

Gender Representation in Sports Illustrated for Kids

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in
partial fulfillment of the requirements for the degree of

Masters

In

Communication

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7 May 2019

Blacksburg, Virginia

Keywords: Social cognitive theory, gender representation, Sports Illustrated for Kids, content analysis, quantitative methodology

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ABSTRACT

Sport media has been a known producer of traditional gender images that reflect inequality between sexes. Sport media has been studied endlessly, but one aspect that has not fostered as much attention is sport media, advertising, and children. *Sports Illustrated for Kids (SIK)* is the only sport media print magazine for children, with a readership age of 8-15 years old. Images and gender stereotypes have been used continuously by advertising companies to sell products to consumers. Children in particular cannot accurately determine between content that is meant to inform and content that is meant to sell. Through the lens of social cognitive theory, this study used quantitative content analysis to determine whether editorial and advertising images in *SIK* reflects actual participation rates of athletic activities based on gender in issues from the past decade (40 issues, $N=544$). This study used scales from Cuneen and Sidwell (1998) and Duncan and Sayaovong (1990) that analyze representation by pure numbers and stereotypes by coding for variables such as state of dress, photo angle, and motion in photograph. Findings show that females are still under and misrepresented in *SIK*. Even so, findings of this study suggest representation of women in team neutral sport such as soccer and basketball is on the rise. Social Cognitive Theory highlights major implications these findings could have on their young readership.

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GENERAL AUDIENCE ABSTRACT

Sport media has been a known producer of traditional gender images that reflect inequality between sexes. Sport media has been studied endlessly, but one aspect that has not fostered as much attention is sport media, advertising, and children. *Sports Illustrated for Kids* is the only sport media print magazine for children, with a readership age of 8-15 years old. Images and gender stereotypes have been used continuously by advertising companies to sell products to consumers. Children in particular cannot accurately determine between content that is meant to inform and content that is meant to sell. This study examined whether editorial and advertising images in *Sports Illustrated for Kids* reflects actual participation rates of athletic activities based on gender in issues from the past decade. Utilizing past research, this study looked at overall numbers and stereotypes by examining factors such as state of dress, photo angle, and motion in photograph. Findings show that females are still under and misrepresented in *SIK*. Even so, findings of this study suggest representation of women in team neutral sport such as soccer and basketball is on the rise. Findings could have implications for *SIK*'s young readership as well highlight a need for more education about advertising and editorial practices being implemented.

Table of Contents

Introduction.....	1
Literature Review.....	4
Defining Gender and Gender Stereotypes	5
Social Cognitive Theory	8
Social Cognitive Theory and Children.....	9
The Power of Photos.....	11
Gender in Sport Media.....	13
Gender in Advertising.....	16
Research Questions.....	19
Methodology.....	21
Content Analysis.....	21
Procedures.....	21
Data Collection.....	21
Unit of Analysis.....	22
Coding Instrument.....	22
Intercoder Reliability and Coding Procedures.....	23
Results.....	27
Summary of Findings.....	31
Implications.....	36
Limitations and Suggestions for Future Research	38
Conclusion	40
References.....	42
Appendix A.....	50
Appendix B.....	55
Appendix C.....	57

Introduction

The journey for equal rights and representation for women has been a long one and one that is still being fought. A step toward equal opportunities for women occurred with the Education Amendments of 1972, which were passed on June 23, 1972. The amendment commonly referred to as Title IX prohibits gender-based discrimination in activities and educational functions that illicit federal funds. Title IX ushered in an era for coed physical education and more opportunities for girls and women to participate in athletics at both the high school and collegiate level. Shaped by the civil rights movement of the 1960s, Title IX provided an answer for legal findings of extensive prejudice against women in educational establishments (Suggs, 2006). According to *Cannon v. University of Chicago* (1979), the law's main objectives were "to avoid use of federal resources to support discriminatory practices and to provide individual citizens effective protection against those practices" (p. 704). Because of this, all educational instances being presented with federal funding were to follow Title IX's procedures preventing discrimination. Due to the fact that Title IX is only directed towards public and private schools that receive federal funding, many states have also implemented laws to prevent discrimination based on gender within institutes that do not receive federal funding (Suggs, 2006).

The adoption of Title IX has allowed for women's participation in sport to increase in a way it was not able to prior (Katz & Luckinbill, 2017). Participation in school athletic programs continues to climb, with girls now making up roughly 41% of all high-school varsity athletes. This was an expansion from 1 in 27 girls who took part in 1971 to 1 in 3 girls doing so in 2017 (The National Federation, 2017). While high school athletics have become more diverse, female participation in college sports also increased tremendously from 16,000 in 1970 to almost

200,000 in 2017. The presence of female intercollegiate sport teams has increased from an average of 3 to an average of 9 per college or university (Suggs, 2006). The U.S. Olympic teams are another measure of the effectiveness of having more opportunities for women. Since 1972, nearly 900 U.S. female athletes have medaled in an Olympic event, most of those being in team sports such as softball, basketball, ice hockey, soccer, gymnastics, volleyball, water polo and many others (International Olympic Committee, 2018). The International Olympic Committee (IOC) also has been in charge of delegated gender-related issues. For example, since 1991, every new sport added to the Olympic games must include a women's event. The IOC also has added gender parity to its 2020 agenda (Katz & Luckinbill, 2017). It is hard to undoubtedly and causally link all of this progress to Title IX, but few scholars doubt the legislation's hand in evolving the playing field for all athletics to include women (Rhode & Walker, 2008).

Even though participation rates of female athletes have risen, attitudes and acceptance by sports media have not risen with the same gumption (Duncan, 2006). After roughly 45 years of Title IX and efforts to recognize female athleticism, it is undeniable that the sporting world today has gone through some noteworthy changes. But it is too soon to abandon all concern and intrigue. Gender misrepresentation in sport remains an issue as media outlets continue to be a leading forum for the dissemination of dominant, traditional images of gender and inequality between sexes (Armentrout, Kamphoff, & Thomae, 2014; Frisby, 2017). Print media in particular is a popular channel for children to be exposed to gender and traditional gender roles (Holtzman & Sharpe, 2014). In regards to sport, children learn what types of sports are traditionally for girls or boys through entertainment media. Children also learn this through advertisements and the gender of who is traditionally used to promote products children are attracted to (Friedman, 2018). With the combination of these two things, it makes sense to look

at the editorial and advertising content of the most popular sport magazine in the United States and the only print sport magazine for children, *Sports Illustrated for Kids* (Sports Illustrated for Kids, 2015).

The magazine, *Sports Illustrated for Kids*, was first published in January of 1989 and is the only children's sports magazine that publishes physical copies. Roughly 8.1 million readers consume *SIK* with their average reader being 11 years old. Out of those readers, 69% are boys and 31% are girls ("Readership and Circulation," 2018). Readership surveys indicated that advertisements in *SIK* influence subscribers' purchases of food, toys, clothing, vacation destinations, and other products or services (*Sports Illustrated for Kids*, 2015). In addition, *Sports Illustrated for Kids* is the only print sport media with the readership age of 8-15 that covers both late childhood and early adolescence ("Readership & Circulation," 2018). The vast circulation of the magazine paired with the monopoly it has on this market calls for the study of the magazine as a socializing agent as well as an advertising influence (Cuneen & Sidwell, 1998).

With heavy influence can come heavy responsibility. Underrepresentation in the media can be harmful for children in minority groups, including women and girls (Badri, Nuaimi, Guang, & Rashedi, 2017). According to social cognitive theory, children learn behaviors from what they observe (Bandura, 1977). A lack of representation from women in fields such as science, math, and athletics can lead to a lack of long term participation and a belief from a young age that girls do not belong in those avenues (Deaton, 2015). Self-esteem, confidence, and happiness have been positively linked to early sport participation (Eiben & Stieglitz, 2018). This makes it very important for young children, especially young girls, to feel like they belong in a variety of athletic roles that can carry typically masculine connotations. Roughly 45 years ago,

Title IX brought about legal action that allowed women an equal playing field in athletics (Katz & Luckinbill, 2017). Today, that work is not done. More research can help accurately gauge the current state of gender representation in children's media such as *Sports Illustrated for Kids*.

While past research from the 1990's and early 2000's surrounding sport media and gender representation has provided a solid base of research about gender representation and advertising content, the dated nature of the research (Duncan & Sayaovong, 1900; Cuneen & Sidwell, 1998; Hardin et al., 2002) warrants updating of this line of inquiry. In addition, this study measures diversity and representation in current sports and sport media. Photographs displayed in children's magazines warrant particular attention. A close look into how media presents gender roles is of the utmost importance when the consumers have limited understanding of what they are consuming. Some of the most unaware media consumers are children. To address these concerns, this study analyzes photographs in the advertising and editorial content in *Sports Illustrated for Kids (SIK)* magazine issues published from 2009-2018 to see if the visual images and feature articles within the magazine reflect documented involvement in athletic competitions based on gender, and whether the number of images of women in the magazine has increased during the magazine's recent publications.

Literature Review

Children have been found to construct stereotyped attitudes about gender early in life as customary images found in advertising and other publications strengthen traditional gender roles (Brown, Ruel, & Medley-Rath, 2011; Mulvey & Killen, 2015). According to social cognitive theory, children learn by observing what others do, followed by modeling of those social behaviors. Therefore, children's attitudes and behaviors regarding gender roles, societal customs,

and prejudices are acquired from models around them, including models present in advertisements and media (Bandura & Walters, 1963; Deaton, 2015; Grusec, 1992; Sears, 1951). Sport is an area where gender disparity is accepted with more ease than other fields or subjects (Adams & Tuggle, 2004; Eiben & Stieglitz, 2018; MacArthur, Angelini, Billings, & Smith, 2107). Even though progress is being made, the rate and intensity of that progress should be continually analyzed.

This literature review will address key areas related to gender portrayals in sport related media and advertising directed towards children. After establishing definitions and key terms, the literature review will address research related to the power of photography. The following section will focus on research studies about gender in sport media. Finally, research related to gender in advertising, all guided by the findings of social cognitive theory, will be discussed.

Defining Gender and Gender Stereotypes

For the sake of clarity, gender is the state of being male or female which is constructed socially, culturally, and psychologically instead of biologically. Gender is different than sex. Sex is determined by biological and physiological characteristics, i.e., reproductive organs and genitalia (Holtzman & Sharpe, 2014). For this study, we will be focusing on gender socialization of adolescents and school-aged children in the sport media context. The designated age range for *Sports Illustrated for Kids*, according to their website, is 8-15 years old (“Readership & Circulation”, 2018). Adolescence is defined by the age range 12-18. Middle childhood is defined by ages 9-11 (Duncan & Sayaovong, 1990; Hardin et al., 2002; Vance, 1965). The age range for the intended audience for *Sports Illustrated for Kids* finds itself in both age ranges and the literature will highlight implications for both. These implications include the exploitation of

traditional gendered activities through the use of stereotypes in sport media and advertisements (Elliot, 2018; Tuncay, Zayer, & Coleman, 2015).

A stereotype is a, “preconceived and oversimplified generalization about a particular social group” (Holtzman & Sharpe, 2014, p. 41). Traditional gender stereotypes usually revolve around personality, demeanor, occupations and physical appearance (Holtzman & Sharpe, 2014). Girls are stereotyped as being emotional and taking on caretaking roles in domestic behaviors and occupations. Jobs that typically are designated for women have accommodating and nurturing connotations such as nurses or teachers, whereas men typically are put into science and repair occupations such as engineers and mechanics. This parallels with stereotypical personality traits for girls and boys. Girls are characterized as more accommodating and emotional, whereas boys are characterized as confident and aggressive. Physical appearance can show itself in gender stereotypes with the notion that females are expected to be thin and graceful and males are expected to be tall, strong, and muscular (O’Keefe, 2016). In sport media and typical athletic environments, women still are subjected to these stereotypes regarding physical appearance. This can lead to women appearing inferior to men in regards to athletic ability and less important or necessary to the success of various athletic endeavors (Koivula, 1995). These stereotypes can be detrimental for the self-esteem and confidence of young girls who fall outside of typical gender stereotypes. It can also lead to a decrease in participation of activities that can aid in the formation of friendships and other early socialization activities (Strouse, Nyhout, & Ganea, 2018).

Long term participation in typically male dominated activities, like athletics and STEM, often can lead to increased opportunities such as scholarships and professional development (Wenner, 2010). The continuation of fields remaining male or female dominated also can be

attributed to the idea that that the way gender stereotypes are interpreted by children and adolescents is not always equal. Different stereotypes can hold different weights or importance and in turn hold social consequences for not following typical gender behavior. Understanding how stereotypes are interpreted by children and adolescents is important in understanding the magnitude of their impact (Mulvey & Killen, 2015; Ruble et al., 2006).

When it comes to adolescents, not all gender stereotypes hold the same prestige. Past finding have shown that stereotypically gendered enterprises for young males are more highly regarded in society than gender-associated activities for young males (Mulvey & Killen, 2015). For example, there would be a higher level of repercussions for a boy to participate in a traditionally female activity than vice versa. In addition, girls in school settings are praised when completing traditional female activities like cleaning up or helping younger children. A 2017 study found that when girls helped clean up or helped younger children with taking off or putting on jackets, they were verbally praised when their male counterparts were not acknowledged with the same verbal recognition (Badri, Nuaimi, Guang, & Rashedi, 2017). When it comes to play, traditional gender roles expect boys to be physical and active when playing, while girls are expected to be quieter and calmer (Brown, Ruel, & Medley-Rath, 2011). Studies have shown children in the 9-14-year-old range are less likely to challenge gender stereotypes and expect consequences for challenging those stereotypes (Mulvey & Killen, 2015). The perceived consequence for challenging gender-stereotypic group norms is exclusion from the norm group. Boys especially recognized the status associated with gender stereotypes in the study with a higher reported importance of inclusion with the norm group and a higher likelihood of being excluded for breaking gender stereotypes (Mulvey & Killen, 2015). This aligns with social cognitive theory and the notion that a child will produce a behavior society deems suitable for its

sex. Along with societal cues, punishment and reinforcement also go into the process of choosing an “appropriate behavior” (Sears, 1951).

Social Cognitive Theory

Social cognitive theory explains that gender identity is learned and children are likely to reproduce observed behaviors (Grusec, 1992). When stereotypes are produced repeatedly through consumed media, according to social cognitive theory, stereotypical behavior is more likely to be adapted (Holtzman & Sharpe, 2014). Because of this, social cognitive theory will be used to guide and inform this study.

Many theorists contributed to the body of work that became social cognitive theory. Even though Bandura’s compiled version of the theory is the most well-known, ideas from other scholars, all the way back to Freud, contributed to what is known as social learning theory today. Social learning theory expanded into social cognitive theory, which describes the process of how personal and environmental factors, and human behavior influence the likelihood of a behavior being changed or modeled (Grusec, 1992). The basis of Bandura’s version of social learning theory centers itself around the idea that behavior is learned through the process of observing and then modeling behaviors, attitudes, or emotional reactions otherwise known as observational learning (Bandura, 1977).

Social cognitive theory recognizes the relationship between the person and the environment. An important factor in this relationship is self-efficacy. Self-efficacy concludes that “people develop domain-specific beliefs about their own abilities and characteristics that guide their behavior by determining what they try to achieve and how much effort they put their performance in that particular situation” (Grusec, 1992, p. 782). Self-efficacy can be found in

social learning research about academic achievement, parenting styles, and athletic performance (Grusec, 1992).

The identificatory processes of social cognitive theory and socialization is also a significant part of the social learning process. Identification can be noticeably accelerated by appropriate matching of behavior and societal-individual expectations. Identification is defined as, “a process in which a person patterns his thoughts, feelings or actions after another person who serves as a model,” (Grusec, 1992, p. 218). Gender is a form of identification and can be a lead to identificatory events. An identificatory event is characterized as “the occurrence of similarity between the behavior of a model and another person under conditions where the model’s behavior has served as the cue for the matching responses” (Bandura, 1969, p. 217). This model can include images in various forms of media that can serve as cues for the modeling process (Deaton, 2015). Power of the model and attractiveness to the behavior by environmental factors also factor into how a behavior is viewed (Bandura, 1977).

Most instances of behavioral similarities can be attributed to the modeling process. Identification can be confused for, but is not imitation. Imitation addresses discrete responses whereas identification involves the adoption of symbolic representations, diverse patterns of behavior, or events similar in meaning (Bandura, 1969). The modeling process does not always lead to a behavior change. Conditions for effective modeling include attention, retention, reproduction, and motivation. Retention includes coding of symbols, mental images, organization of thoughts, and symbolic motor rehearsal. Symbolic representation will then be turned into actions similar to the modeled behavior (Bandura, 1977). This is particularly relevant due to the unique symbolic qualities that images and photographs possess (Sontag, 1977). These definitions present an explanation of social cognitive theory as it will be applied in this study.

Social cognitive theory and its foundational principles lead to the current understanding of the process of observation to behavior (Grusec, 1992).

Social cognitive theory and children. Social cognitive theory, very broadly, claims that people learn by observing others. Many of Bandura's subjects were children, including a notable study where dolls were used to show how children can learn by observing behavior (Bandura, Ross, & Ross, 1961). Social cognitive theory focuses on the effect of "socialization agents" in conveying attitudes norms, motivation, and behaviors to the recipient (Bachmann, John, & Rao, 1993; Moschis, 1978). Gender socialization can be characterized as the process of learning social beliefs, expectations and attitudes affiliated with an individual's sex. Gender socialization is a universal experience that can happen regardless of efforts by parents to enforce gender neutrality. Outside influences (grandparents, friends, religious institutions, and media) are constantly providing cues about what it means to be a boy or a girl (Heintz & Wartella, 2012). Social cognitive theory suggests an agent of socialization could certainly be the media (Bandura, 1994).

Entertainment media produces mediums for subtle gender socialization without obvious cues. Messages from popular media are less likely to be visible in the way they disseminate what it means to be male or female. The media is a powerful entity in today's society. It has become a vessel of information for the public and a means of possible education of social roles and cues (Holtzman & Sharpe, 2014). Images in the media can impact the development of outlines for social roles through the presentation of different characters (Heintz & Wartella, 2012).

Hegemony can show itself when we become so accustomed to seeing traditional gender roles, they can be passed on without extensive thought or meaning. One way to make these processes visible is a content analysis due to its systematic and objective analysis of message characteristics (Holtzman & Sharpe, 2014; Neuendorf, 2002).

Many recent studies have used social learning to explain how (and what) children learn from advertisements (Chan, Ng, & Williams, 2012; Chick & Hunter, 2011; Peruta & Powers, 2017). A study conducted by Chan, Ng, and Williams (2012) showed how adolescent girls adapt gender-specific stereotypes and behaviors from advertisements. In their study they present how young girls desire to be like what they see in various advertisements. Young girls learn what typical females should look like, dress like, and how much makeup they should wear (Chan, Ng, & Williams, 2012). This aligns with social cognitive theory and other literature about the impact images can have on meaning (Frisby, 2017; Plaza, Boiche, Brunel, & Ruchad, 2016). What toys children want to play with, what activities children want to participate in, and even what clothes children want to wear are all influenced by advertisements within children's media. This can include what clothes are popular, weight and physical build, and what sports or academic activities are acceptable for girls or boys to participate in (Shank & Lyberger, 2014). Social learning explains the process of the behaviors being observed in advertisements and then stored to be later modeled at the appropriate time (Bandura, 1977).

Images in advertisements have power in the way they present acceptable behaviors, attitudes, and emotions to be observed and modeled (Keshari & Jain, 2016). This is incredibly important in regards to children who are still forming opinions with the influence of societal cues, including advertisements (Preston, 2004). Images have a great influence on child development and the images selected for advertising purposes should be analyzed because of the power they can possess.

The Power of Photos

Photos tend to have a greater influence in comparison to text when shaping messages. This could partly be because children develop visual literacy before written literacy (Chick &

Hunter, 2011; Tsao, 2008; Singh, 1998). Photographic images can have a notable impact on social learning. This allows images to have a lasting influence on children (Badri, Nuaimi, Guang, & Rashedi, 2017; Strouse, Nyhout, & Ganea, 2018). In children's books, commercials, and school curriculum alike, children are flooded with images that illustrate men as leading more meaningful lives and appealing lifestyles than women (Montez de Oca, Meyer, & Scholes, 2014; Peruta & Powers, 2017). In his book on media messages, Holtzman and Sharpe (2014) described a 2011 study that found two thirds of the visual representations in reading primers were of men.

Outside of their power to influence meaning, photographs also have the power to convey meaning. This does not exclude sports media and messages. Rowe (1999, p. 120) described photographs as "the most potent of all media sports texts...They are not innocent records of events...sports photographs offer up an account of how the world is (or how the photographer thinks it should be)." Photographs project authenticity, naturalness, and realism unlike other images such as cartoons, sketches, or paintings. Photos appear to be accurate and objective representations (Barthes, 1977; Howells & Negreiros, 2012; Jewitt, 2009; Sontag, 1977; Strunken & Cartwright, 2001). This notion stems from the general knowledge that a photograph is an actual record of objects reflected into a camera (Sontag, 1977). However, many researchers have argued that photographs reflect bias just like any other medium might (Barthes, 1977; Hairman & Lucaites, 2016; Mitchell, 2004).

With the introduction of digital photography and various Photoshop programs, photographs have become easier to modify. Images can be airbrushed, cropped, cloned, enlarged, reduced, and retouched with the click of a button. Angles, background, props, filters, and subject poses are all chosen by the photographer to create the desired effect. As a result, photos may seem to capture an absolute reality when they may only reflect partial or peripheral reality

(McMahon, 2014). Related, photographs may also imply that what is presented in a picture is reality (Barthes, 1977). For this study, this could be a reality that may distort the presence of women and girls in sport. The number of photographs, the types of activity or inactivity of subjects in photographs, and camera angles are some of the ways images can be used to present gender differences. In the ways listed above, photographs have the ability to become powerful influences on children and how they convey meaning in and through sports.

Gender in Sport Media

There is no shortage of research analyzing visual representations of gender portrayals in the media. Many studies have looked at how gender is portrayed in sports magazines (Cuneen & Sidwell, 1998; Duncan, 1990; Duncan & Sayaovong, 1990; Frisby, 2017; Hardin et al., 2002; Hardin, Lynn, & Walsdorf, 2005; Hardin, Lynn, & Walsdorf, 2006; Plaza, Boiche, Brunel, & Ruchad, 2016). The majority of findings in these studies found a predisposition toward sexual stereotyping in photographic representations. Even though these images may not present an accurate reality, many people eventually accept them as accurate representations because the media presents them as such (Holtzman & Sharpe, 2014).

Media depictions regarding gender and sport have progressed in the past decade, but the media persist in establishing and strengthening the hegemonic notion athletics are a way to manhood for men (Holtzman & Sharpe, 2014). Sports media typically only devote 5% to 8% of coverage to women's sports. This statistic is concerning due to the fact that 40% of sport participation includes women (Scheidler & Wagstaff, 2018). Traditionally, women in athletics have been under and misrepresented in general coverage. Increase in participation by women and the increase in athletic opportunities for females have been noted, but have still resulted in unfair coverage that is communicated through both text and photographs in magazines in particular,

with photographs considered to offer a greater influence (Wenner, 2010). Multiple studies have examined *Sports Illustrated* and found that men dominate the magazine in both photographic images and in feature articles (Bishop, 2003; Kim & Sagas, 2014; Weber & Carini, 2013). These findings are significant because *Sports Illustrated* is America's most prominent and largest-circulation sports magazine. If photographs reflect editors' ideology and perceived reader interests, then the symbolic message from the cover of the nation's leading sports magazine is clearly not one that includes women being a notable part of the sport world (Armentrout, Kamphoff, & Thomae, 2014). The lack of media coverage of sportswomen sends another message of its own; female athletes do not exist at all, or, if they are being mentioned, it is not because they exhibit any noteworthy achievements (Montez de Oca, Meyer, & Scholes, 2016).

The gendered nature of sports also has been studied heavily. More specifically, many sports have been traditionally classified as appropriate for men but inappropriate for women and vice versa. Therefore, based on gender suitability, sports become conventionalized into three classifications: masculine, feminine, or neutral (Frisby, 2017; Koivula, 1995; Plaza et al., 2016). Several studies have shown that women are highly represented in gymnastics and figure skating because these sports emphasize feminine ideals such as grace, beauty, and glamour (Angelini, Billings, & Smith, 2017; Cuneen & Sidwell, 1998; Eiben & Stieglitz, 2018; Hardin et al., 2002). Furthermore, women tend to be portrayed in individual sports, such as in tennis and swimming, more often than in team sports (Adams & Tuggle, 2004; Cuneen & Sidwell, 1998; Hardin et al., 2002). This can also be seen in the types of uniforms for traditional female versus traditional male sports. Even more serious, female athletes are often the object of sexualization and portrayed with less clothes, less protective gear, in non-athletic poses or "street clothes" that can signify that they are less of an athlete than their male counterparts and should not be taken as

seriously (Adams & Tuggle, 2004; Eiben & Stieglitz, 2018). This could send messages to girls that typically female-dominated sports should not be taken as seriously as traditionally male-dominated sports (MacArthur, Angelini, Billings, & Smith, 2017).

Elliot (2018) found that gender stereotypes for certain sports are learned by grade school, where girls and boys both considered a competitive task that requires strength, speed, and power to be a “masculine” activity. A comparable study concluded that adolescents and teenagers make similar distinctions and assign consequences (exclusion) to activity norms that are not followed (Mulvey & Killen, 2015). These classifications of sports according to gender have been proven in studies to affect both men and women in their choice of sport and their continued participation in that sport (Elliot, 2018; Mulvey & Killen, 2015).

Previous studies, Duncan and Sayaovong (1990), Cuneen and Sidwell (1998), and Hardin et al. (2002), have looked at gender differences in photographic images in *Sports Illustrated for Kids*. All of the studies used content analysis to address their research questions. Duncan and Sayaovong (1990) legitimized the descriptor “sexual difference” to explain how images in the media can represent more than stereotyping and is used to explain the acquainting of females as biologically less equipped for athletics than males. The phrase dictates that there are culturally and socially constructed differences between men and women and that, whatever masculinity is, femininity must be the exact opposite (e.g. men as dominant, women as submissive). The descriptor “gender difference,” also is present in literature about women and sports, is interchangeable with sexual difference, and will be used in this study (Davis, 1997). For this study, gender difference will mainly refer to overall differences in the number of men versus women in media representation in accordance with language used in past research (Duncan & Sayaovong, 1990; Cuneen & Sidwell, 1998).

Duncan and Sayaovong (1990) studied editorial images in the first issues of *SIK* and found the appearance of gender differs in the overall number of photographs, the types of sport, the level of activity associated with the athlete, sporting roles, and camera angles. Men outnumbered women 2 to 1, and sporting situations portrayed conventional gender stereotypes (men in strength and team sports and women in aesthetic and individual sports). In a more recent study of *Sports Illustrated for Kids*, Hardin et al. (2002) examined 5,798 editorial photographs from July 1996 through June 1999. Replicating Duncan and Sayaovong's (1990) earlier study, this study found that the gender inequality gap had expanded rather than gotten smaller since the magazine's inaugural issues, with men outnumbering women 3 to 1. When comparing the two samples, this study found that photographs of women decreased by 4% and photographs of men increased by 14% (Hardin et al., 2002). These findings warrant an updated content analysis to note progress or further decline. Advertising is another sector that employs images. Because of the influence advertisements can possess, it is important to also analyze how images are being used to promote products or services.

Gender in Advertising

Modern advertising in children's magazines relies on images to pitch a product to consumers. According to Chick and Hunter (2011), when reading an advertisement, readers first look at the illustration, then the headline, and finally the text. Advertisers use stereotypes because they believe that stereotypes are helpful in conveying messages quickly and concisely (Tuncay, Zayer, & Coleman, 2015). By emphasizing gender differences, advertisers and media influence perceptions of what it means to be "female" or "male" (Cuneen & Sidwell, 1998; Duncan, 1990; Duncan & Sayaovong, 1990; Hardin et al., 2002; Keshari & Jain, 2016; Tuncay, Zayer, & Coleman, 2015; Walsh, Schaarschmidt, & Ivens 1990). If advertising portrays

traditional gender roles, children are more likely to accept gender differences related to activities and products (Murnen, Greenfield, Younger, & Boyd, 2016).

In spite of all of this information, more equal gender portrayals have slowly trickled into advertising and replaced traditional renderings of women in domestic settings. Advertising has even begun to highlight portrayals of women in the workplace (O’Keefe, 2016). Women always have made up a desired target market for advertising agencies. Sporting goods companies have specifically targeted the women’s market for possible growth (Lancaster & Massingham, 2017; Shank & Lyberger, 2014). Recent market trends have shown that women spend more than men on athletic footwear and that the women’s sports market will increase while the men’s will remain the same (Shank & Lyberger, 2014). As a result, sport product manufacturers have started to create advertisements that portray women as strong and athletic, and have even dedicated entire advertising campaigns for targeting the female demographic. For example, Nike, which has 42% of worldwide sales for women's footwear and apparel, launched a campaign to celebrate the 35th anniversary of their iconic shoe, the Air Force 1s, titled, *The Force is Female*. The campaign featured twelve “real” women in various careers with various skin tones and body types (Nath, 2018).

Advertising can be especially influential on children. Children usually cannot separate between stock that is meant to inform and that meant to sell (Hardin et al., 2002). Through advertising, children learn about popular labels, recreational activities, and future purchases (Friedman, 2018; Peruta & Powers, 2017; Preston, 2004). Story telling through images is frequently seen in popular children’s magazines in both content and advertising. In the annual report produced by the Campaign for a Commercial-Free Childhood, it was stated that marketing targeted toward children is a \$15-billion-a-year business. Additionally, children between the ages

of 4 and 12 accounted for \$30 billion in purchases, and adolescents between the ages of 12 and 18 made \$170 billion in purchases.

Three studies, Cuneen and Sidwell (1998), Lynn et al. (2002), and Chick and Hunter (2011), have concentrated on the gender portrayals in advertising images in popular children's media, specifically magazines. Previous studies have looked at advertising images in *Sports Illustrated for Kids*. The first study by Cuneen and Sidwell (1998) studied 378 advertising images in *SIK* and substantiated the association between gender and sport in advertising images that Duncan and Sayaovong (1990) established using editorial images. Their results found that advertisers favored traditional, or patriarchal images. It also found that advertisements reinforced gender stereotypes by featuring men more frequently than women by a ratio of 9 to 1. Lynn et al. (2002) analyzed 36 issues of *SIK* from July 1996 to June 1999. They found that 80.9% of advertising imagery featured men and 19.1% featured women. That is a ratio of 5 to 1.

Quantitatively speaking, depictions of men are still dominating *SIK* advertising, but women have made progress in narrowing the gap. In a 2011 study, Chick and Hunter (2011) looked at advertisements and content images in popular children's magazines: *Boy's Life: The Magazine for All Boys*, *Highlights for Children: Fun With a Purpose*, *National Geographic Kids*, and *Sports Illustrated for Kids*. These results line up with previous *SIK* studies, in which there were notably more photographs of men than women in advertisements and other content. An interesting finding was that in all images, women were more likely to be present if men were also featured in the image. Less than 6% of editorial content portrayed only women and less than 4% of advertising images did so.

As the previous literature shows, gender stereotypes and emphasis on gender differences still exist in sport media in copious amounts. This of course includes media targeted to children.

When pictured in the sports media and advertising, women continually are depicted as foundationally different from men in body positions, gender roles, sports played, and personality traits. Because of the typical context of editorial and advertising images, analyzing those images can lead to the views of *SIK* as a whole. Editorial photographs usually are chosen by the editor to go along with a story they find newsworthy (Friedman, 2018). Because the editor chooses these stories specifically, the images used in relation to these stories also should be a representation of the editor's beliefs and values (Friedman, 2018) and if they include equal representation. Advertising is sold by the magazine, and the images/ products they choose to feature also reflect the views of the entity creating the media (Preston, 2004).

The first step to fixing a problem is knowing if a problem exists and to what extent. A content analysis of the editorial and advertising images within *SIK* will present a gauge on which to judge future research and provide a starting point for future research. With the dated nature of a number of these studies, an updated version could lead to better insight about the current state of advertising and media in regards to gender stereotypes and differences.

Research Questions

This study builds on two previous studies by Duncan and Sayaovong (1990) and Hardin et al. (2002) that focus on editorial photographs and three previous studies by Cuneen and Sidwell (1998), Lynn et al. (2002), and Chick and Hunter (2011) that focus on advertising images in *Sports Illustrated Kids (SIK)*. Therefore, the overarching research question is as follows: What are the gender differences in photographic and advertising portrayals of athletes and the sources used in *SIK*? The following questions will be used to guide data collection and analysis.

RQ1. To what extent is there a gender difference in the prevalence of the overall number of

photographs of males and females in *SIK*?

RQ2. To what extent is there a gender difference in the prevalence of the overall number of male or females being the dominating model in images featured in *SIK*?

RQ3. To what extent is there a gender difference in the prevalence of the overall number of male or females being featured in a team or individual sport?

RQ4. To what extent is there a gender difference in the prevalence of the overall number of male or females being conveyed in the different categories of sport (aesthetic, high risk, strength, or neutral)?

RQ5. To what extent is there a gender difference in the prevalence of the overall number of male or females related to the prominence of the photograph (cover, poster, 2-page spread, full-page, half-page, quarter-page or less, or sportscard)?

RQ6. To what extent is there a gender difference in the prevalence of the overall number of male and females on the *SIK* cover?

RQ7. To what extent is there a gender difference in the prevalence of the overall number of male or females related to the level of motion portrayed in the photographs (active or inactive)?

RQ8. To what extent is there a gender difference in the prevalence of the overall number of male or females related to the types of clothes the athletes are wearing in the photographs?

RQ9. To what extent is there a gender difference in the prevalence of the overall number of male or females related to the type of model (human, celebrity, animated, or mixed) portrayed in advertising photographs?

RQ10. To what extent is there a gender difference in the prevalence of the overall number of male or females related to the type of product promoted by models in advertising photographs?

Methodology

Content Analysis

For this study, content analysis was used to answer the proposed questions. Content analysis can be characterized as “the systematic, objective, quantitative analysis of message characteristics” (Neuendorf, 2002, p.1). This study aims to build off previous research (Duncan & Sayaovong, 1990) that utilizes quantitative content analysis as well. Content analysis has been shown to be a practical way to look at media of the traditionally oppressed or minority groups and the construction of advertising messages (Cuneen & Sidwell, 1998; Hardin et al., 2002).

Procedures

Data collection. *Sports Illustrated for Kids* is the data source for this study. Editorial and advertising photographs in 40 issues of the magazine, from January 2009 until December 2018, were examined. This decade was chosen to update previous research (Duncan & Sayaovong, 1990; Cuneen & Sidwell, 1998) in addition to gauging the current state of gender representation in the children’s sector of sports media. Hard copies of the magazines were analyzed to combat possible changing advertisements on online platforms. Using efficient and reliable sampling (Riffe, Lacy, & Fico, 1998), four issues were randomly selected from each year during 2009-2018 (40 total issues). This method of sampling was chosen to provide an accurate sample of the magazine’s content over an extended time period. The selected issues were chosen by a random number generator, <http://www.randomnumbergenerator.com>. 120 issues (12 from each year) of *Sports Illustrated for Kids* were collected and labeled numerically. To accomplish this analysis, 43 hard copies of *Sports Illustrated for Kids* (40 for sample and 3 for pilot coding) from the selected years and issues of the magazine were obtained from the Blacksburg Public Library to account for the final sample and issues for pilot coding. These practices were chosen to update

previous research conducted by Duncan and Sayaovong (1990) and Cuneen and Sidwell (1998), on *SIK* issues published during the first years of the magazine's existence.

Unit of analysis. Individuals in the editorial and advertising photographs were coded separately. The unit of analysis was each individual model appearing in the editorial and advertising photographs. This is in accordance to past studies that have also used individuals within photographs as their unit of analysis (Duncan & Sayaovong, 1990; Cuneen & Sidwell, 1998; Hardin et al., 2002). Also, artistic models or computer-generated figures like drawings or graphic representations of human figures were only coded when they appeared in advertising photographs. Each issue was reviewed to identify editorial photographs the size of a sportscard (2x3) or larger to be included. Replicating the Cuneen and Sidwell (1998) study, advertisements featuring only written text or a picture of a product, animal, or novelty figure as models were not coded. Identical advertisements that appeared in multiple issues were only coded once (Cuneen & Sidwell, 1998). The advertising text was not analyzed because this study addresses only visual images and because *SIK* is a children's magazine in which advertising text is minimal.

Coding instrument. A coding instrument, using classifications from Duncan and Sayaovong (1990), Cuneen and Sidwell (1998), Hardin et al. (2002), and adapted to include state of dress, was developed to analyze *SIK* editorial and advertising photographs (Appendices A-B). The categorical variables included: (a) Gender (male or female); (b) prominence of editorial photograph (cover, poster, 2-page spread, full-page, half-page, quarter-page or less, or sportscard); (c) motion in photograph (active or inactive); (d) type of sport (individual or team); (e) category of sport (aesthetic, high risk, strength, or neutral); and (f) state of dress (fully clothed in uniform, fully clothed in street clothes, scantily clothed in uniform, or scantily clothed in street clothes). The categorical variables for the advertising images also included: (a) type of

advertisement (product, service, or other); (b) character (human, celebrity, animation/artistic, or mixed); (c) type of product (sport, food/beverage, equipment/clothing, media and other) and (d) model domination (prominent, supporting, or other). The variables gender, prominence of photograph, motion in photograph, type of sport, and category of sport were modeled off of Duncan and Sayaovong (1990). The variables for advertising images (type of advertisement, character, type of product, and model domination) were modeled from Cuneen and Sidwell (1998). All of these variables were chosen to accurately assess how *Sports Illustrated for Kids* proceeded since the time of these studies and build upon that knowledge. The variable, state of dress, was created based on the literature review for this study.

Several variables presented a challenge in definition, including motion in photograph, model domination, type of product, category of sport, state of dress, and photo location. Motion of the photograph and category of sport are defined using the work of Duncan and Sayaovong (1990) as a guide. To determine motion in a photograph, an individual was defined as inactive if the model is either posing for the camera, appears inactive, or is pictured as a headshot or from the neck up. An active pose will be determined by the model clearly in motion or poses that indicate they are about to take motion, such as posed to swing a bat or shoot a basketball. For the model domination variable, the prominent model referred to a model in the foreground and/or a model that appears larger than others in the same advertisement because of positioning. A supporting model is used to define the model in the background and/or the model that appears smaller in relation to others in the same advertisement because of positioning. The other category encompasses other model placements within the photograph. The variable photo location included studio, athletic environment, home, and other. This variable was created for this study by the author to account for other variables being present simply because of the setting the image

was taken in. Studio included images taken in a studio, utilizing green screens, and other professional equipment. Athletic environment included images set within an athletic environment. Examples could include a track, basketball court, football field, or ice rink. The home category included images set within a home environment. Examples could include a living room, bedroom, and kitchen. Lastly, the other category included any other location not mentioned above.

To determine the type of product variable, the media category included advertisements for websites, movies, TV shows, or video games, whereas the “other” category included advertisements for sweepstakes, fan clubs, or free merchandise. The team category included either male or female, whereas the “other” category included such subjects as best toys of the year, best sports camps, videogame reviews, etc. Category of sport is defined as follows:

- Aesthetic: “Included sports wherein success is determined primarily on the basis of grace and proper form” (i.e., gymnastics, diving, dressage) (Duncan & Sayaovong, 1990, p. 104). Other examples include ice-skating, ballroom dancing, or cheerleading.
- High risk: “Sports in which the danger posed to the athlete is produced primarily by the physical environment” (Duncan & Sayaovong, 1990, p. 104). Sports in this category include race car driving, horse racing, rock climbing, and skiing.
- Strength: “Characterized by contact sports [such as] football or boxing, in which one opponent overpowers another by superior physical strength, and by events [such as] the heptathlon, which requires great endurance” (Duncan & Sayaovong, 1990, p. 104). Other examples include wrestling, weightlifting, cycling, rowing, and track and field events, such as shot put or discus.
- Neutral: “Contains all other sports (i.e., basketball, volleyball, soccer, tennis, swimming)”

(Duncan & Sayaovong, 1990, p. 104). This category includes most track and field events, baseball, softball, and hockey.

The final category, state of dress, was defined as follows:

- Fully clothed in uniform: Includes individuals appearing in photographs wearing a uniform that covers up most of the body. Examples include football, basketball, baseball, and softball uniforms, etc.
- Fully clothed in street clothes: Includes individuals appearing in photographs without uniforms on or individuals involved in sports with no specific uniform, such as skateboarding.
- Scantily clothed in uniform: Includes individuals appearing in uniforms where more skin is exposed than covered. Examples include track uniforms, leotards, swimsuits, etc.
- Scantily clothed in street clothes: Includes individuals appearing in photographs without uniforms on and who had more skin exposed than covered.

Other categories of variables included gender, prominence of photograph, type of sport, type of advertisement, and character. Gender included the categories of male and female and was coded according to his or her gender. Prominence of photograph was determined by whether the photograph was on the cover of the magazine, a poster within the magazine, covers two facing pages, covers a full page, covers a half of a page, covers a quarter of the page or less, or was the size of a sportscard (2x3). Type of sport included the categories individual (requires just one or two people to complete) and team (requires more than two people to complete). Type of advertisement included categories for manufactured product, a service (sweepstakes or fan club) or other, which included all other advertisements. Finally, the character variable included categories for human model, celebrities (famous athletes and actors), any model that is not human (animation or artistic drawing), or any combination of the character categories.

Intercoder reliability and coding procedures. Two female second year graduate students in the Communication Master's program at Virginia Polytechnic Institute and State University served as coders for magazine issues in the sample. Both coders were familiar with athletics and had completed content analysis before. Coding procedures were reviewed by coders in a pilot coding training session using three magazines not included in the final study sample. In the pilot session that lasted approximately 2 hours, practice coding of the three issues was done independently. After the coding took place, percentage agreement was assessed for the practice coding data, with no sections reporting below 72% agreement. The variable with the lowest agreement during the practice coding was character. The variable was then examined again and analyzed further for clarification for both coders.

Fifteen percent of the final sample (6 issues, $n=86$) was coded for assessment of intercoder reliability. The author of this study served as the primary coder, coding 100% of the final sample (40 issues $N=544$). Coders worked independently to control for unwanted cooperation. Coders ($N=2$) were provided a detailed codebook and coding procedures for both editorial and advertising images (Appendices A-B) to adequately record perception of each variable. The author of this study labeled each unit of analysis with a case id to ensure all coders coded the correct number of individuals in the photograph. All thirteen variables were coded for each unit of analysis. Cohen's kappa (K) was used to assess intercoder reliability for all thirteen variables. Kappa values were .89 for model age, .95 for model gender, .92 for prominence of photograph, .90 for motion in photograph, .85 for photo angle, .94 for type of sport, .96 for category of sport, .88 for state of dress, .84 for ad type, .95 for character, .96 for type of product, .88 for model domination, and .94 for photo location. Therefore, reliability was *very good* for all variables. Based off of previous standards (McHugh, 2012), this reliability is acceptable.

Results

Statistical software JMP was used to analyze the nominal data. Simple descriptive statistic and frequency distributions were used to assess association between gender and the proposed variables. The statistical significance of the cross analysis of differences between men and women was measured through Chi Square tests. The level of significance was set at $p < 0.05$.

The majority (50.9%) of the models were coded as adults. Seniors (60 years of age or older) were not represented at all. The second highest age group represented was adolescents (12-18 years of age) at 25.9%.

The first research question asked about the extent to which there was a gender difference in the prevalence of overall photographs of males and females in *SIK*. Males were found to outnumber females in *SIK* editorial and advertising images by a ratio of 80.1% to 19.9%. Using Pearson chi square analysis ($X^2 (1, N=544) = 5.34, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant.

The second research question asked about the prevalence of males or females being the dominating model in images featured in *SIK*. Men (84.4%) were depicted more often than women (15.6%) as the prominent model in editorial and advertising images in *SIK*. In addition, women were roughly three times as likely to appear as the supporting model (see Table 1). Using Pearson chi square analysis ($X^2 (1, N=544) = 6.43, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant.

Most photos were shot at eye level (83.3%). Women were less likely to be in photographs shot at with an upward angle at a ratio of 93.8% to 6.3%, and more likely to be seen in photos shot at eye level (21%). Using Pearson chi square analysis ($X^2 (2, N=544) = 4.13, p < .05$), the

difference of proportions of males versus females proposed by this research question was found to be statistically significant.

The third research question asked about the number of males or females being featured in team or individual sports. Individuals in photographs could appear in three categories: individual sports (gymnastics, golf, tennis, etc.), team sports (basketball, football, softball, etc.), and other (individuals in advertising photographs that did not appear to be involved in a sport). Men were more likely to be seen in team sports than individual sports. Only 9.8% of women were shown in team sports, while 90.2% of men were shown in team sports. Furthermore, 35.9% of individuals were depicted in neither individual or team sports. A higher percentage of women (30.3%) were classified in the other category. The other category includes photos that were not associated with a sport. Using Pearson chi square analysis ($X^2(2, N=544) = 41.91, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant (see Table 2).

The fourth research question asked about the number of males and females being conveyed in the different categories of sport. Four categories were used to characterize sporting activities-aesthetic, high risk, strength, neutral and other. This variable produced mixed results. The majority of sports represented in *SIK* fell into the neutral category (31.8%) with 15% depicting females and 85% depicting males. However, the most significant category was N/A or non-athletes in image (35.5%). Males dominated all categories of sport except aesthetic, which had an equal number of females and males. Athletes were depicted in strength sports 28% of the time with males dominating at 88% and females accounting for 12%. High risk and aesthetic representations in *SIK* were quite low with 4% and 2% respectively. Of images depicting high-risk sports, males dominated with 90% and females accounted for 10%. Using Pearson chi

square analysis ($X^2 (4, N=544) = 26.75, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant (see Table 3).

The fifth research question asked about number of males or females related to the prominence of the photograph (cover, poster, two-page spread, full-page, half-page, quarter-page or less, or sportscard). *SIK* photographs portraying males appeared more often than photographs portraying females in all major categories: cover, posters, two-page spread, full-page, half-page, quarter-page or less, or sportscard. The breakdown of cover photographs will be discussed below, but all percentages heavily favored males. Males on posters and two-page spreads outnumbered females 76% to 24.3%. Males featured in full-page photographs outnumbered females by a ratio of 81.01% to 19%. Females had the most representation in the smallest photograph size coded. Using Pearson chi square ($X^2 (6, N=544) = 1.78, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant (see Table 4).

The sixth research question deals with gender representation on the cover of *SIK*. When comparing the total number of females and males on the cover of *SIK*, males outnumbered females by a ratio of 79.5% to 20.5%. Only 24 females appeared on the cover compared to 93 males. Using Pearson chi square analysis ($X^2 (6, N=544) = 1.78, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant.

The seventh research question asked about the number of males and females related to the level of motion portrayed in the photographs (active or inactive). Men were portrayed in active poses more than women, even though the gap was narrower. 37.2% of males were shown as active and 23.1% of females were depicted as active. 34.4% of models in *SIK* were depicted as

active, while 65.6% were shown in inactive poses. Using Pearson chi square analysis ($X^2(1, N=544) = 7.92, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant (See Table 5).

Research question eight asked to what extent is there a gender difference in the number of males or females related to the types of clothes being worn in the photographs. Results of both males and females in scantily clad street clothes or uniform were rare. Females and males were equally as likely to be seen in uniform or street clothes having more skin exposed than covered. Males were more likely to be seen in uniform overall with females being presented in uniform 7.6% of the time and males being presented in uniform 41.8% of the time. Using Pearson chi square analysis ($X^2(3, N=544) = 11.21, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant (see Table 6).

The ninth research question asked about the number of male or females related to type of model (human, celebrity, animated or mixed). The majority (41.5%) of models fell under the celebrity character with 84.5% portraying males and 15.5% portraying women. Human characters were seen at 36.2%, with males dominating that category 149 to 48. Animations accounted for 10.85%, with 27.1% of animations being female and 73% being male. Females were more likely to be portrayed as animation than celebrity. Using Pearson chi square analysis ($X^2(3, N=544) = 8.31, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant (see Table 7).

The tenth research question asked about the number of males or females related to the type of product promoted by the models. Even though males outnumbered females in advertising images, the type of product most represented was the same for both genders. The majority (39%) of products advertised fell under the media category, where all images depicted 80.2% males and

20% females (see Table 8). Using Pearson chi square analysis ($X^2(5, N=544) = 8.56, p < .05$), the difference of proportions of males versus females proposed by this research question was found to be statistically significant.

Discussion

Social cognitive theory provides information about how social cues are learned by modeling and then turned into a behavior. If traditional gender roles about athletics are being disseminated by the only print sport media for the age range of 8-15, then these roles could be learned and modeled by the individuals who read the magazine. Athletics have been known to be a producer of traditional gender roles. Changing this can start by adding inclusive media for the young kids interested in sport and sport media.

Summary of Findings

The findings from this study found that editorial and advertising photographs in *Sports Illustrated for Kids* presents a gender difference through the research questions asked. The difference is shown quantitatively in the noticeable percentage difference in photos depicting female athletes versus male athletes. In all of the variables, photographs of male athletes outnumber photographs of female athletes. This was particularly true when it came to prominence of photograph. The more prominent a photograph was (on the cover), the more likely it was to feature a male. This aligns with past research (Duncan & Sayaovong, 1990) that explored the connection between who is on the cover and what editors believe will sell their product. Duncan and Sayaovong (1990) cited a quote from past SIK managing editor John Papanek that said, "It is reasonable to think that a cover that features only females will be repugnant to those people who are most likely to buy the magazine." (Duncan & Sayaovong,

1990, p.103). Even though today's social climate would probably not allow for such harsh remarks, it is obvious the notion of "judging a book by its cover," still rings true.

Going along with this line of thinking, the character variable also provided findings that warrant discussion. If a character was characterized as a celebrity, it was more likely to be male in a ratio of 35 to 191. Because celebrities are the most likely character to be featured on the cover, this provides support for the implications mentioned above.

Overall, men were depicted 80.2% of the time. This is a higher percentage than previous *SIK* studies that examined similar variables. Duncan and Sayaovong (1990) found 62% of photographs feature males. Even though in reality women are making gains in regards to sport participation, these results suggest that *SIK* is more skewed now than 20 years ago.

It is significant that these percentages of male and females represented in the images do not represent confirmed athletic participation rates. For the 2017 to 2018 academic year, females comprised about 42% of all high school athletes. This percentage has steadily increased since Title IX passed in 1972. Males represented a moderately higher number with 58% of all high school athletes (The National Federation, 2018). With that being said, rates in *SIK* images are 80.2% for males and 20% for females. This disconnect is alarming since *SIK* is the only print sport magazine targeted for a younger audience (8-15 years old).

The findings on team versus individual sports and gender representation in *SIK* photos, adds to the research regarding gender appropriateness and sport. Even though the overall majority of the images portrayed team sports, females were more likely to be seen in individual sports. Individual sports include things such as gymnastics, swimming, and tennis which are considered to be more feminine. In contrast, males were more likely to be portrayed in team sports such as football, basketball and baseball. Again, this is considered gender appropriate

(Koivula, 1995). Women were also most likely to be seen in the “other” category which represents photos not associated with a sport. This means that most women pictured were not associated with athletics in a magazine that is centered around sports. Relating back to social cognitive theory, for young readers, this paints a picture of females being left out of the media, but out of athletics as well. When thinking about the modeling process outlined by social cognitive theory, the absence of females in athletic roles in a sport magazine could send the message that women do not belong in athletics and their opportunities are elsewhere.

Concerning the variable category of sport (aesthetic, high risk, strength or neutral), the largest category represented in *SIK* was neutral. The different categories of sport relate back to what sports are more appropriate for certain genders. For example, sports such as football (strength) and BMX riding (high risk) are seen as more masculine and sports such as gymnastics and figure skating (aesthetic) are seen as more feminine (Koivula, 2001). Sports in the neutral category includes sports such as soccer, basketball, and golf. The findings suggest the reinforcement of stereotypes in images that fell outside of the neutral category. Males were more likely to be pictured depicting a high-risk or strength sports whereas females dominated the more gender-appropriate aesthetic category which also includes mostly individual sports. These findings seem to suggest that young men and women are receiving societal messages that sports such as figure skating and gymnastics are inappropriate for boys and sports such as football and boxing are inappropriate for girls (Kinnick, 1998). *SIK* has continued this pattern by associating individual sports that are aesthetic in nature with femininity and high-risk and strength sports associated with masculinity. The results presented more of equality between women portrayed in individual, team, and neutral sports than in past studies (Duncan & Sayovong, 1990; Hardin et al., 2002). It seems that the representation of females in neutral team sports is on the rise. In

comparison to Hardin et al. (2002), females being pictured in the neutral and team categories are up 11% and 19% respectively. When thinking about social cognitive theory, this is important because it allows for sports such as soccer and basketball to be represented by both genders and in turn, perceived as socially acceptable for both genders to participate in (Carpenter & Acosta, 2017).

Differences in gender were also portrayed by how the genders were framed in regards to motion in photograph, type of products advertised, model domination in photograph, and photo angle. The variable state of dress offered results that go against previous research. Photographs in *SIK* were mostly characterized by individuals in inactive poses. Even so, men were more likely to be portrayed in active poses out of the individuals that were coded as such. These results support Cuneen and Sidwell's (1998) findings where women were more likely to be supporting characters and in inactive poses. For the variable state of dress, the number of men and women appearing as "scantily clad" was almost non-existent. Of the ones that did appear, there was an equal representation of men and women. Scantily clad usually consisted of uniforms such as leotards, swimsuits, and track uniforms. This suggest that *SIK* understands its readership age and is avoiding practices seen in other sport media where women are more likely to be seen in less clothes with focus on their bodies (Adams & Tuggle, 2004). Males outnumbered females in all product categories, specifically in the most frequently seen products (media & food/ beverage). Images were more likely to have males as the prominent figure and females as supporting figures off to the side, in the background, or presented in a smaller space on the page. To use an example combining the above mentioned, males would be the central figure in an advertisement (playing the game/ interacting with the media, eating the food/ beverage) while females would be supporting (watching the central figure interact with the media or even serving the food). This

matters because of the cues young girls could be learning about their role in consuming certain products and what products are more appropriate for them to be interested in. Photographs featured in *SIK* were the most likely to be taken at eye-level. If a photograph was taken at a downward level, it was more likely feature a female, but disparity between genders was minor. Duncan and Sayaovong (1990) first created this variable to address the nature of photography to use upward facing angles to relay power and a down facing angle to portray the opposite. When tested by Hardin et al. (2002), the angle produced similar results and photo angles were not found to be significant in conveying gender differences.

The results throughout this analysis have provided evidence for gender differences in *SIK*. The findings relate back to theory and potential effects on kids in relation to images featured in *Sports Illustrated for Kids*. Even though there has been an increase of females depicting neutral sports (basketball, golf, and soccer), the overall numbers suggest *SIK* is not making a conscious effort to provide gender-neutral images to its young, impressionable readers. Overall, females are still underrepresented in all images and more often than males, are seen in inferior or stereotypical ways.

The majority of the findings coincide with past research (Duncan & Sayaovong, 1990; Cuneen & Sidwell, 1998; Hardin et al., 2002). The findings of the category and type of sport categories suggest that there is a slight increase of women being fairly represented in the neutral and team sport categories. It is important to know what areas are improving and what areas still need advancement. These findings do so by providing numerical data in comparisons to past studies that show even though we are seeing more of the same in overall representation of women in *SIK*, there are a few bright spots. The category of sport labeled neutral is one that is on the rise. Girls will be able to see themselves represented in sports such as basketball, golf, and

soccer, which is important in regards to social cognitive theory and sports that girls and boys both think are acceptable in terms of gender roles.

When thinking about social cognitive theory, these findings are important to think about in relation to the reception of all genders in a variety of athletic endeavors. Because social cues start early, the process of becoming more inclusive in regards to athletics should include the media.

The next section will discuss how these findings are important for *SIK*, their readers, and other researchers interested in similar topics. These discussions are followed by a report of the study's limitations, areas for future research, and concluding thoughts.

Implications

Many of the findings presented by this study offer many implications that should be examined. Many are practical in nature and can help put these findings in perspective.

SIK's readership should be considered as well when discussing the results of this study. With an audience ranging from 8-15 years old, readers may be influenced by the magazine's images. In addition, this readership age has not fully developed the critical thinking skills to distinguish that these images may not represent the way things are in the real world (Dorr, 1986). Young readers may believe the appearance of women in sports is not as important or vital, or they may gain a sense that certain kinds of athletic activities are more suited for a specific gender (Duncan & Sayaovong, 1990). Because the media are one of the main agents of socialization (Preston, 2004), the way children reading *SIK* interpret their photographs will have a role in how they are socialized towards or away from different sports.

When analyzing these results, it may be important to not only think about the ages of the individuals reading *SIK*, but also their genders. In their annual report, *SIK* reported their readership of approximately 8.1 million was 69% percent male and 31% female ("Readership &

Circulation”, 2018). Consequently, the smaller number of women pictured in *SIK* photographs may be the result of *SIK* marketing towards their majority demographic of readership. However, the steady rise of female participation rates in a variety of sports would suggest that *SIK* should devote time to this possible new clientele instead of the opposite. If looked at from a social cognitive theory perspective, the fact that females are only pictured 19% of the time sends a message. *SIK* has a monopoly on the print sport media market for that age group. It is the only sport magazine available for kids, not just boys. The message that it is conveying to 31% of its consumers is that females have a less significant role to play in athletics. This message is being conveyed to their young male audience as well. Social cues about how women should be treated and respected could also be learned by young boys. Because the absence of female figures and females being depicted in traditional gender roles are being presented at a young age, the cues seen and eventually learned could linger into their adult lives. Continuing, since young males are the majority audience for *SIK*, misrepresentation may feed into the cycle of female athletes’ participation and accomplishments not being taken seriously, particularly when compared to their male counterparts.

Parents could become a factor in regards to these findings by becoming advocates of their own for their children. Since children do not purchase the magazine or other forms of media on their own, having parents scanning media before it is consumed and allowing the media to start conversations about what is socially acceptable in regards to athletics, could be a way to combat traditional gender roles being disseminated outside of not consuming the media all together. Parents and others could also become advocates for policies that would require forms of children’s media to provide equal representation.

Sadly, even if the number of young girls reading *SIK* increased it is unlikely that advertisers would change their strategies. Advertisers find it most effective to target both genders with male-centered advertisements because stereotyping is an effective method for advertising a variety of products (Lancaster & Massingham, 2017). Even though males tend to dismiss products that are labeled as feminine, women are receptive to products (and in return advertising) that are labeled as masculine. Since the goal of advertising is to sell a product, without education about these issues raised by this study, it is doubtful these tactics will change anytime soon. The first step to making advertisers, editors, and others concerned about this problem, is informing the designated parties about what is happening. Acknowledging the problem could potentially be the first step to addressing it.

Limitations and Suggestions for Future Research

This study contains limitations that should be considered as they also present countless opportunities for future research.

One limitation of this study was the method. Content analysis is limited to the surface content. Content analysis does not allow for an examination of the potential effects of the artifacts users and viewers. Future research based on this limitation could expand to use surveys assessing feelings or reactions about photos featured in *SIK*. It may be pertinent to note the *SIK*'s editorial board consist of five men and three women. This a fairly representative number that would allow for perspectives and ideas about decision making and creative content from both genders.

As with any quantitative research, the data is limited to numerical descriptions. This of course cannot account for narratives of human perception. A future line of research may be surveying editors of *SIK* or other children's media about the process that takes place when

selecting images to feature in their magazine, as this would add another level of comprehension surrounding the topic. Quantitative content analysis allows for generalization of a sample group (Younus, 2014). This sample only focused on one outlet, which may not be representative of all children's media. Future research paths can be based off of this limitation as well.

This study focused on photographic depictions featured in *Sports Illustrated for Kids*. There are many other children's magazines and books that could be analyzed to broaden the scope of the issue and provide more generalization about gender representation in children's media. It is important to note that *SIK* is not the only media source kids are consuming. Other sport institutions such as ESPN have interactive online media directed towards that age group, even though they do not have a print outlet. An examination of texts and images in *SIK* or others could help bring a more comprehensive view of the gender messaging in children's media. Because this study was narrowed down to print media, future research could also encompass electronic or interactive media, particularly *SIK*'s website. Creating a variable to analyze roles and careers of individuals featured in *SIK* images would also be a way to analyze gender differences in children's sport media.

It is true that media privileges athletic entertainment, specifically male athletics in the United States. Looking at advertisements and television-based media could also be a way to analyze gender difference related various sports. Also, if we are valuing the message coming from *SIK*, other issues such as race and disabilities should be looked at as well. Analyzing representations of athletes of color and adaptive athletes can allow for fair representation across the board.

Conclusion

Despite the progress made for female athletes and the amount of time and money spent on Title IX, *SIK* is providing readers with the idea that males have a dominant place in athletics. The boys and girls reading *SIK* are taking away a message. Just because *SIK* readership is of the male majority does not mean the magazine should present an unvaried sports world. The issue of boys seeing themselves in non-traditional gendered sports is important as well. The fight to end hegemony in sport is far from over. Females are finally seeing a level playing field in front of them. The opportunities brought to life by Title IX must be preserved and handled with care for our future female athletes. This study shows that children today interested in sport may have a skewed view of “how things are” based on the pages of *SIK*. In addition, the gender roles recognized by the magazine do not encourage young athletes to fight for even play.

A lack of representation of females in *SIK* could be damaging to the sport careers of some young readers. Past research has shown that kids who play sports are less likely to quit school at any age and have higher rates of attending college (Marsh & Kleitman, 2003). Involvement in sport activities has also been associated with high success with social skill, higher grades, and school attendance, as well higher educational, and therefore, better job prospects (Badri, Nuaimi, Guang, & Rashedi, 2017). Sports can be an important medium for socialization and provide a sense of acceptance and achievement. If future sportsmen and sportswomen are not seeing themselves represented in media grounded in their interest, they may be less prepared for their future endeavors and successes.

As mentioned throughout this study, acknowledging the facts about overall representation of males and females in sport media for children, should be the first step to addressing the problem. Not only allowing more women to be represented in this specific media outlet, but

having them represented accurately as athletes could help young children of all genders have equal and fair representation when it comes to the powerful realm of athletics.

References

- Adams, T., & Tuggle, C.A. (2004). ESPN *Sportscenter* and coverage of women's athletics: "It's a boy's club." *Mass Communication and Society*, 7(2), 237-248.
- Armentrout, S. M., Kamphoff, C., & Thomae, J. (2014). Photographic images in sports illustrated for kids: an analysis of sport coverage and gender representation. *Women in Sport and Physical Activity Journal*, 22(1), 37-46.
- Bachmann, G. R., John, D. R., & Rao, A. R. (1993). Children's susceptibility to peer group purchase influence: An exploratory investigation. *Advertising Consumer Research*, 20, 463-468.
- Badri, M., Nuaimi, A. A., Guang, Y., & Rashedi, A. A. (2017). School performance, social networking effects, and learning of school children: Evidence of reciprocal relationships in Abu Dhabi. *Telematics and Information*, 34(8), 1433-1444.
- Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63, 575-582.
- Bandura, A., & Walters, R. (1963). *Social learning and personality development*. New York: Holt, Rinehart & Winston.
- Bandura, A. (1969). *Social learning theory of identificatory processes*. In D. A. Goslin (Ed.), *Handbook of Socialization Theory and Research* (pp. 213-262). Chicago, IL: Rand McNally & Company.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barthes, R. (1977). *Image, music, text* (S. Heath, Trans.). New York: Hill & Wang.

- Bandura, A. (1994). Media effects: Advances in theory and research. In: Bryant, J., Zillman, D: Social cognitive theory of mass communication. Hillsdale: Lawrence Erlbaum Associates, 61-90.
- Bishop, R. (2003). Missing in action: Feature coverage of women's sports in *Sports Illustrated*. *Journal of Sport & Social Issues*, 27, 184-194.
- Brown, M., Ruel, E., & Medley-Rath, S. (2011). High school student's attitudes toward providing girls opportunities to participate in sports. *Sociology of Sport Journal*, 28, 239-253.
- Campaign for a Commercial-Free Childhood. (n.d.) The facts about marketing to kids. Retrieved from www.commercialfreechildhood.org.
- Cannon v. Univ. of Chi., 441 U.S. 677, 704 (1979).
- Carpenter, L. J. & Acosta, R. V. (2017). Women in intercollegiate sport. Retrieved from <http://webpages.charter.net/womeninsport/>.
- Chan, K., Ng, Y.L., Williams, R.B. (2012) What do adolescent girls learn about gender roles from advertising images? *Young Consumers*, 13(4), 357-366.
- Chick, K. A., & Hunter, M. W. (2011). An analysis of human images and advertisements. *Language and Literacy*, 11(1), 1-25.
- Cuneen, J., & Sidwell, M. J. (1998). Gender portrayals in *Sport Illustrated Kids* advertisements: A content analysis of prominent and supporting models. *Journal of Sport Management*, 12, 39-50.
- Davis, L. R. (1997). *The swimsuit issue and sport: Hegemonic masculinity in Sports Illustrated*. New York: State University of New York Press.

- Deaton, S. (2015). Social learning theory in the age of social media: Implications for educational practitioners. *Journal of Educational Technology, 12*(1), 1-6.
- Duncan, M. C. (1990). Sports photographs and sexual differences: Images of women and men in the 1984 and 1988 Olympic games. *Sociology of Sport Journal, 7*, 22–42.
- Duncan, M. C. (2006). Gender warriors in sport: Women and the media. In A. A. Raney & J. Bryant (Eds.), *Handbook of sports and media* (pp. 231-252). Mahwah, NJ: Lawrence Erlbaum Associates.
- Duncan, M. C., & Sayaovong, A. (1990). Photographic images and gender in *Sports Illustrated for Kids. Play and Culture, 3*, 91–116.
- Eiben, J. & Stieglitz, O. (2018). Depicting sporting bodies- Visual sources in the writing history of sports: An introduction. *Historical Social Research, 43*(2), 7-24.
- Eliot, L. (2018). Impact of gender- typed toys children’s neurological development: How early play experiences impact development. *American Psychological Association, 167*-187.
- Friedman, A. (2018). To “read” and “write” pictures in early childhood: Multimodal visual literacy through Israeli children’s digital media. *Journal of Children and Media, 12*(3), 312-328.
- Frisby, C. (2017). Sexualization and objectification of female athletes on sport magazine covers: Improvement, consistency, or decline? *International Journal of Humanities and Social Science, 7*(6), 21-32.
- Grusec, J. E. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology, 28*(5), 776-786.
doi:10.1037/00121649.28.5.776.
- Hardin, M., Lynn, S., Walsdorf, K., & Hardin, B. (2002). The framing of sexual differences in *SI*

- for Kids* editorial photos. *Mass Communication & Society*, 5, 341-359.
- Hardin, M., Lynn, S., & Walsdorf, K. (2005). Challenge and conformity on “contested terrain”: Images of women in four women’s sport/fitness magazines. *Sex Roles*, 53, 105-117.
- Hardin, M., Lynn, S., & Walsdorf, K. (2006). Depicting the sporting body: The intersection of gender, race and disability in women’s sport/fitness magazines. *Journal of Magazine and New Media Research*, 8, 1-16.
- Hariman, R., & Lucaites, J. L. (2016). *The public image. Photography and civic Spectatorship*. Chicago: The University of Chicago Press
- Heintz, K. E., & Wartella, E. A. (2012). Young children’s learning from screen media. *Communication Research Trends*, 31(3), 22.
- Holtzman, L., & Sharpe, L. (2014). *Media messages: What film, television, and popular music teach us about race, class, gender, and sexual orientation*. Armonk, N.Y: M.E. Sharpe.
- Howells, R., & Negreiros, J. (2012). *Visual culture*. Malden, MA: Polity.
- International Olympic Committee. Olympic Medal Winners. Retrieved September 1, 2018, from http://www.olympic.org/uk/athletes/results/search_r_uk.asp.
- Jewitt, C. (2009). An introduction to multimodality. In C. Jewitt (Ed.), *The Routledge handbook of multimodal analysis*. New York: Routledge
- Katz, R. S., & Luckinbill, R. W. (2017). Changing sex/gender roles and sport. *Stanford Law & Policy Review*, 28, pp. 215-243.
- Kelley, B., & Carchia, C. (2013). “Hey data data—swing!” *ESPN*. Retrieved from http://www.espn.com/espn/story/_/id/9469252/hidden-demographics- youth-sports-espn-magazine.

- Keshari, P., & Jain, S. (2016). Effect of age and gender on consumer response to advertising appeals. *Paradigm, 20*(1), 69-82
- Kim, K., & Sagas, M. (2014). Athletic or Sexy? A comparison of female athletes and fashion models in Sports Illustrated swimsuit issues. *Science and Business Media, 29*, 1-20.
- Koivula, N. (1995). Ratings of gender appropriateness of sports participation: Effects of gender-based schematic processing. *Sex Roles, 33*, 543-557.
- Lancaster, G., & Massingham, L. (2017). Markets and customers: consumer and organizational buyer behaviour and marketing strategy. In *Essentials of Marketing Management* (pp. 43-69). Routledge.
- MacArthur, P. J., Angelini, J. R., Billings, A.C., & Smith, R. L. (2017). The thin line between masculinity and skate: Primetime narratives of male figure skaters on the CBC and NBC 2014 Winter Olympics broadcast. *Sociology of Sport Journal, 34*, 46-58.
- Moschis, G. P. (1978). Consumer socialization: a theoretical and empirical analysis. *Journal of Marketing Research, 15*(4), 599-609.
- Mitchell, W. J. T. (2004). *What do pictures want? The lives and loves of images*. Chicago: The University of Chicago Press.
- Montez de Oca, J., Meyer, B., & Scholes, J. (2016). Reaching the kids: NFL youth marketing and media. *Popular Communication, 14*(1), 3-11.
- Mulvey, K. L., & Killen, M. (2015). Challenging gender stereotypes: *Resistance and exclusion*. *Child Development, 86*(3), 681-694.
- Murnen, S. K., Greenfield, C., Younger, A., & Boyd, H. (2016). Boys act and girls appear: A content analysis of gender stereotypes associated with characters in children's popular culture. *Sex Roles, 74*(1-2), 78-91.

- Nath, I. (2018). Three big brands that are highlighting badass women right now. Retrieved from: <https://www.flare.com/fashion/nike-force-is-female/>.
- Neuendorf, K.A. (2002). *The content analysis guidebook*. California: Sage publications.
- O'Keefe, D. (2016). *Good girl messages: How young women were misled by their favorite books*. Bloomsbury Publishing.
- Peruta, A., & Powers, J. (2017). Look who's talking to our kids: Representations of race and gender in TV on Nickelodeon. *International Journal of Communication, 11*, 1133-1148.
- Plaza, M., Boiché, J., Brunel, L., & Ruchaud, F. (2016). Sport = Male... But Not All Sports: Investigating the Gender Stereotypes of Sport Activities at the Explicit and Implicit Levels. *Sex Roles, 76*. 10.1007/s11199-016-0650-x.
- Preston, C. (2004). Children's advertising: The ethics of economic socialization. *International Journal of Consumer Studies, 28*(4), 364-370.
- Readership and Circulation. (2018). *SIKids.com*. Retrieved from: http://www.sikids.com/magmediakit/reader/mag_reader.htm.
- Rhode, D. L., & Walker, C. J. (2008). Gender equity in college athletics: Women coaches as a case study. *Stanford Journal of Civil Rights & Civil Liberties, 4*, 1-50.
- Rowe, D. (1999). *Sport, culture and the media*. Buckingham, England: Open University Press.
- Ruble, D. N., Martin, C. L., & Berenbaum, S. (2006). Gender development. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 3. Personality and social development* (6th ed., pp. 858–932). New York, NY: Wiley.
- Scheidler, T., & Wagstaff, A. (2018). Exposure to women's sports: Changing attitudes toward female athletes. *The Sport Journal, 19*, 1-17.

- Shank, M. D., & Lyberger, M. R. (2014). *Sports marketing: A strategic perspective*. Abingdon, UK: Routledge.
- Sears, R. R. (1951). A theoretical framework for personality and social behavior. *American Psychologist*, 6(9), 476-482. doi: 10.1037/h006367.
- Singh, M. (1998). *Gender issues in children's literature* (Report No. OERI-RR-93-1). Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED424591).
- Sontag, S. (1977). *On photography*. New York: Farrar, Straus & Giroux.
- Sports Illustrated for Kids. (2015). *Sports Illustrated for Kids fast facts: Purchase Influence*. New York: Time-Life, INC.
- Strouse, G. A., Nyhout, A., & Ganea, P. A. (2018). The role of book features in young children's transfer of information from pictures books to real- world contexts. *Frontiers in Psychology*, 9, 50.
- Strunken, M., & Cartwright, L. (2001). Practices of looking: In introduction to visual culture. New York: Oxford University Press.
- Suggs, W. (2006). *A place on the team: The triumph and tragedy of Title IX*. Princeton, N.J.: Princeton University Press.
- The National Federation of State High School Association. (2017). *2017-2018 high school athletics participation survey*. Indianapolis: Author.
- Tsao, Y. (2008). Gender issues in young children's literature. *Reading Improvement*, 45(3), 108-114.

- Tuncay Zayer, L., & Coleman, C. A. (2015). Advertising professionals' perceptions of the impact of gender portrayals on men and women: A question of ethics? *Journal of Advertising, 44*(3), 1-12.
- Vance, B. (1965). Social learning theory and guidance in early childhood. *National Association for the Education of Young Children, 1*, 30-42.
- Walsh, G., Schaarschmidt, M., & Ivens, S. (2017). Effects of customer-based corporate reputation on perceived risk and relational outcomes: empirical evidence from gender moderation in fashion retailing. *Journal of Product & Brand Management, 26*(3), 227-238.
- Weber, J. D., & Carini, R.M. (2013). Where are the female athletes in *Sports Illustrated*? A content analysis of covers (2000–2011). *International Review for the Sociology of Sport, 48*(2), 196-203.
- Wenner, L. A. (2010). Sport, communication, and the culture of consumption: On language and identity. *American Behavioral Scientist, 53*(11), 1571-1573.

Appendix A:

Coding Protocol for *SIK* Editorial and Advertising Photographs

Editorial Photographs: Size of a sportscard (2x3) or larger to be included.

Advertising Photographs: Advertisements featuring only written text or a picture of a product, animal, or novelty figure as models will not be coded. Identical advertisements that appear in multiple issues will only be coded once.

The following steps should be taken in the content analysis coding described below (v stands for variable): (1) All relevant photographs are viewed to determine individuals that fit the coding criteria; (2) Each photograph is then analyzed for specific characteristics described below.

Month/Year of Issue: Identify the issue by looking at the cover of each magazine.

Case #: Label each individual in each photograph as a single case.

v1. Model Age: Code each individual (model) according to these age ranges. Use captions and/or associated stories to determine the model's age if it is difficult to determine.

1= Child: appearing 0-11 years of age

2= Adolescent: appearing 12-18 years of age

3= Adult: appearing 19-59 years of age

4= Senior appearing 60 years of age or older

v2. Gender: Code each individual according to his or her gender.

1= Male

2= Female

v3. Prominence of Photograph: Code these photograph locations with the associated numbers below.

1= Cover: Image is located on cover of magazine

2= Poster: Image is located on a poster within the magazine

3= 2-page spread: Image covers two facing pages

4= Full-page: Image covers full page

5= Half-page: Image covers half of page

6=Quarter-page or less: Image covers a quarter of the page or less, but greater than 2x3

7= Sportscard: Image dimensions are 2x3

v4. Motion in Photograph: Code individuals according to their action within the photograph.

1=Active: Refers to individuals moving through space, applying force using their bodies or engaged in movement.

2= Inactive: Refers to individuals posed in a stationary position of standing, sitting, kneeling, or otherwise not motor engaged.

v5. Photo Angle: Code photograph according to the camera angle it was shot.

1= Camera angle is shooting up. Superior/Dominating

2= Camera angle is shooting down. Inferior/Subservient

3= Straight ahead. Camera angle is eye level

v6. Type of Sport: Code individuals according to the type of sport they play. This does not mean there has to be a team pictured with them.

1= Individual: Refers to individuals engaged in activities that require just one or two people to complete such as tennis, skiing, golf, etc.

2= Team: Refers to individuals engaged in activities that require more than two people to complete such as baseball, basketball, soccer, etc.

3=N/A: Non-athlete in image.

v7. Category of Sport: Code individuals to the category of sport their sport falls into.

1= Aesthetic: Sports where success is determined primarily on the basis of grace and proper form. Examples include gymnastics, diving, figure skating, cheerleading, etc.

2= High risk: Sports in which the danger posed to the athlete is produced primarily by the physical environment. Examples include race car driving, skiing, BMX, surfing, rock climbing, etc.

3= Strength: Sports characterized by contact (football, karate, boxing), in which one opponent overpowers another by superior physical strength and by events which require great endurance (crew, cycling, marathon).

4= Neutral: Contains all other sports. Examples include basketball, baseball, soccer, tennis, swimming, most track and field events, hockey, golf, etc.

5=N/A. Non athlete in image.

v8. State of Dress: Code individuals according to the clothes they are wearing in the photograph.

1= Fully clothed in uniform: Includes individuals appearing in photographs wearing a uniform that covers up most of the body This can include football, basketball, baseball, softball uniforms.

2= Fully clothed in street clothes: Includes individuals appearing in photographs without their uniforms on or individuals involved in sports with no specific uniform, such as skateboarding

3= Scantily clothed in uniform: Includes uniforms where more skin is exposed than covered. Examples include track uniforms, leotards, swimsuits, etc.

4= Scantily clothed in street clothes: Includes individuals appearing in photographs without their uniforms and have more skin exposed than covered.

v9. Ad Type: Code each advertisement according what the ad is trying to promote.

1= Product: An article or substance that is manufactured or refined for sale

2= Service: Includes sweepstakes, fan clubs, free merchandise, etc.

3= Other

4= Editorial photo: Ex) Cover page.

v10. Character: Code each individual according to these character categories.

1= Human

2= Celebrity: Includes famous athletes, actors, etc.

3= Animation/Artistic: Includes any model that is not human.

4= Mixed: A combination of any of the above. For example, an artistic drawing of a famous athlete.

v11. Type of Product: Code each advertisement according to what product is being displayed by the ad.

1= Sport: Includes sport camps, training camps or products directly relating to physical activity and performance/ participation

2= Media: Includes ads for websites, movies, TV shows or videogames.

3= Food/Beverage

4= Equipment/Clothing: including uniforms, shoes and sporting equipment such as helmets and pads.

5= Other: Includes ads for sweepstakes, fan clubs or free merchandise.

6= Editorial photo: Ex) Cover page.

v12. Model Domination: Code each individual according to his or her position within the ad.

1= Prominent: Refers to the model in the foreground or larger than others in the same advertisement because of positioning

2= Supporting: Refers to the model in the background or smaller in relation to others in the same advertisement because of positioning

3= Other: Refers to a model in any other position within the photograph.

v.13. Photo Location: Code each image according to the location within the photograph.

1= Studio: Includes images taken in a studio, utilizing green screens and other professional equipment, etc.

2= Athletic environment: Includes images set within an athletic environment. Examples could include a track, basketball court, football field, ice rink, etc.

3= Home: Includes images set within a home environment. Examples could include, living room, bedroom, kitchen, etc.

4=Other: Includes any other location not mentioned above.

Appendix B:
Codebook for Editorial and Advertising Images

Column Name	Column Location	Variable	Values or Explanation
CASE ID	A	Case number of unit of analysis (individual in photograph)	Chronological, no duplication
ISSUE	B	Month and Year of magazine issue	Numerical Month/Year. Ex) 01(18)
MODEL AGE	C	Model age	1= Child: 0-11 2= Adolescent: 12-18 3= Adult: 19-59 4= Senior: 60+
GENDER	D	Gender of model	1= Male 2= Female
PROMINENCE OF PHOTOGRAPH	E	Prominence of model in photograph	1= Cover 2= Poster 3= 2-page spread 4= Full-page 5= Half-page 6=Quarter-page or less 7= Sportscard
MOTION IN PHOTOGRAPH	F	Motion of individual in photograph	1=Active 2= Inactive
PHOTO ANGLE	G	Camera angle photograph was shot	1= Up/ Superior/ Dominating 2= Down/ Inferior/ Subservient 3= Straight/ Eye level
TYPE OF SPORT	H	Type of sport individual in sport plays	1= Individual 2= Team 3= N/A
CATEGORY OF SPORT	I	Category sport the individual plays	1= Aesthetic 2= High risk 3= Strength 4= Neutral 5=N/A
AD TYPE	J	What the advertisement is trying to promote or sell	1= Product 2= Service 3=Other 4=Editorial
CHARACTER	K	Type of character used in advertisement	1=Human 2=Celebrity 3=Animation

			4=Mixed
TYPE OF PRODUCT	L	What product is being displayed	1=Sport 2=Media 3= Food/ Beverage 4=Equipment/ Clothing 5= Other 6=Editorial
STATE OF DRESS	M	Type of dress of individual in advertisement	1=Fully clothed in uniform 2= Fully clothed in street clothes 3= Scantily clothed in uniform 4=Scantily clothed in street clothes
MODEL DOMINATION	N	Model position within the advertisement	1= Prominent 2=Supporting 3=Other
PHOTO LOCATION	O	Location the photo was taken	1= Studio 2= Athletic environment 3= Home 4= Other

Appendix C:
Tables

Table 1

Model Domination

Domination	Men	Women	Total
Prominent	n=233 (84.4%)	n=43 (15.6%)	n=276 (50.7%)
Supporting	n=203 (75.7%)	n=65 (24.3%)	n=268 (49.3%)
Total	n=436 (80.2 %)	n=108 (19.8%)	n=544

Table 2

Type of Sport

Sport Type	Men	Women	Total
Team	n=34 (6.3%)	n=20 (3.7%)	n=54 (9.9%)
Individual	n=266 (48.9%)	n=29 (5.3%)	n= 295 (54.2%)
Other	n=136 (25%)	n=59 (10.9%)	n=195 (35.9%)
Total	n=436 (80.2 %)	n=108 (19.8%)	n=544

Note. Other category was used for the images that were not associated with a sport.

Table 3

<i>Category of Sport</i>			
Sport Category	Men	Women	Total
Aesthetic	n=4 (0.7%)	n=4 (0.7%)	n=8 (1.5%)
High Risk	n=18 (3.3%)	n=2 (0.4%)	n=20 (3.7%)
Strength	n=132 (24.3%)	n=18 (3.3%)	n=150 (28%)
Neutral	n=147 (27%)	n=26 (4.8%)	n=173 (32%)
Other	n=136 (25%)	n=59 (10.9%)	n=193 (35.9%)
Total	n=436 (80.2%)	n=108 (19.8%)	n=544

Note. Other category was used for the images that were not associated with a sport.

Table 4

<i>Prominence of Photograph</i>			
Prominence of Photograph	Men	Women	Total
Cover	n=93 (17.1%)	n=24 (4.4%)	n=117 (21.5%)
Poster	n=12 (2.2%)	n=4 (0.7%)	n=16 (2.9%)
2-page spread	n=44 (8.1%)	n=14 (2.6%)	n=58 (10.7%)
Full-page	n=256(47.1%)	n=60 (11%)	n=316 (58.1%)
Half-page or less	n=20 (3.7%)	n=4 (0.7%)	n=24 (4.4%)
Quarter-page or less	n=9 (1.7%)	n=2 (0.4%)	n=11 (2%)
Sportscard	n=2 (0.4%)	n=0 (0%)	n=2 (0.4%)
Total	n=436 (80.2%)	n=108 (19.8%)	n=544

Table 5

<i>Motion</i>			
Motion	Men	Women	Total
Active	n=162 (29.8%)	n=25 (4.6%)	n=187 (34.4%)
Inactive	n=274 (50.4%)	n=83 (15.3%)	n=357 (65.6%)
Total	n=436 (80.2%)	n=108 (19.8%)	n=544

Table 6

<i>State of Dress</i>			
State of Dress	Men	Women	Total
Fully Clothed- Uniform	n=227 (41.7.8%)	n=39 (7.2%)	n=266 (49%)
Fully Clothed- Street Clothes	n=206 (37.9%)	n=66 (12.1%)	n=272 (50%)
Scantily- Uniform	n=2 (0.4%)	n=2 (0.4%)	n=4 (0.7%)
Scantily- Street Clothes	n=1 (0.2%)	n=1 (0.2%)	n=2 (0.4%)
Total	n=436 (80.2%)	n=108 (19.8%)	n=544

Table 7

<i>Character</i>			
Character	Men	Women	Total
Human	n=149 (27.4%)	n=48 (8.9%)	n=197 (26.2%)
Celebrity	n=191 (35.11%)	n=35 (6.4%)	n=226 (41.5%)
Animation	n=43 (7.9%)	n=16 (2.9%)	n=59 (10.9%)
Mixed	n=53 (9.7%)	n=9 (1.7%)	n=62 (11.4%)
Total	n=436 (80.2%)	n=108 (19.8%)	n=544

Table 8

<i>Product Type</i>			
Product Type	Men	Women	Total
Sport	n=74 (13.6%)	n=19 (3.5%)	n=93 (17.1%)
Media	n=170 (31.3%)	n=42 (7.7%)	n=212 (39%)
Food and beverage	n=50 (9.2%)	n=3 (>1%)	n=53 (9.7%)
Equipment/ clothing	n=13 (2.4%)	n=4 (>1%)	n=17 (3.13%)
Other	n=44 (8.1%)	n=13 (2.4%)	n=57 (10.5%)
Editorial	n=85 (15.6%)	n=27 (4.5%)	n=112 (20.6%)
Total	n=436 (80.2%)	n=108 (19.8%)	n=544