group contacts allow friendships, which enable empathy. Positive social interactions require knowledge of self, a perspective of others, and a motivation for contact (Moore & Boldero, 1991). These capacities are the core of social cognition. As a teen reflects on experiences, he or she constructs beliefs about his or her social abilities and interpersonal skill sets. Theorists such as Bandura (1989) have looked at the relationships between attitudes and empathy. This empathy affects perception of the out-group and reduces anxiety about the group. Researchers of bullying have recognized the

negative correlation between bullying and cognitive–affective empathy (Heinrichs, 2001). Pettigrew and Tropp (2006) found, in their meta-analysis of contact effects, that the theory was appropriate for groups other than the ethnicities and races for which it was developed. Contact theory could be used to explain groups of different sexual orientations, different age groups, and the mentally and physically disabled. Interactions with people with disabilities can dismiss stereotypes and increase awareness. The concept of using teen television programming to raise awareness of ASD and model social interactions between teens with and without autism is practical and mirrors the influential role media plays in the socialization of teens.

Prosocial Impact of Television Programming

The media's use as an educational tool can be seen with television broadcasting targeting preschool learners. Modeling social behaviors, including sharing, manners and etiquette, are the themes for young viewers. Social learning theory indicates how media might be used to gain indirectly knowledge of the world around them and to model behaviors viewed within a certain context. Siperstein et al. (2007) reported that only 40% of the 6,000 middle school students surveyed had contact with a student with an intellectual disability within the classroom while 90% acquired information on intellectual disabilities from the media. Positive attitudes about behavior events and individuals are acquired through vicarious exposure (Buckley & Malouff, 2005). The use of media by teens is well supported in the literature (Fuller & Damico, 2008). Relevant teen soap operas expose viewers to teen issues of pregnancy, homosexuality, and drug abuse. "Degrassi High," part of the Degrassi television series, dealt with issues of AIDS,

abortion, eating disorders and suicide to dismiss negative attitudes and encourage awareness and tolerance.

Television programming often reflects teen culture along with modeling attitudes and behaviors that affect teen culture. The media can provide a vicarious contact for teen viewers by casting roles that include teens with disabilities. The significance of casting individuals with disabilities in television programming was demonstrated through a study of student nurses (Sadlick & Perta, 1975). Researchers noted that the attitude of the student nurses toward a quadriplegic patient had changed after viewing a documentary that included individuals with physical disabilities. "Degrassi," a teen soap opera, introduced teen characters who dealt with AIDS, homosexuality, and addictions. When one of the teen characters was severely injured, the show began to focus on the impact of a disability on his life and his friendships. The producer identified the social stigma that was associated with the physical challenge and being in a wheelchair. The once-star athlete had to unravel the stereotyping that surrounded his life that was now lived in a wheelchair. The scenes offered implicit lessons of value and dramatized multicultural relationships between teenagers. Through vicarious contact, teens could learn and model positive attitudes toward teens with disabilities, as described in social learning theory.

Autism Spectrum Disorders

Characteristics of Autism Spectrum Disorders

ASD is characterized by an unusual, sustained attention to favorite activities, a demonstration of repetitive activities, a marked distractibility, and a disorganization (APA, 2013). An individual with autism often displays deficits in attention, along with language, cognition, and social skills (Kemper & Bauman, 1997). DSM-5 criteria also

included distinctive characteristics regarding impairment in reciprocal social interaction, verbal and nonverbal communication, and restricted repertoire of interests. Reciprocal social interactions impairments can be gross and sustained. The APA (2013) described in the DSM-5 four presentations of social skill impairments. A marked impairment of nonverbal behaviors (e.g., facial expression) might be evident in an individual with autism. Another manifestation includes a difficulty in initiating mutual peer relationships. Individuals with autism might also not spontaneously share or seek others for the sake of sharing. Lastly, as described in the DSM, a lack of emotional reciprocity and the preference for solitary activities are evident. Skill sets and social schemas must be learned to promote for them integration and adaptability through development. The behaviors described might suggest to a teen who is not familiar with ASD a lack of interest or ill-mannered intentions. ASD is described as a continuum of symptomology, which affects the functioning of individuals throughout development and adulthood; hence, it is important to have a positive attitude toward people with ASD (APA, 2013).

Prevalence of Autism Spectrum Disorders

The CDC (2012) estimated that, in 2008, 1 in 88 children were diagnosed with ASD. This marks a 78% increase from the 1 in 150 children diagnosed with ASD in 2002 (CDC, 2012). These numbers suggest as many as 1 million children and teens with ASD now live in the United States (CDC, 2012)

Growing up with autism brings many challenges. Communication is limited, even if the child has language. Social sophistication is a struggle. Early childhood programs provide rich environments with typically developing children to model the play skills for children with autism to model. Elementary classrooms provide opportunities for inclusion

and children of different abilities are encouraged to play and interact with each other. The concrete nature of elementary studies also allows children with autism to be successful within classrooms. Teachers are key social models for children and an important factor in the success of an inclusion program for students with disabilities (Alghazo et al., 2003). Their attitudes and behaviors toward students with disabilities in their classroom serve as education and model the social attitudes and behaviors for interactions and relationships between the students with and without disabilities (Ison et al., 2010). However, research also demonstrates the importance of the media milieu on teen social attitudes and prosocial behavior (Arnett, 1995).

Representation of Characters With Disabilities in Television Programming

Extensive literature has noted the importance of providing people with information about disabilities to remove barriers for successful inclusion of persons with disabilities (Englandkennedy, 2008). Attitudes can serve as barriers and affect social acceptance of teens with ASD. However, the media can serve model social attitudes and prosocial behaviors between teens with and without disabilities. Although people with physical, mental, and neurosensory challenges are occasionally represented in films and on television, their portrayal is often less than accurate. A study by Farnall and Smith (1999) noted exposure to positive portrayals in media was related to positive perceptions and feelings toward persons with disabilities. The representation of persons with disabilities in the media is not sufficient. Positive and accurate representation can change perceptions and can break through stereotypes that often interfere with positive social attitudes or social integration (Murray, 2006; Weber et al., 2010). The history of portraying people with disabilities in media has been one of negative representation

(Nelson, 1999; Safran, 1998). Disabled and disfigured villains portrayed people with disabilities as freaks and outcast early in the film. People with facial disfigurements or scars felt the negative impact of scary film characters. Characters who were mobility-challenged and in wheelchairs dealt with the struggle of the disability, as in the film, *The Waterfront*. The character had a disability that was not an incidental characteristic of the actor. Lt. Dan in the film, *Forest Gump*, portrayed the anger of a newly paralyzed veteran. Forest ran out of his braces and was portrayed as possessing superhuman running stamina. Television programming has begun to include actors with Down syndrome, for example, in the television show "Life Goes On" in which a student with Down syndrome navigates the struggles of inclusion in typical school.

Characters With Autism Spectrum Disorders in Television Programming

Individuals with autism are beginning to be represented in film (Autism Research Institute, 2012). Often the representation illustrates the characteristics of the disability and the negative impact on family or friends, for example, in the television show "Parenthood." The show portrayed a multigenerational family in which one of the children, Max, had Asperger Syndrome, a form of ASD Holton, 2013). The family in the show often struggled with Max's lack of empathy, rigidity in routines, preoccupation with bugs and academic genius. However, the show was also about the family and its response to having a son with Asperger Syndrome. In the show, Max eventually evolved into a character who works toward relationships and works on attitudes that block those relationships. His struggles provided insight to encourage understanding and empathy toward teens with autism. This vicarious contact can provide the necessary experience to affect positively the attitudes of teen viewers about autism. "Parenthood" looks at

perceptions of a teen, Max, with ASD and the impact of those attitudes on empathy and friendships.

The recent increase in the number of teens with ASD shows the need for accurate representation of characters with ASD in teen television programming; however, casting of individuals with ASD is scarce. The recent increase of autism reflects the importance for representation in media to raise awareness, remove biases, and promote integration. The CDC (2007) reported that 1 in 150 teens currently carries the diagnosis of autism, indicating that 1 in 150 8-year-old children carried the diagnosis of ASD in 2002. According to these numbers, the estimate for teens with ASD, 10 years later, would be 1 in 150. However, the lack of representation of teens in media shows a lower prevalence of ASD and not the actual social milieu incidence that exists within a school or community.

Television programming for teens can model social attitudes and behaviors between teens with and without autism. It can provide positive social messages and reinforce social attitudes to promote prosocial behavior between teens with and without disabilities.

Summary

The media can be effective in portraying the social skill differences of teens with and without autism, and can model successful relationships that are nurtured by the typical teens. The accurate representation of teens with autism is important in film and video. The representation of autism can affect how a teen perceives, accepts, and interacts with a teen with high functioning autism. Observing proficient social models and positive interactions of teens with autism and their nondisabled peers in film and video can affect

attitudes and can result in direct intergroup contact according to Bandura's (2001) theory. Entertainment–educational dramas can portray social schemas along with positive attitudes about ASD. Given the desirability of television and drama programming, the media use can model social schemas, raise social awareness, and can positively affect social attitudes toward peers with ASD. These programs can be influential in promoting not only tolerance, but also acceptance of teens with autism. Characters can model the behavior needed to satisfy the needs of having a relationship with a teen with autism. The media has played an educational role in the social emotional development of today's youth. Portraying a reciprocal relationship between teens with and without autism can promote positive social attitudes, thus reducing anxiety about peers with autism. The vicarious reinforcement of positive modeled behaviors in the media can result in enhanced social awareness of teens regarding autism and can positively affect the attitudes of teens toward their peers with autism.

The proponents of social learning theory would suggest that friendships that are modeled on the shows would translate to prosocial attitudes and behaviors that could be modeled by teen viewers with their classmates and neighbors with disabilities. Subsequently, identifying and eliminating the interfering behaviors that negatively affect student–teacher relationships, peer acceptance, and social opportunities could support further intervention strategies and creative educational programming. This study might provide insight on the use of media, specifically television programming, to affect positively the attitudes of typical teens about ASD. To summarize, this study might provide support for the use of television to provide vicarious contact to support positive

attitude toward teens with autism by their typically developing peers in an attempt to eliminate barriers for social integrations of all teens as they transition into adulthood.

Chapter 3 will provide information on research design and rationale, methodology, along with threats to validity, and ethical procedures. The details on sampling and the ATDP Survey will also be explained.

Chapter 3: Research Method

Introduction

The purpose of this study was to determine whether observational learning could be effective in generating positive changes in teens' attitudes toward peers with ASD. My intent was to conduct a quantitative analysis to measure whether exposure to a single video clip that included a character with ASD could positively influence the attitudes of 18-year-old viewers about ASD.

The first section of this chapter includes a description of this quantitative study. The experimental design included independent samples to study attitudes. The second section, which focuses on the setting and participants, includes a description of the population and the criteria for participant selection. The third section includes information on the statistical analysis being used for this study and the data being measured. In the final section, I identify threats to validity and ethical procedures.

Research Design and Rationale

The following research question was addressed:

1. Can a short video that includes a panel of persons with ASD positively affect the attitudes of teen viewers about ASD?

I investigated the following hypotheses:

$H_0$1: Teen viewers will not report attitudes that are more positive on the ATDP regarding their peers with ASD after viewing a short video clip that included a panel of persons with ASD discussing relationships as compared to the teen viewers that watched an innocuous 10-minute video clip that included a panel of persons without ASD discussing their use of media.

$H_1$1: Teen viewers will report attitudes that are more positive on the ATDP regarding their peers with ASD after viewing a short video clip which included a panel of persons with ASD as compared to teen viewers who watched a video clip that did not contain a panel of persons with ASD.

In this quantitative study, I used a two-group, posttest only, experimental design to determine whether observational learning could be effective in generating positive teen attitudes toward teens with ASD. I used the ADTP Survey to measure and compare attitudes about ASD after the participants watched a short video clip. Yuker (1970) designed this scale to measure attitudes toward disabled persons in general. This scale continues to be the instrument of choice for researchers measuring attitudes about disabilities. This Likert-scale instrument takes 10 minutes to administer.

The scales for the control and experimental groups were scored and compared. An independent samples *t*-test analysis was performed to determine whether a statistical difference existed between the mean scores for the two groups corresponding to attitudes toward ASD. The findings of this quantitative study were used to determine whether vicarious observational learning could positively affect the attitudes of teens about their peers with ASD.

I asked the participants to view a short video and to complete a survey after the showing. The study took place in two areas for each sample group to view the video without cross-group interaction. Although the study took place late in the first half of the school year, it was possible that senior participation could have been limited because some seniors had not yet had their 18th birthday at the time of data collection.

Methodology

Population

For this study, the population being studied consisted of 18-year-old public high school seniors from Ventura County, CA. Seniors were recruited to participate in the study after a school-sponsored event; the participants were selected because of the number of 18-year-olds expected to be present.

Sampling and Sampling Procedures

A convenience sample ($N = 130$) of 18-year-old, public high school seniors from Ventura County, California was recruited for this study. I recruited individuals near a sporting event at a local public high school to participate in a study about attitudes toward disabilities. Recruits completed a short questionnaire to determine whether they met the inclusion criteria (18-years-old, capable of providing informed consent, and enrolled in high school). Individuals who qualified to participate in the study were randomly assigned to either the experimental group (Group A) or the control group (Group B). Both groups ($n = 65$) were homogeneous with respect to age and demographics.

A pool of 18-year-old, public school seniors in Ventura County, California was recruited for this study outside a school-sponsored event because of the number of seniors who attend those events. This convenience sampling strategy supported the needed sample size. The 18-year-old seniors had the ability to give consent at the time of the study. The sample size for the two-tailed *t*-test at .05 was determined using the G*Power 3.1 statistical power analysis program found online for Mac users (Faul, Erdfelder, Lang, & Buchner, 2007). The G*Power program allows parameters to be entered to estimate the required minimum sample size. The *t*-test to determine the

difference between two independent means was first located. Next, a two-tailed test with a significance of .05 was chosen. To increase the probability of detecting a true effect, a power level of .80 was chosen. A medium effect size of d = .50 was employed. The program was then used to determine the number of participants in each sample group. To have an 80% chance of detecting a medium sized effect, a minimum of 64 participants was needed for each group.

Procedures for Recruitment, Participation, and Data Collection

A table was set up near an event to approach potential participants and to screen for inclusion. Each candidate was given a short checklist to complete that included two questions to determine whether they met the inclusion criteria. The candidates were screened for age and high school grade. After completion, I reviewed the checklist and directed approved candidates to the research location.

If participation criteria were satisfied, the checklist was replaced with two labeled consent forms that identified the purpose of the study and confirmed confidentiality (see Appendix A). The labels only indicated a Number 1 or Number 2 for room assignment and eased the data collection procedure. Each participant signed and returned one of the consent forms, which was held during the viewing of the clip and survey completion. The participants were instructed to keep the second copy of the consent form for their records.

After it was confirmed that all the inclusion criteria for the study were met, participants were directed to the designated rooms. Room assignments alternated between Room 1 (control group) and Room 2 (experimental group) determined by the consent label. Participants received instructions to view the video and to complete the survey. Directions were read to the participants to ensure proper procedures of data collection

within the study. Both the control group and the experimental group viewed a short video that had been retrieved from YouTube. The videos ran every 25 minutes to allow small groups of participants to view the video together. The experimental group viewed a 10-minute video clip that included a panel of teens with ASD speaking about relationships. The control group viewed an innocuous 10-minute video clip that included a panel of persons without ASD discussing media use. Walden University's Institutional Review Board approved the use of the short video and determined the need for copyright approval.

After the conclusion of the video, data on the attitudes of the teens from each group in the study were gathered to determine whether observational learning strategies had an effect on attitudes toward teens with ASD. The ADTP Survey, a 20-question attitude survey, was then distributed for the collection of participants' attitudes about ASD (see Appendix B). This Likert-style questionnaire has been used with secondary students to measure attitudes toward disabled persons (Yuker & Block, 1986). The questionnaire can be group administered, and responses to the 20 Likert-style questions range from +3(*strongly agree*) to –3(*strongly disagree*). No neutral score was used; therefore, all questions answered were ranked positively or negatively. A copy of the ATDP Survey score sheet appears in Appendix C.

I handled the distribution and the retrieval of the surveys upon completion. The participants were excused and received an information card about accessing the study results in the future through a URL. The completed surveys were secured in manila envelopes labeled 1 (control) and 2 (experimental) for individual anonymity.

Materials

Video clips. In this quantitative study, I used two video clips.. The video for the experimental group was a 10-minute clip entitled, "Focus on Autism," an online TV production from the Focus Center on Autism (Swanson, 2012). The video showed a panel of teens with ASD discussing relationships and friendships. This video was chosen because of the panel style format that showed the spectrum of teens with ASD. Although the teens with ASD did not display identifiable behaviors, they did demonstrate difficulties in social communication strategies, which are representative of persons with ASD. The second video, which was shown to the control group, displayed a panel of teens discussing how they used media in their daily lives. The second YouTube video, entitled, "Youth Panel: A Look at How They Really Consume Media," (Brand Marketer's Summit, 2012) was found during a YouTube video search on media and teens. Both videos use a teen panel format.

Attitudes Toward Disabled Persons Scale. In this quantitative study, I relied on data collected using the ADTP Survey. The measure was distributed to the participants after they had viewed the video. The survey was completed in a group setting. On completion, the ADTP Survey was collected and placed in labeled folders for group identification.

The ATDP Form O was developed by Yuker (1970) and was chosen for its reliability in measuring general attitudes toward persons with disabilities. The ATDP is a self-report, 20-item survey in which participants use a 6-point Likert scale, from −3 (*I disagree very much*) to +3 (*I agree very much*), to indicate the extent of their agreement or disagreement with each item. The ATDP has no neutral point. The scores range from 0

to 60 with higher scores indicating a more favorable attitude. The total score is used as a measure of attitude toward disabled persons.

The ATDP Form O was selected to measure attitudes in this study because it is self-administered and has concise data collection. The scale is in the public domain and is free to use. For this study, minor adjustments were made to the survey to accurately access attitudes toward teens with ASD specifically. The adjustments included replacing the word disabled with the phrase teen with ASD. Modifications to the ATDP scale have been noted in the research and include specific disabilities: Down syndrome, children in special education, and blind person (Furnham & Pendred, 1983; Simpson, Parish, & Cook, 1976). Minor changes to this scale have been found to have little effect on reliability and validity (Yuker & Block, 1986). For the ATDP, the internal reliability coefficient alpha has been reported as .80 (Yuker & Block, 1986).

Data Analysis Plan

The ATDP Survey was scored by summing the responses on each item for each of the study groups: control (C) and experimental (E). Statistical analysis was conducted using SPSS 21 (IBM:SPSS, 2014). To test the hypothesis that observational learning can positively affect teens' attitudes toward their peers with ASD, an independent samples *t*-test was performed. The *t*-test measured for a statistically significant difference in mean scores between the two sample groups. Significance was determined at the .05 confidence level.

Threats to Validity

Threats to validity can occur through the choice of intervention and the location in which the study is executed; therefore, both groups viewed YouTube videos. However

only one group saw the clip that included the panel of teens with ASD. No current scale to measure attitudes toward ASD was located; therefore, the ATDP Survey was chosen as the measurement tool. Although the ATDP Survey was designed to measure attitudes toward persons with disabilities in general, Yuker and Block (1986) reported no validity concerns with replacing wording for specific groups. Although directions were read to adhere to research procedure, indirect or subtle cueing might have fostered the desired responses and resulted in inaccurate measurement of attitudes. To limit the possibility of incidental cue, a script of the procedures and procedural instructions was used for directing the participants at each step of the study.

Ethical Procedures

I followed all of the American Psychological Association's (2010) ethical principles and standards to protect the participants from harm. Informed consent to participate in a research study was obtained. All surveys were anonymous and were stored immediately after they were completed in two folders for future scoring. No compensation was provided to the participants. The Walden University Institutional Review Board fully approved this study prior to participant recruitment (10-06-14-0063985).

Summary

In this study, I investigated whether observational learning could be effective in generating positive changes in teens' attitudes toward other teens with ASD. I used a two-group, posttest only, experimental design to determine whether observational learning was effective in generating positive teen attitudes toward teens with ASD. A convenience sample ($N = 130$) of 18-year-old public high school seniors from Ventura

County, California was recruited for this study near a sporting event at a local public high school. The prospective participants were screened for inclusion and were asked to provide informed consent to participate in the study. The participants viewed the assigned video and were then asked to complete the ADTP Survey. I concluded Chapter 3 by identifying the data analysis performed with a discussion on threats to validity and ethical considerations for this study. Chapter 4 will present the data collection as well as report of the results of the study.

Chapter 4: Results

Introduction

The purpose of my study was to determine whether observational learning could be effective in generating positive changes in teens' attitudes toward peers with ASD. The following research question and hypotheses were examined:

1. Can a short video that includes a panel of persons with ASD positively affect the attitudes of teen viewers about ASD?

$H_0$1: Teen viewers will not report attitudes on the ATDP that are more positive regarding their peers with ASD after viewing a short video clip of a panel of individuals with ASD as compared to teen viewers who watched a similar video clip that did not contain a panel of individuals with ASD.

$H_1$1: Teen viewers will report more positive attitudes on the ATDP regarding their peers with ASD after viewing a short video clip which included a panel of persons with ASD as compared to teen viewers who watched a video clip that did not contain a panel of persons with ASD.

In this chapter, I describe the sample and then address the research question and test the hypothesis.

Data Collection

A convenience sample (N = 130) of 18-year-old public high school seniors was recruited from a local high school from October 24 through December 15, 2014 after school-sponsored events. Individuals who qualified to participate in the study provided written consent and were alternately assigned to either the experimental group (Group 1) or to the control group (Group 2). No demographic information was collected except age

and grade. This was a convenience sample of 18-year-old seniors, and therefore, both groups (n = 65) were homogeneous with respect to age and grade. The location of the study was modified to view the assigned video on an iPad and to have the participants complete the survey after viewing. The participants were not directed to one of two rooms inside the park building. Instead, the participants were directed alternately to one of two pavilions, 30 feet apart. The participants were able to view the videos on individual iPads with their backs only in view to those participants in the other condition. Only six persons at a time participated because of the number of iPads available. One pavilion was used for the experimental group, who viewed the 10-minute video clip that included a panel of teens with ASD speaking about relationships. Each participant viewed the video clip on individual iPads. The alternate pavilion was used for the control group to view an innocuous, 10-minute video clip that included a panel of persons without ASD discussing media use on individual iPads. This modification of procedure was required because the viewing rooms were no longer available at the time of the study. The use of iPads did not require the study to use a projector, screen, or television, which would require set up and possible researcher malfunction. No participants were knowingly included twice in the study; however, no safeguards were in place to prevent double inclusion. After viewing the video, the participants were provided with the modified ATDP to complete at a nearby table. Directions were given to complete the 20 items on the ATDP Survey by indicating the extent of their agreement or disagreement on each item of the scale. Reliability was determined using Cronbach's alpha. The alpha coefficient was .82. The alpha coefficient was similar to that of the ATDP, which was reported as .80 (Yuker & Block, 1986).

Results

The data collected from the 130 participants were entered, scored, and analyzed using the SPSS program. None of the ATDP score sheets were incomplete or unreadable, and the ATDP item responses were entered into the SPSS program (IBM Corp, 2012).

The ATDP was scored following the Yuker and Block (1986) instructions, which included a four-step process. First, Items 2, 5, 6, 11, and 12 were reversed scored. Second, the sum of all of the items was obtained. Next, the sign of this sum was reverse scored. Last, to eliminate negative values, a constant of 60 was added to the sum to generate the final score. High scores reflected accepting attitudes while low scores represented rejecting attitudes. There were 65 high school seniors who were randomly alternately assigned to each of the two groups for this study. A test for homogeneity of variances was performed using Levene's test for equality of variances. The results of the test indicated homogeneous variance between the groups, F (1,128) = .50, p = .48

The sample group who watched a short video, which included a panel of teens with ASD, had a mean of 74.91 with a standard deviation of 8.39. The sample group who watched an innocuous video had a mean score of 48.57 with a standard deviation of 9.11. The means of the two groups were compared using a t-test for independent groups. The difference in the scores of the two groups was significantly more than would have been expected by chance. In this study, 18-year-old students who watched a video clip of a panel of teens with ASD had more positive attitude scores than the 18-year-old students who watch an innocuous video clip, t (128) = 17.14, $p < .0001$. The significant difference in the scores of the two groups was was large with a Cohen's d of 3.00.

Summary

In this quantitative study, I used a two-group, posttest only, experimental design to determine whether observational learning could be effective in generating positive teen attitudes toward teens with ASD. A convenience sample ($N = 130$) of 18-year-old, public high school seniors who met the inclusion criteria for this study (18-years-old, capable of providing informed consent, and enrolled in high school) were assigned alternately to the experimental group (Group 1) or control group (Group 2). Both groups ($n = 65$) were homogeneous with respect to age and grade. SPSS was used to conduct independent samples *t*-test analysis on mean scores between the sample groups demonstrating statistical significance at the .0001 level. In Chapter 5, I will address the results, implications, and recommendations from this study as they relate to the attitudes of high school seniors toward individuals with ASD.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

This study was conducted to determine whether observational learning could be effective in generating positive changes in teens' attitudes toward other teens with ASD. Media plays and important role in socialization of teens by impacting teen beliefs and attitudes (Arnett, 1995). The research question guiding this study was whether a single exposure to a short video, which included a panel of teens with ASD, would positively affect the attitudes of teen viewers about ASD. The teens in this study completed a survey that was modified to address attitudes toward teens with ASD after viewing a short video clip, which included a panel of teens with ASD. I discuss the results of the study as they realte to the research question along with identifying the limitations, recommendations, and implicaations for further research.

Interpretations of the findings

In the findings of this study, I found a difference in attitudes between teens in the experimental and control conditions, lending support to the hypothesis that teen viewers would report attitudes that were more positive regarding their peers with ASD after watching a short video clip of a panel of individuals with ASD. It was found that the 18-year-old, high school students in the experimental condition had a significantly higher mean total score ($M = 74.9$, $SD = 8.4$) on the ATDP Survey than the 18-year-old, high school students in the comparison group ($M = 48.6$, $SD = 9.1$). This statistical difference was identified after a single exposure to the video clip, which is in alignment with the research on media influence on teens discussed in Chapter 2. The use of television to promote prosocial attitudes was also identified in the research in accordance with social

learning theory (Müller, 2009). Social learning theorists suggest that depicting positive social messages about ASD can positively affect teen attitudes toward other teens with ASD. In this study, the participants confirmed the influence of social learning and the impact of positive social messages on attitudes of teens toward teens with ASD (Farnall & Smith, 1999). Consequently, this study might substantiate the use of television to provide vicarious contact to support positive attitude toward teens with autism by typically developing peers in an attempt to eliminate barriers for social integration.

Limitations of the Study

The sample population was drawn from 18-year-old, high school students attending sporting events in Conejo Valley, California. The convenience sample of high school students might not be generalizable to postsecondary students. No demographic information, besides age and grade, was collected; therefore, it is impossible to determine whether the sample was demographically representative of 18-year-old seniors. An improvement to the study would be to include a diverse demographic sample to allow for confidence in generalizability. Additional demographic information would allow me to determine whether demographic characteristics affected findings. The minimum sample size was calculated to be 130, according to a power level of .8 and a medium effect size of .5. The survey was validated for this age group; therefore, age was not a contributing factor to effect. Modifications to the ATDP Survey have been noted in the research and include specific disabilities, Down syndrome, children in special education, and blind person (Furnham & Pendred, 1983; Simpson et al., 1976). Minor changes to this scale have been found to have little effect on reliability and validity (Yuker & Block, 1986). For the ATDP, the internal reliability coefficient alpha was reported as .80 (Yuker &

Block, 1986). Internal reliability for the modified ATDP Survey was measured with an alpha coefficient of .82.

The significant difference in the scores of the two groups was was large with a Cohen's d of 3.00. Data entry was complete, and scoring was rechecked for errors. In the consent form, I did identify that I would measure attitudes about ASD after watching a video. However, because the same consent form was given to all participants regardless of condition, I do not think it biased their responses. Each participant received written instructions for completing the ATDP to minimize any undue influence by me. The two groups were seated away from each other to prevent viewing or overhearing the alternate videos. The participants were unaware which viewing condition they were assigned. Upon completion of viewing, the iPads were collected. Each iPad was assigned to one of the two viewing conditions and contained only the video for that designated condition. To validate the results of this study, the study should be replicated using a representative sample. Further attention to seating, clarity of instructions, and location of study should be investigated for potential bias.

Recommendations

One in 150 teens currently carries the diagnosis of autism, which reflects a 78% increase since 2002 (CDC, 2012). Research to provide insight into ways to support teens with ASD is needed for this growing population. It is common practice to teach young students to serve as social models to aid in the teaching of social skills to their peers with ASD (Rogers, 2000). Using media to affect attitudes about ASD could serve to support teens with ASD as they move into postsecondary work and school settings. Social learning theorists indicate that learning can occur not only through direct contact and

experience, but also through watching others (Katz et al., 1988). The use of television to support prosocial attitudes is the focus of entertainment education campaigns (Slater & Jain, 2011). As reported by social learning theory, teens learn not only from direct experiences, but also from observing the attitudes and behavior of other people. According to social learning theory, such vicarious contact can lead to learning, reinforcement, and imitation (Bandura, 2001). In fact, television programming has been studied to determine its strength on influencing attitudes and its impact on modeling behavior (Murray, 2006; Schwartz et al., 2010; Stern, 2005). In addition, researchers have also demonstrated the importance of the media milieu on teen social attitudes and prosocial behavior.

Most observational learning researchers have focused on inclusion and the importance of contact with individuals with disabilities on the student's attitudes toward disabilities. Lieberman et al. (2004) reported that student interactions are an important goal of structured activities in classrooms to support positive contact with students with disabilities. Positive interactions are important to help students gain an understanding about peers with disabilities and to provide opportunities for students with and without disabilities to interact. Although increasing numbers of individuals with ASD are being reported, research is lacking regarding the impact of observation learning through television on attitudes of teen viewers about autism. I recommend that further research on ways to affect positively the attitudes of teens about ASD be completed to support the increasing numbers of 18-year-olds with ASD. According to previous research on the media's impact on attitudes, positive portrayals of persons with disabilities in media is

related to positive perceptions and feelings about those persons with disabilities (Fatnall, 1999).

ASD is characterized by impaired reciprocal social interactions, verbal and nonverbal communication, and restricted repertoire of interests (APA, 2013). In addition, persons with ASD can have significant impairments, which would identify their disorder while higher functioning teens may perform adequately without identifiable characteristics (APA, 2013). Both of the previously described teens with ASD would require accurate representation in the media to positively affect the attitudes toward spectrum range of the disorder. Further studies that accurately represent a full range of teens with ASD would provide information regarding attitude differences toward different presentations of ASD. This would allow for more focused education and inclusion of persons with ASD in teen-focused media.

Implications

The information drawn from this study can give insight into the social attitudes of teens about ASD that might interfere with social networking. The study results might be used to identify the effect that television has on modeling attitudes that support the development of relationships between teens with and without disabilities. In this study, I found that a single exposure to a video clip that included a positive representation of a panel of teens with ASD could positively affect the attitudes of teen viewers about ASD. The information drawn from this study gives insight on ways to change attitudes of teens about ASD using media. This study's finding was in alignment with the research of media impact on teen attitudes and the importance of the representation of characters

with disabilities in media to eliminate stigmas and to promote positive attitudes about specific disabilities (Schwartz et al., 2010).

Social supports will continue to be needed as teens with ASD leave the structured programs of high school. Challenges in nonverbal communication, difficulty with social challenges in novice situations, and difficulties with social emotional reciprocity affect social experiences for a teen with ASD (APA, 2013). Many young adults with ASD will transition into the community into postsecondary education or in the workforce. Positive attitudes toward teens with ASD can foster social interactions between teens with and without ASD. In addition, positive social attitudes about ASD may foster social experiences and opportunities for teens with ASD to learn social behaviors and social language by modeling their typical peers.

Conclusion

Media play a role in socialization, and researchers have demonstrated the media's impact on teen attitudes and behaviors. The recent increase of ASD points to the importance for the representation of teens with ASD in the media to raise awareness, remove biases, and affect positive attitudes toward teens with ASD. The power of media affects teen beliefs and attitudes about socialization. The inclusion of characters with ASD in television programming can provide insight, dispute biases, and help reduce stigma that can be present for a teen with ASD. Positive attitudes can result in creating social opportunities for emotional and social growth and support successful community integration. Teens can acquire positive attitudes towards their peers with ASD by interacting and observing the teens with ASD. These interactions can eliminate estrangement and demonstrate the similarities between teens with and without ASD to

support friendships and social networks. In this study, I demonstrated the impact of social learning through vicarious contact by showing teens a video of teens with ASD to affect their attitudes. This observation opportunity significantly changed the attitudes of teen viewers suggesting acceptance and tolerance for teens with ASD. This attitude change would be beneficial for fostering friendships, social networks, and community supports for persons with ASD. These relationships can then serve as social models for persons with ASD to foster further emotional and social development.

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Appendix A: Consent Form

Consent Form

You are invited to take part in a research study about teen attitudes toward peers with Autism Spectrum Disorder (ASD). I am inviting 18 year-old high school seniors outside of school environment to watch a video clip and complete a survey about attitudes toward teens with autism. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part. This study is being conducted by a researcher named Sheila Orta, who is a doctoral student, at Walden University.

Background Information:

The purpose of this study is to investigate media's influence on teens.

Procedures:

If you agree to be in this study, you will be asked to:

- Watch a short 10 min video clip in a small group setting.
- Complete a 10 min questionnaire about attitudes.

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time. No compensation will be provided for your participation

Risks and Benefits of Being in the Study:

Being in this study would not pose risk to your safety or wellbeing. Being in this study will not provide an immediate benefit to your wellbeing, although research participation is respected.

Privacy:

Any information you provide will be kept anonymous. I will not use your personal information for any purposes outside of this research project. Also, I will not include your name or anything else that could identify you in the study reports. Data will be kept secure by me in sealed envelopes. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact me via Sheila.orta@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. University's approval number for this study is 10-06-14-0063985.

Please keep a copy of this form for your record.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I understand that I am agreeing to the terms described above.

Printed Name of Participant _____

Date of consent _____

Participant's Signature _____

Researcher's Signature _____

Appendix B: ATDP-O (Modified)

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3: or –1, –2, –3: depending on how you feel in each case.

+3: I AGREE VERY MUCH	–1: I DISAGREE A LITTLE
+2: I AGREE PRETTY MUCH	–2: I DISAGREE PRETTY MUCH
+1: I AGREE A LITTLE	–3: I DISAGREE VERY MUCH

_____1. Parents of teens with ASD should be less strict than other parents.

_____2. Physically disabled teens are just as intelligent as nondisabled ones.

_____3. Teens with ASD are usually easier to get along with than other people.

_____4. Most teens with ASD feel sorry for themselves.

_____5. Teens with ASD are the same as anyone else.

_____6. There should not be special schools for teens with ASD.

_____7.It would be best for teens with ASD to live and work in special communities.

_____8. It is up to the government to take care of teens with ASD.

_____9. Most teens with ASD worry a great deal.

_____10. Teens with ASD should not be expected to meet the same standards as nondisabled teens.

_____11.Teens with ASD are as happy as nondisabled teens.

_____12. Teens with low functioning ASD are no harder to get along with than those with those with high functioning ASD.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3: or –1, –2, –3: depending on how you feel in each case.

+3: I AGREE VERY MUCH	–1: I DISAGREE A LITTLE
+2: I AGREE PRETTY MUCH	–2: I DISAGREE PRETTY MUCH
+1: I AGREE A LITTLE	–3: I DISAGREE VERY MUCH

_____13. It is almost impossible for a teen with ASD to lead a normal life.

_____14. You should not expect too much from teens with ASD.

_____15. Teens with ASD tend to keep to themselves much of the time.

_____16. Teens with ASD are more easily upset than nondisabled teens.

_____17. Teens with ASD cannot have a normal social life.

_____18. Most teens with ASD feel that they are not as good as other people.

_____19. You have to be careful of what you say when you are with a teen with ASD.

_____20. Teens with ASD are often grouchy.

Appendix C: ATDP Permission for Use

Re: The ATDP permission to use

Thank you for your inquiry.

The ATDP is in the public domain, so you are free to use it without specific permission. The Library does not provide copies of any measures.

There are various forms of the ATDP. They are included in an 86-page book entitled "Research with the Attitudes Towards Disabled Persons Scales (ATDP)". This book includes the various forms, administration and scoring, reliability and validity data, and an extensive reference list. The book is available through the Psychology Department for US $10.00, which includes postage. The contact person is Ruth Mangels, who can be reached either by phone at 516-463-4205 or by email at Ruth.Mangels@Hofstra.edu

Appendix D; Instructions for Participants in Study

Thank you for participating in this research study about attitudes. Please watch the following 10-minute video clip. When the video is finished, you will be given a short survey to complete.

Please refrain from talking during the video and survey.

Your participation is voluntary and the information received will be used in a doctorate study.

Thank you. Let's begin with the video.