IMAGES OF ATHLETES WITH DISABILITIES: AN ANALYSIS OF PHOTOGRAPHS FROM THE 2012 PARALYMPIC GAMES

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ABSTRACT

The purpose of this study was to explore how the print media portrayed athletes with disabilities during the 2012 Paralympic Games in London. An analysis was conducted of photographic images of the 2012 Paralympic Games and athletes in 12 newspapers with top circulation from 5 countries during the 12 days of competition, August 29 through September 9, 2012.

Eleven categorical variables were examined to determine how the Paralympic athletes were represented in print media photographs. Chi-square analysis was used to look at the relationships between variables. Statistical analysis included descriptive statistics, frequencies, and crosstabs with chi-square analysis to compare the differences between the variables. A one-way analysis of variance (ANOVA) was used to determine the presentation of an association between the variables. The level of significance was set at $p < 0.05$.

An overall difference in portrayal between male and female as well as between domestic and foreign athletes was found in the amount, coverage type, and disability of the athletes featured in the photographic images. Males were pictured more often than females, reinforcing hegemonic ideals of able-bodiedness and masculinity. Even though athleticism was an important theme in the photographs of female athletes with disabilities, the performance of female athletes with disabilities was often pictured with particular emphasis on medals without their disability. Domestic athletes with disabilities were more frequently portrayed in the selected newspapers than foreign athletes with disabilities, and coverage tended to minimize their adversities and
visibly maximize their successful performance regardless of disabilities. The reproduction and reinforcement of traditional attitudes and perceptions were found in portrayals of foreign athletes with disabilities.

Athletes with disabilities were similarly framed by gender and by national characteristics. There were similar characteristics between female athletes and domestic athletes, and between male athletes and foreign athletes except in the amount of coverage. Photographs in the selected newspapers tended to emphasize the strength and minimize the weakness of male and domestic athletes with disabilities while pointing out the weakness and balancing commendable qualities against small shortcomings for female and foreign athletes.
DEDICATION

This dissertation is dedicated to my God Almighty who has been my eternal rock and source of refuge. I also dedicate this work to my parents Hae Min Lee and Young Sook Kim and my in-laws Byung Joon Jeong and Kyung Ok Cha, who have sacrificed much to help me succeed and who never gave up. My next dedication is to my husband, Dong Chul Jeong. His endless love, patience, and encouragement kept me motivated during difficult times. Lastly, I want to dedicate this dissertation to my greatest treasures in life: my son Joshua Jihan Jeong and my daughter Joanna Da-Eun Jeong. I have a wonderful family who are healthy and happy. I love you.
LIST OF ABBREVIATIONS AND SYMBOLS

CR  Coder reliability

df  Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data

F   Fisher’s F ratio: A ration of two variances

M   Mean: the sum of a set of measurements divided by the number of measurements in the set

M   the number of times the coders agree

N1  the total number of coding decisions made by first coder

N2  the total number of coding decisions made by second coder

SD  Standard Deviation: a measure of the variability or dispersion of a population, a data set, or a probability distribution

p   Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value

r   Pearson product-moment correlation

\( t \)  Computed value of \( t \)-test

<   Less than

=   Equal to

\( % \) Percentage
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CHAPTER I
INTRODUCTION

The mass media plays a powerful role in the creation of important cultural information and societal perspectives such as values, norms, and attitudes (Duncan, 1990; Dyer, 1993; Lumpkin & Williams, 1991). People are impacted by what they see, hear, and read from the mass media (Creedon, 1994; Kane & Greendorfer, 1994; Riffle & Fico, 1998; Sage, 1990).

Mass media has been defined as the entire body of media conceived and designed to reach a very large public via television, radio, magazine, newspaper, and the Internet (Seevers, Graham, Gamon, & Conklin, 1997). The mass media is important in the representation of sports because sports have become one of the essential parts of social life. As such, what the media cover as well as how the media view and treat sports and those who participate in sports can be issues that create barriers due to stereotypes, trivialization, and under-representation (Bryant, 1980; Dyer, 1993; Rintala & Birrell, 1984). These barriers in the media tend to be the result of two aspects: the amount of coverage and the portrayal of sports and athletes (Bernstein, 2002; Pedersen, 2002).

One example of barriers created by mass media representation of sports is related to female athletes. Female values in sport are different from male values. Sport has traditionally been a male preserve, as shown in the male prevalence and dominance of sport. There remains a great difference in the amount of media coverage provided to male athletes versus female athletes (Bernstein, 2002; Griffin, 1989; Lee, 1992; Lumpkin & Williams, 1991).
There were no female athletes in the first Olympic Games in 1896. However, starting in 1900, the participation of female athletes slowly increased (Bernstein, 2002). It has been over a hundred years since female athletes first began to make serious inroads into what had long been considered the male-dominant area of sport. However, the media still covers a lower percentage of female athletes and has dealt with them in a way that indicates that female athletes are valued less than male athletes (Buysse & Borcherding, 2010; Caprancia et al., 2005; Kane & Greendorfer, 1994; Mason, 1998). For example, female athletes tend to be described in terms of attractiveness or physical appearance, whereas descriptions of male athletes tend to be focused on strengths and success (Duncan et al., 1990; Hargreaves, 2000; Schantz & Gilbert, 2001). Consequently, female athletes are not breaking down the barriers in this male-dominated domain.

People with disabilities have also been covered differently in the media and have sometimes been portrayed with negative images and ideas. Athletes with disabilities are often ignored, and sports media outlets often act as if they do not think disability sports are legitimate and competitive sports (Auslander & Gold, 1999; DePauw & Gavron, 1995). When they are covered, athletes with disabilities are often portrayed in stereotypical ways as victims, heroes, and “supercrips” (Day, 2000; Hardin & Hardin, 2004; Nelson, 1994).

As the popularity of sports has accelerated with globalization, athletes with disabilities, who had previously been perceived as disadvantaged in the field of sports, have begun to participate in much larger numbers. Nevertheless, the media still perpetuate stereotypes of athletes with disabilities and disability sports by focusing on how these athletes overcome their obstacles instead of covering their actual athletic accomplishments (Hardin & Hardin, 2005; Schantz & Gilbert, 2001; Stein, 1989). In addition, the mass media neglect and do not promote disability sports such as the Paralympic Games because the public tends to pay attention to
things that are perceived to be relevant and exciting. Despite the very important role of national media to advocate for disability sports, they emphasize popular sports in accordance with the tastes of the public (Lim, 2001). People without disabilities sometimes depend on accurate and sufficient media coverage to understand and recognize disability sports and athletes with disabilities. Many remain grossly uninformed of the disability sport movement because of the media’s portrayal of the concepts of disabilities, disability sports, and athletes with disabilities (Schantz & Gilbert, 2001; Schell & Duncan, 1999).

The Paralympic Games is an international competition for people with physical disabilities such as mobility disabilities, amputation, visual disabilities, and cerebral palsy. It is the second largest competition in the world after the Olympic Games. The Games are held every four years following the Olympic Games and are governed by the International Paralympic Committee (IPC). Both the summer and winter events of the Paralympic Games are held in the same year and in the same host city as those of the Olympic Games (Scheufele & Tewksbury, 2007). The Olympic Games is considered one of the premier sporting events in the world (DePauw, 1997), and the Paralympic Games is also considered an extraordinary sports event. While coverage of the Paralympics is very limited in comparison to the Olympic Games, the media pays more attention to the Paralympic Games than to any other disability sport events (Schantz & Gilbert, 2001).

The outcome or the process of competition in international sports events can cause an accumulation of stress over time (Grant, 1984). The Paralympics are an international event and bring athletes of many nations together in a generally peaceful manner to compete. As in the Olympic Games, the athletes show great devotion to their countries, and their teams are proud to be representatives of their countries. Paralympians show nationalism in connection with national
spirit or aspirations as well as patriotism and devotion and loyalty to their own nations. Each of the nations involved interacts based on their own national interests. As in the Olympics, nationalism is pursued through the Paralympics because it allows countries and people of different nationalities to meet and mingle in a non-political environment (Lee, 1992).

Very few researchers have studied print media coverage produced by and for people with disabilities (McCoy, 1999), primarily because individuals with disabilities in sports events have not been considered significant enough to be worthy issues (Buysse & Borcherding, 2010). Even though a few scholars have published work on the attitudes, perception, and values toward individuals with disabilities, none has focused on athletes with disabilities themselves (Hardin & Hardin, 2003). Recent studies of newspaper portrayals of sports have concentrated on photographs as a way to look at the relationship of sports, gender, disability, and nationalism (Buysse & Borcherding, 2010; Chang & Crossman, 2009; Schantz & Gilbert, 2001; Schantz & Marty, 1995; Thomas & Smith, 2003).

For the last 25 years, many researchers have studied athletes without disabilities in the media, but there has been much less research on athletes with disabilities and even less cross-cultural research on these athletes. Cross-cultural comparison of how often athletes with disabilities show up in the press media and how the countries participating in the Paralympics represent disability sports and athletes with disabilities is necessary because cross-cultural comparisons focus on aspects of improving both the quantity and quality of disability sports, and coverage of disability sports shows differences in the cultural perspective of sports in each country (Buysse & Borcherding, 2010).

Society is influenced and dominated by visual images (Berger, 1985; Goffman, 1979; Kuhn, 1985; Postman, 1987). For a long time, people have believed that photographs in
magazines, newspapers, posters, or advertisements tell the truth and show what really happened. In particular, photographs not only exercise powerful influence but also play a considerable part in most people’s lives as they enable people to actually visualize and see what is going on (Emmison, 1986; Hall, 1982, 1985). Thus, photographic images are more effective than other kinds of writing or description (Blackwood, 1983). Even so, people seem not to realize what power photographs have and how they can affect their lives. For example, photographs are used by organizations to gain political influence, to rationalize their interests, to highlight particular subject matter, and to enlighten people’s understanding of the subject in question.

The mass media make a large contribution toward creating social agreement (Thomas, 1986). For instance, media portrayals of sports are focused on physicality, with more coverage of mainstream sports than non-mainstream sports such as disability sports (Hargreaves, 2000). Mass media are also concerned with masculinity (Duncan et al., 1990; Schantz & Gilbert, 2001), and the main sport interests in mass media are male sports and athletes. In addition, sexuality is a major issue in the mass media (Duncan, 1986, 1990; Lumpkin & Williams, 1991; Sabo & Jansen, 1992; Schantz & Gilbert, 2001), and the aesthetic attractiveness of female athletes is depicted in sports media more often than their performance. Furthermore, sports can be used to enhance national prestige (Schantz & Gilbert, 2001).

Disability sports and athletes with disability are subjects of negative stereotypes and disadvantages in the mass media in these respects (Auslander & Gold, 1999; Hardin, Hardin, Lynn, & Walsdorf, 2001) because most disability sport coverage is focused on athletes’ having a specialty as a disabled person rather than being competitive. Moreover, female athletes, especially those with disability, tend to be paid less attention because they are perceived to be biologically less suited to sport itself than males (Hall, 1996; Hardin, Lynn, Walsdorf, & Hardin,
2002; Schantz & Gilbert, 2001). However, female athletes are likely to be given more attention during mega sports events such as the Paralympic Games compared with other sports events as previous studies on the coverage of female athletes have shown (Daddario, 1994; Duncan, 1990).

**Purpose of the Study**

The purpose of this study was to explore how the print media portrayed athletes with disabilities during the 2012 Paralympic Games in London through an analysis of newspaper photographic images of the 2012 Paralympic Games and athletes. Specifically, this study documented how often athletes with disabilities were portrayed, the frequency of photographs of athletes, what percentage of the total number of photographs were of males versus females, and any evidence of nationalism in the photographic images. Differences in frequency and content in the photographic representation of Paralympic athletes across nationalities were also examined.

Reading the newspaper every day is one way to stay informed of local and international events. Photographs in newspapers are intended to catch the reader’s eye and often help to establish the context or frame of reference by which readers interpret a newspaper story. They may catch the eye of a reader who just looks at the picture and does not read the article (Miller, 1975). It is not a novel idea that newspaper photographs are important and meaningful. Studies of newspaper photographic content in terms of sports have been largely conducted in terms of quantitative and qualitative comparisons and have yielded similar results. For instance, women are often shown in stereotyped and traditional ways, and photos of sporting events typically focus on winning and losing. Thus, the public perception of appropriate subjects, topics, attitudes, and images of athletes with disabilities and disability sports can be built by repeated exposure to photographs in newspapers (Hagaman, 1993; Luebke, 1989).
The representation of sport in the media is one of the first and foremost foundations for the reproduction of dominant and traditional images of male and female athletes (Hargreaves, 1986; Sage, 1990). It is therefore very important to examine how athletes with disability are treated and portrayed in newspaper photographs as they participate in competition like athletes without disabilities.

For the purpose of this study, two major themes in mass media coverage of sport events were amount of coverage and type and style of coverage. As most studies have shown that female athletes are under-represented (Eastman & Billings, 1999; Fink & Kensicki, 2002; Schantz & Gilbert, 2001; Thomas & Smith, 2003), and athletes with disability are under-reported (Chang & Crossman, 2009; Schantz & Gilbert, 2001), the first focus was on the amount of coverage, including a proportional comparison of coverage frequency and number of photographic images in newspaper sport sections.

The second focus was on the type and style of portrayal of the athletes. For example, male athletes are often portrayed as having a strong body, emphasizing their strength, skill, endurance, and speed (Buysse & Embser-Herbert, 2004; Daddario, 1994; Hardin et al., 2002; Hargreaves, 2000; Kane & Lenskyj, 1998), whereas female athletes’ physical appearance and sexual attractiveness are emphasized (Duncan, 1990; Eastman & Billings, 2000; Kinnick, 1998; Lumpkin & Williams, 1991; Messner, 1988; Trujillo, 1991). Female athletes are further trivialized through the pressure to embody “cosmetic perfection” (Duncan, 1990, p. 25). In general, female athletes are represented as women first (e.g., focusing on their physical appearance, clothing, and attractiveness) and as athletes second. Athletes with disabilities in general are portrayed in a way that does not emphasize their athletic abilities or performance as
athletes, and female athletes with disabilities are even more marginalized in non-action or passive poses (Buysse & Borcherding, 2010).

These aspects of media coverage show the very damaging effect of stereotypic presentation that serves to trivialize or downgrade the seriousness and importance of disability sport. Therefore, a better understanding of the stereotypes of athlete with disabilities is necessary.

These two major themes in mass media coverage of disability sports events are also related to how the media constitute nationalism in disability sports. Sports coverage is often slanted in favor of the national interests of the publishing country. For example, the more media focus on national symbols such as flags, flag patches on uniforms, national anthems, and national coats of arms during international sports events such as the Olympic Games, the more feelings of national unity and belongingness are prompted in viewers and readers (Cho, 2009). The descriptions and portrayals of athletes in the media present national teams or athletes as warriors so that national competence, confidence, or success in sport is highlighted. Media outlets generally cover more domestic athletes than foreign athletes, and famous national and foreign athletes are represented as celebrities or stars rather than warriors in media coverage (Cho, 2009; Gilchrist, 2005). With this in mind, the ways of fostering and inducing nationalism through sport seem to be strongly contrary to purposed of international sports events (Cho, 2009; Gilchrist, 2005). Assuming that nationalism in international sports events such as the Olympics can appear in different media, it is necessary to find out how the media coverage of the Paralympics constitutes a form of nationalism.

Some researchers have conducted content analysis of newspaper coverage of the Paralympic Games (Chang & Crossman, 2009; Thomas & Smith, 2003), but few have included a
cross-cultural analysis (Buysse & Borcherding, 2010). There have been a very few studies related to gender, sport, and nationalism (Chrisholm, 1999), and it is assumed that not many have emphasized gender, disability, and nationalism within newspaper coverage. These issues can be used as an important source of data for how print media portray male and female athletes with disabilities and treat athletes with disability as symbols of the nation.

**Research Questions**

Previous newspaper content analysis of the Paralympic Games indicated that athletes in the Paralympic Games have not been treated the same as athletes without disabilities; coverage focused on dealing with impairments instead of on the performance of the athletes in their sports (Buysse & Borcherding, 2010; Chang & Crosman, 2009; Hardin & Hardin, 2005; Schantz & Gilbert, 2001; Stein, 1989). Moreover, male athletes with disabilities seemed to be covered more frequently, and female athletes with disabilities were even more under-represented in Paralympics coverage (Buysse & Borcherding, 2010; Chang & Crossman, 2009; Crossman, Hyslop, & Guthrie, 1994; Messner, Duncan, & Cooky, 2003; Pedersen, 2002). Nevertheless, female athletes with disabilities have been more focused on during the Paralympic Games as their actions, records, elite performances, emotion, and team or individual achievement seemed to bring glory to their countries (Cho, 2009; Schantz & Gilbert, 2001).

The intent of the study is to examine gender, disability sports, and nationalism as portrayed in sport photographs published in newspapers during the 2012 Paralympic Games in London. To address the different aspects of these portrayals, 23 sub-questions were developed to answer 2 research questions:
1. Do the photographic images of male and female athletes with disabilities receive different treatment in terms of number, placement and dominance, type of coverage, angle, theme, sport type, disabilities, and nationality in selected newspapers?

Sub-question 1: Is there a difference in the numbers of photographic images of athletes with disabilities between selected newspapers from five countries?

Sub-question 2: Is there a difference in the proportions of male and female athletes with disabilities in the photographic images featured in selected newspapers from five countries?

Sub-question 3: Do newspapers selected in this study give the photographic images of male athletes with disabilities more prominent placement such as on the front page of the entire newspaper or on the front page of the sports/Paralympics section?

Sub-question 4: Are the photographic images of female athletes with disabilities presented in less dominant size on the page more often than in dominant size?

Sub-question 5: Are photographs of female athletes more often taken from head or upper-body angles than from full-body angles?

Sub-question 6: Are athletes with disabilities portrayed more often in uniform than in action shots?

Sub-question 7: Are male athletes with disabilities portrayed in action shots more often than in uniform?

Sub-question 8: Do photographs of athletes with disabilities highlight the theme of disability more often than the theme of athleticism?

Sub-question 9: Do photographs of male athletes with disabilities highlight the theme of athleticism more often than the theme of disability?
Sub-question 10: Are female athletes with disabilities participating in an individual sport represented more often than those participating in team sports?

Sub-question 11: How often are disabilities of athletes presented in selected newspapers?

Sub-question 12: Are disabilities of female athletes presented less often than those of male athletes?

Sub-question 13: Are female athletes in wheelchairs shown more often than other categories of disabilities in selected newspapers?

2. Do the newspapers in this study represent their own country’s athletes differently from athletes from other countries in terms of number, placement and dominance, type of coverage, angle, theme, sport type, disabilities, and nationality?

Sub-question 14: Are athletes with disabilities from the same country as the newspaper pictured more frequently than foreign athletes with disabilities?

Sub-question 15: Are domestic male athletes with disabilities more frequently pictured than foreign male athletes with disability?

Sub-question 16: Are photographs of domestic athletes with disabilities placed on the front page of the entire newspaper more often than inside the sport section?

Sub-question 17: Are domestic athletes with disabilities more frequently shown in dominant size than in non-dominant size?

Sub-question 18: Are domestic athletes more frequently pictured with head or upper-body shots than with full-body shots?

Sub-question 19: Are domestic athletes with disabilities pictured in action shots more frequently than in uniform shots?
Sub-question 20: Do the photographic images of domestic athletes with disabilities highlight the theme of athleticism more frequently than that of disability?

Sub-question 21: Are domestic athletes with disabilities participating in team sports represented more often than those participating in an individual sport?

Sub-question 22: Are disabilities of domestic athletes not often presented in the selected newspapers compared to foreign athletes with disabilities?

Sub-question 23: Do the photographic images of domestic athletes with disabilities more often show wheelchairs than other categories of disabilities?

**Significance of the Study**

Media plays a powerful role in the creation and continuation of stereotypes about athletes with physical disabilities. The cultural hegemonic ideas fueled by media coverage of disability sports and athletes with disabilities need to be examined as they are present in media coverage of these events. The findings from this study add to the data from previous studies concerning media coverage of athletes with disabilities and the Paralympics.

The methodology of this study was based on that of Buysse and Borcherding (2010), who examined photographs from 12 newspapers in 5 countries during the 2008 Paralympic Games in Beijing to determine how athletes with disabilities were treated. They were the first to explore cross-cultural newspapers’ photographic portrayal of the Paralympic Games. Different newspapers from different countries were used in the current study, and the results gave information about how athletes with disabilities in the Paralympic Games were portrayed in the print media.
Limitations of the Study

First, newspapers were the only form of media used for this study. Since analysis of media coverage and the direct effect of the researcher have not been evaluated, the results can be different depending on personal experience and individual errors or biased perception (Kellner, 1995). Thus, the results of this study cannot be generalized.

Second, the photographs in newspapers used for this study were retrieved using the PressDisplay database. Different newspapers or other forms of media such as television, radio, magazines, blogs, or online news sources may display differences in how they treat athletes with disabilities and disability sports in terms of social norms, values, stereotypes, and meaning of athletes with disabilities.

Third, as the coders in this study were not regarded as people with disabilities, they may not have much understanding of athletes with disability and disability sports.

Fourth, the tabloid media has received little academic attention in reporting sport (Harris, 1999; Tomkins, 1993; Wagg, 1991). However, tabloid format newspapers were included in this study to find the portrayals of athletes with disabilities. As it was hard to find newspapers with identical conditions, some were national newspapers and some were regional newspapers.
CHAPTER II
REVIEW OF LITERATURE

The review of literature is divided into six sections. The first section provides definitions of the mass media, media effects, cultural hegemony in the media, and the importance of photographs. The second section contains a discussion of the relationship between media and sport including sport hegemony. The next section presents literature on the relationship between disability sports and media, including issues that have been raised in the media. The fourth section provides historical information about the Paralympic Games and their portrayal in the media. The fifth section is a review of literature on disability sport and gender focusing on under-representation in disability sports and marginalization of female athletes. The final section focuses on the relationship between disability sports, gender, and nationalism in the media.

The Mass Media

The mass media is pervasive and significant in terms of our social perceptions and interactions with our surroundings. Thus, it is not surprising that people devote many hours during their daily schedule to media consumption (Connell, 1990; Pedersen, 2002).

The mass media has been defined as a section of the media specially conceived and designed to reach very vast audiences without any personal contact between senders and receivers. Most people are unaware of the effects of mass media on their thought and lives because they are unconsciously exposed to many kinds of mass media, such as the Internet, TV, magazines, newspapers, and radio programs (Kinkema & Harris, 1992). Because
almost everyone is affected by the words and images of the media, the mass media have a big impact on power structures, social values, beliefs (Harris, 1999; Schantz & Gilbert, 2001; Scherer & Jackson et al., 2007), normative standards of thought, attitudes, style, and opinion, as well as a tendency to construct and shape knowledge and information (Kellner, 1995). It is important to understand the effects of media because people who have no direct experience with various circumstances or situations are absolutely dependent on the media for information. The perception that people understand the world through the media commonly explains the scholarly focus on a variety of media effects, including agenda setting, priming, and framing (Scheufele & Tewksbury, 2007).

Agenda setting refers to the idea that the mass media consciously and unconsciously set about prioritizing certain issues of public opinion and thought. In other words, the media selects and deals with particular issues in order to focus the public or public attention on these issues. In this process, other issues are ignored automatically (Scheufele & Tewksbury, 2007). Agenda setting has three types of effects: media credibility, media reliance, and media exposure. Wanta and Hu (1994) explained that these three variables maximize media effects directly or indirectly. They offered a model of agenda-setting based on the assumption that media effects are more distinct if an issue is highly exposed in the credible media. Individuals thus exposed will be likely to rely on the media for information and opinion on the issue and change prejudices or stereotypes quickly.

The priming effect occurs when people tend to answer with basic information that comes to mind most easily. By emphasizing specific details among different criteria, the media provides specific directions for evaluating standards and can exert a strong influence in
determining the issues that come up as well as what should be forgotten and ignored (Scheufele & Tewksbury, 2007).

“Framing” occurs when people analyze an issue based on the memories and knowledge they already have. For instance, people could form a physical and emotional framework for understanding the world from their memories and knowledge, and this framework influences decisions they make in their everyday life (Scheufele & Tewksbury, 2007).

**Media and Hegemony**

The term hegemony refers to the dominance or leadership of one social group or nation over others through the process of agreement regarding political, ideological, and cultural norms (Croteau & Hoynes, 2000). Mass media has the function of promoting cultural hegemony in the United States (Croteau & Hoynes, 2000; Herman & Chomsky, 1988; Holtzman, 2000). Scholars contend that mass media’s function to inculcate individuals with values and beliefs is fundamental to institutional structures in society because the cultural hegemonic function of the mass media adopts dominant assumptions and frames content within these assumptions (Croteau & Hoynes, 2000).

The concept of cultural hegemony is based on the theory that a capitalist culture’s most powerful economic groups obtain consent for their leadership through the use of ideological and political “norms” by which social structures and relationships that help the powerful but disadvantage others are presented as “natural,” or the “way of things” (Altheide, 1984; Condit, 1994; Croteau & Hoynes, 2000; Holtzman, 2000). Thus, social relations and political policy are framed within a worldview that serves the powerful and has gained passive acceptance from other groups that are oppressed by it.
Hegemonic ideas are presented as universally valid by the mass media through covert and overt messages (Artz & Murphy, 2000; Condit, 1994). These dominant hegemonic ideas provide some groups with disproportionate advantage and ignore or marginalize others (Condit, 1994). Hegemonic ideas are portrayed to be valid and alternative views are marginalized (Artz & Murphy, 2000; Condit, 1994). Since individuals do not have direct experience with all information or knowledge, they develop a hierarchy of values, attitudes, and behaviors based on indirect knowledge and information through the mass media (Harris & Clayton, 2002). Thus, it should be of concern what the main influence of mass media is and how issues in the media affect individuals.

Photographs in Newspapers

People take in a large number of visual images and a lot of information from newspapers, magazines, television, and the Internet. Newspapers are an especially powerful part of the mass media which can have a great influence on public opinion by transmitting ideas and images (Buysse & Borcherding, 2010). According to Weis (1986), three characteristics of newspaper text are to “present something, say something about its producers and animate the reader to certain thoughts or action” (p. 239). Consequently, newspapers offer valuable information to be absorbed and assimilated by readers who have different levels of knowledge and interest (Berger, 1985; Kuhn, 1985; Vincent & Crossman, 2007).

A photograph is perceived to display truthful information of content’s meaning. Photographs are “something directly stenciled off the real, like a footprint or a death mask” (Sontag, 1977, p. 154). Relevant to this study, Pedersen, Miloch, and Laucella (2007) stated that “without their pictures, most sport sections would lose their appeal to subscribers” (p. 158).
Photographs in newspapers are effective visual communicators, describe or portray something which deserves our attention, and provide valuable information (Curry et al., 2002; Paivio & Csapo, 1973). They are also more subtle than text in their ability to motivate people to be linked to reality and overlook the fact that they are human-made constructions (Garcia & Strack, 1991). They are a particularly important part of how media consumers view the world, but people rarely think about how they are affected by photographs (Duncan, 1990). For these reasons, an analysis of what is included in an image and how media interprets the image is significant.

Duncan (1990) explained that “one characteristic that makes photography a particularly powerful ideological context for legitimation is its ability to project an aura of naturalness, realism, and authenticity. When one looks at a photograph, one is impressed by the realness, accuracy, and tangibility of the objects therein” (p. 23). In this regard, there are three particular ideological effects of photographs. First, the photograph appears objective, natural, and spontaneous while at the same time it delivers the power of exciting the viewer more than text (Zimmerman, Kauffman, & Leifer, 1975). Second, the ideological power of the photograph is its status as a commodity (Duncan, 1990; Kuhn, 1985). Photographs are commodities that transmit or validate certain ideological position, and that is why people like them. For this reason, photographs are targets of consumption. For instance, people prefer to consume images of females as weak or vulnerable because these images reinforce their social position. Lastly, Goffman (1979) said that photographs help viewers identify with the subject matter and represented context. For instance, in sports, if a photograph displays a triumphant athlete who won, the viewer of the photo is able to identify as a winner in life. A photograph of a beautiful
female athlete will arouse thoughts about aesthetics or sexuality. When males are shown in
superior positions and females in inferior positions, photos can exemplify paternalism.

**Sports in the Media**

Since the media are an integral part of our lives, it is crucial to look at characteristics of
the media in modern societies, the relationship between sports and media, and the images and
messages emphasized in the media. According to Coakley (2009), mass media mediate between
people and societies by focusing attention on selected subjects, experiences, images, and ideas
through providing information about events and people, interpretations of what is going on, and
numerous forms of entertainment.

The representation of reality in the media emerges from decisions that are motivated by
media interests such as making profits, shaping values, providing public service, building their
own reputation, and expressing technical artistic forms. The content of media is also influenced
by power relations and society as a whole (Coakley, 2004). Pertinent to this study, most people
believe that media portrayals of sports information show events as they really happened.

Sports are a mirror reflecting society and make up a small society of their own (Crossman,
2007). According to Jackson et al. (2007), “sport is an important conduit of the transmission of
images, symbols and meanings that are central to our society” (p. 178). Media coverage of
sports represents a variety of issues related to sports events, teams, athletes, performance, and
records all over the world. Sports media can make its audience feel great joy or sorrow
depending on the coverage. In addition, many people enjoy viewing sports through mass media,
and mass media’s promotion of popular sports has a positive effect on exchanging information
and changing the attitude, approach, and behavior of people in general when exposed to media.
Even those who do not care much for sports are aware of general information and have basic knowledge about sports because of media coverage (Shin & Jang, 2008).

Sports might not be as popular and pervasive if there were no mass media such as television, radio, and newspapers because people use various kinds of mass media to search for game results, sporting issues, and interesting sports information. In particular, newspapers deliver sports information to those who are unable to watch or listen to games on TV or radio and offers rational knowledge and messages with the excitement, realism, and uncertain expectations of outcome that sports can offer (Rowe, 1999). Since 1920, newspaper coverage of sports has been assigned its own section (Sage, 1990), and the sports section is one of the most popular and widely read sections in any newspaper (Boyle & Haynes, 2000; Coakley, 2009).

Even though the popularity of newspaper subscriptions in North America has been dwindling since 1980, the size of sports sections has been growing (Vincent & Crossman, 2007). There are two reasons for this. First, sports reflect the reality of society today, and second, there are mutual advantages between sports and media. In other words, newspapers and other media outlets use sports to create a successful business (Knoppers & Elling, 2004) through selling advertisement space (Jhally, 1984). Burstyn (1999) said that “sport sells newspapers and newspapers sell sport” (p. 105).

According to Schantz and Gilbert (2001), “When representing sports, the mass media in general emphasize action, records, elite performances, aggression, heroic actions, drama, emotions, and celebrities (sport stars). Particularly, the newspapers focus on team and athlete performance, results, and statistics” (p. 71). The mass media and sports have different impacts on each other, and all these relationships are not easy to identify.
Sports and Hegemony

Sport is the largest cultural individual or group activity in the world. It is a pursuit of physical exertion and skill and often involves the testing of physical capabilities in the form of a competitive game governed by a society or set of rules (Coakley, 2004; Curry et al., 2002).

The media and sports are the most socially significant and powerful hegemonic institutions in the United States (Duncan & Brummett, 1991; Kane & Disch, 1993; Sage, 1990). There is a symbolic relationship between the mass media and sport. Even though a variety of sports do not rely on the media, commercial sport organizations do for their existence and success because of their profit-making goals. Commercial sports have been open to change to accommodate the media whenever it is profitable to do so. In addition, sport media is an ideal venue to strengthen and intensify American capitalist values such as respect for authority, individualism, and hard work (Hardin & Hardin, 2004b). Success, one of the important concepts of American culture, is to achieve personal potential and requires individual effort. It takes a lot of self-discipline to guide self-actualization (Trujillo & Van de Berg, 1989). In sport, physical fitness plays a major role in success emphasized in cultural hegemony and is associated with athletes’ bodies, which are very fit in order to perform at the level they achieve.

Masculinity. The athlete’s body is an important and valued issue between superior and inferior groups in sports. The inferior groups have traditionally been female athletes (Rowe, McKay, & Miller, 1998). According to Messner (2005), sport is an institution in which male bodies are privileged over female bodies: “sport is a key site for ideological contest over the meaning of ‘masculinity’, as well as ‘femininity’” (p. 314).

Connell (1990) mentioned that when masculinity is “culturally exalted and that its exaltation stabilizes a structure of dominance and oppression in the gender order as a whole” (p.
Hegemonic masculinity is comprised of actions which ensure the inferior position of females and the superior position of males. Hegemonic masculinity is displayed in heroic characteristics such as strength, aggressiveness, and toughness using muscular strength to succeed in sports. By contrast, hegemonic femininity is characterized by “inferiority, weakness, incompetence, cooperation, passivity, timidity, and vulnerability” (Duncan, 2006, p. 231). As a result, the media present many more male heroes in sports (Hargreaves, 2000) while portraying female athletes as sexualized and emphasizing their femininity rather than their sporting achievements and abilities.

Furthermore, the ideal body image in sport is relevant to masculinity such that the characteristics of masculinity in sports are associated with different degrees of nationalism (Boyle & Haynes, 2000). For instance, national pride is related to the image of the nation as being strong and tough, like a masculine image, and so athletes who are masculine reinforce the idea of the nation being masculine.

Sport is used to construct the national image with which people can identify and feel a sense of belonging (Anderson, 2003). Athletes represent prominent figures of the nation and have national identity. Sports reporting emphasizes national characteristics and national identity using symbols, focusing on winning and on competitions between two teams or countries (Boyle & Haynes, 2000). In addition, sports play a role in creating nationalism by highlighting masculinity (Enloe, 1990; Nagel, 1998). Because nationalism relies on constructions of an idea that the male is considered superior to others, nationalism shapes hegemonic masculinity. As a result, nationalism and masculinity are intertwined with one another (Hagel, 1998) in that nationalism is masculine (Enloe, 1990).
**Able-bodiedness.** The issue of able-bodiedness (Thomas & Smith, 2003) and the ideal body image in sports emphasize the normalized body in the larger culture (Hahn, 1988) since sports are associated with physical activity or complex physical skill (Coakley, 2004; Curry et al., 2002). DePauw (1997) stated that sport has been embedded in society and reflects the dominant values, norms, and standards of a society and culture in terms of its focus on the physical body. She defined three key aspects of sport: physicality, defined as “the socially accepted view of able bodied physical ability;” masculinity, which includes “aggression, independence, strength, courage;” and sexuality, or “the socially accepted and expected view of sexual behavior” (p. 421).

Because normality in the culture is defined by able-bodied men, competition is a significant concept in sports. In this case, physical activities or complex physical skills are not considered part of competition among subordinate groups such as female athletes or those with disabilities. Rather, success for subordinate groups implies individual endeavor to overcome barriers (Trujillo & Van de Berg, 1989).

Illustrating how sport reinforces the able-bodied hegemony reflected by ableism in the larger culture (Hahn, 1987), major U.S. newspapers ran from zero to five articles on the 2002 Paralympic Games compared to hundreds of articles on the Olympic Games (Golden, 2002). Even though other countries such as Britain, Germany, and France presented more articles about the Paralympics, reporters applied able-bodied ideals to the athletes (Thomas & Smith, 2003), such as focusing on how they overcame an obstacle and set a record (Curry et al., 2002), or on national success and medal rankings (Schantz & Gilbert, 2001).

In the media, photographs of sports events and athletes provide a variety of opportunities to construct society’s normative standards (Cathcart & Gumpert, 1986). From a pessimistic point of view, the negative tendency of the media to stir up controversy often appears in sports as
photographs are frequently manipulated and cropped in such a way as to present a very biased and inaccurate view. For instance, photographs may facilitate the marginalization and construction of social norms of disability sports and athletes with disabilities (Hardin & Hardin, 2004a). Photographs featuring athletes with disabilities as people with disabilities first and athletes second put the viewer’s attention on how athletes with disabilities overcome their disabilities rather than on their athletic performance.

**Gender.** Another major hegemonic issue of sports in the media is gender (Duncan, 1990; Duncan, Messner, Williams, & Jensen, 1991; Eastman & Billings, 1999; Jones, Murrell, & Jackson, 1990; Tuggle & Owen, 1999). Gender is comprised of masculine and feminine (Artz & Murphy, 2000; Connell, 1987; Lenskyj, 2003). Sport is highly gendered in that it imposes standards of masculinity and femininity in order to ensure the inferior position of females and the superior position of males (Connell, 1990). Sports media overwhelmingly promote the perception that female sports are inferior to male sports (Mason, 1992) and marginalize female athletes as well as female sports (Crane, 1999; Mason, 1992; Walsdorf, 2000). Female athletes have received considerable scholarly attention in terms of sexual difference (Garland-Thompson, 2002; Hall, 1996; Hardin & Hardin, 2004a). Sexual difference is the media framing of female athletes that depicts them as biologically less suited for sports than males (Hall, 1996). Because the bodies of female athletes, especially those with disabilities, do not correspond with the dominant image of the able-bodied male body (Garland-Thompson, 2002), female athletes and athletes with disability are neglected and marginalized in the media (DePauw, 1997; Hardin et al., 2002).

Sports media also reinforce gender ideals of male sports as aggressive, strong, and competitive and female sports as emotional, passive, cooperative, and weak. Since sport has
been associated with the ideal body image of a strong male sporting body (DePauw, 1997; Hardin et al., 2002), the majority of researchers have focused on ways in which male sports and athletes have traditionally been considered masculine or feminine through descriptions of aspects such as grace, aesthetics, and sexual differences (Daddario, 1994; Duncan, 1990; Hardin et al., 2002; Kane, 1988). Other researchers have spotlighted specific media strategies that support hegemonic gender issues including unequal media coverage for women’s sports compared to men’s sports (Sabo & Jansen, 1992; Wann et al., 1998) and differences in media coverage of socially acceptable sports for females compared with coverage of females playing masculine sports (Jones et al., 1999; Tuggle & Owen, 1999). Female athletes with a disability are discriminated against for both their gender and their disability. Sherrill (1997) and Schell and Duncan (1999) found that coverage of the 1996 Paralympic Games showed greater discrimination against female athletes with a disability than against male athletes with a disability in terms of brevity of coverage, poor production values, and absence of commentary about rules, strategies, and physical mastery.

**Nationalism.** Nationalism and national unity are prevalent hegemonic issues of sports in the media (Adair & Vamplew, 1997; Jackson, 2004; Kell, 2000). Bairner (1996) claims that “not only does sport provide opportunities for the expression of national solidarity, it may also represent one of the clearest and most tangible indications of a nation’s very existence” (p. 315). Media has played an undeniably important role in associating sport with nationalism by making sports global, especially at international events such as the Olympics and the Paralympics. Therefore, media is central to the contemporary connection between sport and nationalism (Bairner, 1996; Rowe, McKay, & Miller, 1998).
Rowe et al. (1998) mentioned that men are the representatives of national character. In this regard, the achievements of male sports teams and individual male athletes display characteristics of nationalism (Boyle & Haynes, 2000). Since the media has reinforced the ideal body image as masculine (DePauw, 1997; Hardin et al., 2002), the media constructs nationalism through male sports such as glorifying male efforts in defeating foreign opposition and encouraging male support and patriotism (Boyle & Haynes, 2000). However, there has not been much study related to nationalism in the coverage of disability sports (Schantz & Gilbert, 2001). Schantz and Gilbert found that nationalism was obvious in the media coverage of the Paralympic Games in French and German newspapers. Compared with the focus in Olympic reporting on records and famous foreign athletes, French and German newspapers primarily informed their audience about national athletes and performances in the Paralympics. In other words, French and German newspapers were mostly interested in covering their own Paralympic athletes.

Athletes seem to be entirely represented as national symbols in sport when representing their own countries in competition with athletes from other countries (Coakley, 2009). According to Eitzen and Sage (2009), “the Olympic Games and other international sports competitions produce and promote an ‘us versus them’ feeling among athletes, coaches, politicians, the press and citizens” (p. 200). The promotion of this conflict demonstrates that international sports events and nationalism are deeply involved with each other (Hargreaves, 1992).
Disability Sports in the Media

The mass media can act to frame the hegemonically produced dominant ideology of body image through its coverage of sports (Farnall & Smith, 1999; Greenberg & Brand, 1994). Sports coverage in the media tends to focus on able-bodied activity. Consequently, able-bodied athletes are portrayed as superior and athletes with disabilities are portrayed as inferior (Barnes, 1996; Campbell & Oliver, 1996; Chang & Crossman, 2009; Thomas & Smith, 2003); furthermore, disability sport is not visible in American media. In other words, the media has not treated athletes with disabilities in the same way as able-bodied athletes due to the perception that athletes with disabilities could not be competitive or that they should be viewed simply as inspirational figures who overcome their adversities to succeed (Hardin & Hardin, 2003). Even in academic research, the focus of many studies of disability sports is on how athletes deal with adversity or impairment instead of on the performances of these athletes in their sports (Hardin & Hardin, 2005; Schantz & Gilbert, 2001; Stein, 1989). The athletes themselves would like to be shown for their achievements and not their impairments (Schantz & Alberto, 1999) but are often portrayed negatively in the media (Auslander & Gold, 1999) because people without disabilities think that disability sports are not legitimate and that athletes with disability are not eligible to meet society’s standards as able-bodied sports and athletes (DePauw, 1997). According to Thompson (2002), even though it is a very useful tool to construct positive images related to many issues of disability sports and athletes with disabilities, the media – especially newspapers – confirm the dominant and typical perceptions of disability sports and athletes with disability.
Marginalization

Stereotypes, attitudes, perception, and prejudices regarding individuals with disabilities limit their participation in society. These are affected by cultural and societal background factors or previous experience with individuals with disabilities and disabilities themselves (Auslander & Gold, 1999). Media depictions of individuals with disabilities can be positive or negative (Longmore, 1987), and so media coverage affects the perceptions of individuals with disabilities among the general public (Yoshida, Wasilewski, & Friedman, 1990).

People with disabilities in sports are not often discussed and represented because they are treated as outsiders and seen as having low value (Barnes, 1996). Campbell and Oliver (1996) observed that media portrayals reduce people with disabilities to their disabilities, ignore their individuality, and present them as superheroes who defeat their disabilities. Furthermore, people with disabilities seem to be portrayed as dependent, passive recipients of care, and as a small group (Barton, 1993). People with disabilities’ internalizing of negative stereotypes cause them to marginalize and exclude themselves from societal and cultural values (Haller, 2000; Iwakuma, 1997; Smart, 2001).

Media coverage of people with disabilities seems to vary in different ways (Zola, 1985), but media portrayals of their character tend to be unfair and unrealistic (Nelson, 1994; Yoshida et al., 1990). Individuals with disabilities are not commonly shown in the media. When they are, they are often represented by fixed stereotypes such as victims, heroes, evil and warped villains, burdens on family and friends, or accident survivors who would be better off dead (Day, 2000; Hardin & Hardin, 2004; Nelson, 1994). They may also be shown as successful in overcoming their terrible lives, as fearful, pitiful, innocent, helpless, survivors, or as “supercrips” or poster children (Hevey, 1992; Longmore, 1987; Norden, 1994; Zola, 1985).
Athletes with disabilities in the media are particularly marginalized by the supercrip model of a person with a disability overcoming his or her disability and being successful in both sports and everyday life. The idea presented is that these supercrips are somehow amazing and inspiring rather than merely people getting on with their lives (Hardin & Hardin, 2004; Smart, 2001). For example, Erik Weihenmayer, the first person with a visual impairment to climb to the summit of Mt. Everest, has been compared to Helen Keller and is praised as a disabled hero. Schantz and Gilbert (2001) cited a story in the French newspaper coverage about Claude Issorat, a French champion wheelchair racer in the Paralympic Games, that illustrates the stereotypes often found in media coverage of athletes with disability. The story described him in this way:

He was born as somebody obstinate, as a fighter, wild and indestructible. However, his terrible destiny didn’t even wait until he could make his first steps before it stopped him. He was just nine months old when the poliomyelitis invaded his body. He will not be able to walk. Ever. (as cited in Schantz & Gilbert, 2001, p. 80)

Though the supercrip is a common media model for athletes with disabilities, females with disabilities do not even appear as supercrips (Hardin & Hardin, 2004).

The marginalization of athletes with disabilities can be divided into three aspects: masculinity, physicality, and sexuality. Female athletes have been expected to conform to norms of femininity such as playing female sports, appearing feminine rather than masculine, and being sexually attracted to men. Male athletes have been expected to conform to norms of masculinity and sexuality. However, even if female athletes with disabilities appear to be soft, beautiful, and tough and male athletes with disabilities appear aggressive and strong, they are excluded from sport because they do not meet the social concept of the ideal body (DePauw, 1997). These aspects of marginalization alienate athletes with disabilities from society and are not beneficial.
The media alone obviously does not cause those without disabilities to develop their ideas of those with disabilities. However, societal ideas about individuals with disabilities may cause people without disabilities to stereotype individuals with disabilities in media portrayals. To understand athletes with disabilities, typical stereotypes of the character of disability sports, athletes with disabilities and gender discrimination/inequalities need to be exposed as they are present in media coverage of these events.

**Discrimination**

Mainstream society and culture have historically disregarded disability sports because athletes with disabilities are far from the physically ideal body image and are not seen as fit to compete (Hardin & Hardin, 2005). Many studies on how athletes with disabilities are represented in the press show disability sports as noncompetitive sports (Hardin, Hardin, Lynn, & Walsdorf, 2001; Hardin, Lynn, & Walsdorf, 2003; Schell, 1999).

Buysse and Borcherding (2010) found that the athletes with disabilities shown in photographs were not highlighted for athletic abilities or their sport performance. Particularly, female athletes were not shown as serious athletes. Compared to Olympic athletes, athletes with disabilities are likely to be ignored and their disabilities covered up in photographic coverage because they do not fit “the ideal sports-body viewed as a strong able body, not a body with disability or impairment” (p. 309). Hargreaves (2000) explained that “people with disabilities are looked upon, identified, judged and represented primarily through their bodies, which are perceived in popular consciousness to be imperfect, incomplete and inadequate” (p. 185).

Schantz and Marty (1995) found that although the number of articles about disability sports in the French daily sports journal *L’Équipe* increased from 1987 to 1993, the content of the articles tended to deal with disabilities themselves. Thomas and Smith (2003) found that both
male and female athletes were depicted in active (during competition) and passive (not in competition) poses, with male athletes with disabilities more often represented in active poses. Male athletes in the active shots transmitted the cultural concept of masculinity while female athletes in the passive shots were shown as being passive, weak, and unathletic. Although athletes with disabilities hid their impairments to deemphasize their disabilities and highlight their sporting achievements, stereotypical perceptions of athletes with disabilities as not able-bodied were imprinted.

Schantz and Gilbert (2001) found that males, medal winners, wheelchair athletes, and nationalism were the focus of newspaper articles in the coverage of the 1996 Paralympic games. Among a total of 25 photos, 52% of the photos were of wheelchair athletes, 44% of the photos were framed on the upper body or face, and 32% of the photos hid their disabilities. Depicting athletes in wheelchairs may be acceptable for most newspapers as wheelchairs represent the stereotype of the athlete with a disability (Hardin & Hardin, 2003; Schell & Duncan, 1999; Sherrill, 1997). For instance, Jean Driscoll, who was a silver medalist twice in Paralympic wheelchair games and a winner of the wheelchair division of the Boston Marathon seven times, was shown in an advertisement and has been featured in affirmative images of athletes with disabilities in a wheelchair that were displayed “as normal people doing things that normal people do” (Nelson, 1996, p. 125).

Thomas (2000) and others have indicated that there is a hierarchy of disability in which some types of disabilities are more socially acceptable than others. Tringo (1970) investigated attitudes toward disabled groups and developed the Disability Social Distance Scale (DSDS) to measure the degree of social distance. The DSDS presents a list of 21 disabilities and asks respondents to indicate what kind of relationship they would be pleased to have with an
individual with each disability. Amputation has been found to be the most “preferred,” with blindness, paraplegia, dwarfism, and cerebral palsy following (Tringo, 1970; Tripp, 1988). Thomas (2000) found that this disability hierarchy has generally been stable over the past few decades.

Mastro, Burton, Rosendahl, and Sherrill (1996) examined preference of disability hierarchies among athletes with disabilities toward each other using the Athletes with Impairment Attitude Survey (AWIAS) with members of the United States Disabled Sports Team (USDST). The members of USDST represented five disabilities: amputation, cerebral palsy, other locomotive impairments, para/quadriplegia, and visual impairment. Mastro et al. found that the athletes themselves thought that amputation had the lowest degree of disability and that dwarfism had the next lowest degree. Athletes with paraplegia or quadriplegia who had more severe disabilities than amputees were third, and cerebral palsy and vision impairment were the last in the overall preference of disability hierarchy. The preference of disability hierarchy stated by athletes with disabilities toward one another did not differ from the disability hierarchy stated by individuals without disabilities (Mastro et al., 1996; Thomas, 2000; Tringo, 1970; Tripp, 1988): amputation was the most “preferred,” with the lowest perceived degree of disability. Even though Mastro et al. (1996) did not directly include athletes in wheelchairs in their study, they mentioned that athletes who compete in wheelchairs or use prostheses or braces were considered more like athletes without disabilities than athletes with vision impairment.

When the Paralympic Games began in 1952, only wheelchair users participated. In later Games, most of the athletes who participated in the Paralympics were in wheelchairs due to spinal cord injuries (DePauw & Clarke, 1986). In 1976, athletes with amputation and visual impairment were added. Athletes with ambulatory cerebral palsy were added in 1980, and
athletes with cerebral palsy who used wheelchairs, other locomotive impairments including dwarfism, limb deficiencies, muscular dystrophy, osteogenesis imperfecta, postpolio conditions and multiple sclerosis were added in 1984 (Paciorek & Johns, 1994; Sherrill, 1993).

Previous research on disability sport found that athletes in disability sports are not much covered in the media and not treated the same as athletes without disabilities (Buysse & Borcherding, 2010; Chang & Crossman, 2009; Hardin & Hardin, 2003; Schantz & Gilbert, 2001; Thomas & Smith, 2003). Since disability sports are usually covered in sports sections rather than human interest sections, the studies of print media coverage of disability sports are still limited in terms of both quality and quantity (Schantz & Gilbert, 2001; Schantz & Marty, 1995).

The Paralympic Games in the Media

Although the Paralympic Games are not treated as serious, real sport competitions, coverage of the Paralympic Games is offered for image reasons in most newspapers (Schell & Duncan, 1999). Since the Paralympic Games were born as the Olympic-style games for athletes with a disability when the Rome Olympic Games were held in 1960, they have expanded their sport program and an increasing number of athletes and countries have participated.

In 1948, Sir Ludwig Guttman, who was working to rehabilitate World War II veterans with spinal cord injuries at Stoke Mandeville Hospital in Aylesbury, England, organized a sport competition as a form of rehabilitation and recreation for his patients. The first international game was a Wheelchair Tennis competition (Chang & Crossman, 2009) between players from England and the Netherlands in 1952; this was considered to be the first official Paralympics and gave birth to the organization that is now known as the International Paralympic Committee (IPC). In 1960, the Paralympic Games were modeled after the Olympic Games in Rome and included 400 athletes from 23 countries. The first winter Paralympics was held in 1976 in
Örnsköldsvik, Sweden (Scheufele & Tewksbury, 2007). Paralympic games were held in the same city as the Olympics in 1988 at the Seoul Summer Games and in 1992 at the Alberta Winter Games due to an agreement between the International Olympic Committee (IOC) and the IPC. Most Paralympians now compete at national and international levels, some in direct cooperation with non-disabled counterpart organizations (Scheufele & Tewksbury, 2007).

In 2008, 3,951 athletes from 146 countries competed at the Beijing Paralympics. The media coverage of the 2008 Paralympics was more extensive than ever before (International Paralympic Committee, 2000). However, only a few Paralympic athletes were shown in the coverage, and they were not framed in the media in the same way as Olympic athletes (Buysse & Borcherding, 2010). Golden (2002) interviewed sports reporters at the Olympic and Paralympic Games and found that journalists from the United States did not regard disability sports as legitimate sports because they believed that athletes with disabilities could not be competitive. One reporter in Golden’s study stated, “They can’t compete on the same level as the Olympic athletes, so it’s a bone they throw to them to make them feel better. It’s not a real competition, and I, for one, don’t see why I should have to cover it” (p. 13).

Media coverage of the Paralympics highlights disability sports but may distort the value of the performance of athletes with disabilities (Schantz & Gilbert, 2001). Chang and Crossman (2009) compared coverage of the Olympic and Paralympic Games in South Korean newspapers in 2004 and found that the Olympics received six times more coverage than the Paralympics. There was ten times the photographic coverage of the Olympic Games as of the Paralympic games, and the size of the photographic coverage of the Olympic Games was much larger than of the Paralympic Games. Male athletes had more frequent coverage in photographs and articles, and individual sports were shown in articles and photographs more often than team sports. The
angle of photographs in the Olympic Games was more focused on the head shot than on upper body and full body shots, whereas full body shots were more common in coverage of the Paralympic Games. Olympic coverage of domestic and international athletes was similar, but the Paralympic coverage showed mainly domestic athletes.

Thomas and Smith (2003) studied the British media coverage of the 2000 Paralympic Games and found that photographic coverage is likely to hide the athletes’ disabilities; in particular, female athletes with disabilities seemed to be less often represented in active poses. The coverage emphasized the successful performance of athletes with disabilities more than their athleticism. In addition, women with disabilities were often portrayed as helpless victims who need protection, or as heroines who have triumphed over a disadvantage.

Even though the number of participants and events in the Paralympics is small compared with the Olympic Games, representing athletes with disabilities in media such as advertisements tends to improve the positive image of athletes with disabilities (Day, 2000; Nelson, 1996). Thus, the media need to pay more attention to the Paralympics than any other disability sports event because the Paralympics is a major international sports event. Paralympic coverage in the media aids an understanding of disability and the performance of athletes with disabilities (Schantz & Gilbert, 2001; Thomas & Smith, 2003). Nevertheless, “media have often focused on anything and everything but [Paralympic] competition itself and the athletes themselves” (Stein, 1998, p. 419).

Disability Sports and Gender in the Media

Mass media is significant regarding sports because so many people watch sports through mass media (Ahlin, 1993). Context, interpretation, and structure of newspapers and television exert influences that mediate the experience, values, and beliefs regarding sports. Studying sport
in the media may increase understanding of the cultural values and social structure related to
gender or gender differences (Duncan & Brummett, 1987; Duncan et al., 1994; Kane &
Greendorfer, 1994).

Societies generally impose certain gender constructions that apply directly and indirectly
to sports. Men are primarily thought of as physically stronger, more aggressive, and more
physically active. Hence, men involved in sports are seen as fulfilling part of their experience as
men. Women are perceived as the gentler sex and are not thought of as being physically strong
or physically capable of being strong (Griffin, 1989). Once women began to enter the sports
world, they were expected to look feminine, to wear feminine uniforms, and to compete against
each other but to have no physical contact with other players. In general, female athletes have
not been provided equal opportunities in sport because of perceptions relative to physiological
differences between the sexes, societal norms and attitudes, and organizational rules and support
(Lumpkin & Williams, 1991).

**Under-representation**

The amount of media coverage given to the Paralympic Games is much less than that
given to the Olympics. Chang, Crossman, Taylor, and Walker (2011) compared the coverage of
the 2008 Beijing Olympic and Paralympic Games by Canadian newspapers and found 302
articles published about the Olympics compared with 11 articles about the Paralympics. Chang
and Crossman (2009) found only 17 photos of athletes in the 2004 Paralympic Games compared
with 220 photos of Olympic athletes. As more newspapers have to be sold, Chang and Crossman
discussed the commercial potential of news values and the issue of social and cultural prejudice
in terms of athletes with disabilities. The more the Paralympics make a profit, the more
newspapers cover the Paralympics. However, the Paralympics were not considered a serious
sports event, and athletes in the Paralympics were described as victims or supercrips rather than real athletes (Schantz & Gilbert, 2001; Thomas & Smith, 2003). Thus, the under-representation of Paralympics coverage continues to support the hegemony of the able-bodied, emphasizing the ideal body image.

All mass media sources also seem to mainly cover male athletes and to under-represent female athletes, who were treated as nonexistent or of low value during the 1980s and 1990s (Bernstein, 2002; Kane & Greendorfer, 1994). Female athletes continue to have a subordinate position in the world of sports, thereby perpetuating the idea that sports and athletics are more appropriate in the masculine domain and encouraging the marginalization and sexualization of females in sport (Bruce, 2008; Crane, 1999; Mason, 1992; Walsdorf, 2000).

The data show that female sports are hugely underreported in newspapers (Bishop, 2003; Buysse & Borcherding, 2010; Chang & Crossman, 2009; Crossman, Hyslop, & Guthrie, 1994; Pirinen, 1997; Duncan et al., 1990; Kane & Lenskyj, 1998; Kane & Parks, 1992; Lee, 1992; Lumpkin & Williams, 1991; Messner, Duncan, & Cooky, 2003; Pedersen, 2002; Vincent, Imwold, Masemann, & Johnson, 2002). Thomas and Smith (2003) analyzed British newspaper coverage of the 2000 Sydney Paralympics and found that male athletes were represented more often than female athletes in photos because fewer women participated in the Paralympics. A few years later, Chang and Crossman (2009) analyzed coverage of the 2004 Summer Olympic and Paralympic Games by a South Korean national newspaper and found once again that male athletes were shown more often. Buysse and Borcherding (2010) examined photographs from 12 print newspaper in five countries during 2008 Paralympic games in Beijing. Among the 152 photographs, 88 (58%) were of male athletes, 62 (41%) were of female athletes and 2 (1%) were of male and female athletes.
Less coverage of female athletes with disabilities clearly created a stereotype of female athletes with disabilities in the media and reinforces hegemony of the able-bodied male in sport (Buysse & Borcherding, 2010).

**Marginalization of Female Athletes**

Female athletes are marginalized in the sports arena as well as in the media. This marginalization results from the belief that sports are more natural and comfortable for males than for females (Pedersen, 2002). As Kane (1988) reported, the marginalization of female athletes is kind of a hegemony strategy to refuse female athletes the status, power, and honor of male athletes. Furthermore, female athletes have not been highlighted in sport performance and achievement even though they have made significant advances in organization, competition, and performance (Klein, 1988).

The media play a prominent role in reinforcing sexual differences (Hardin et al., 2002). As women’s sports have been growing in popularity in recent decades, women athletes have been portrayed more often in the media. However, newspaper coverage of female athletes especially emphasizes sexual differences in sports events (Hardin et al., 2002).

Sports considered masculine tend to highlight characteristics such as power, control, influence, domination, and full body contact, while sports considered as being feminine stress characteristics such as elegance, glamour, and beauty (Adams, 1998; Tuggle & Owen, 1999). In addition, female athletes tend to be portrayed more in individual sports, whereas male athletes tend to be portrayed in team sports. This emphasis reflects the common characterization of individual sports as feminine and team sports as more masculine (Hardin et al., 2002). There are also differences in how the media in sports shape individual sports as opposed to team sports. Female athletes in team sports are less covered due to the emphasis placed on individual sports.
where the media stresses on the athletes’ aesthetic qualities (Eastman & Billings, 2001; Kinnick, 1998).

Generally, media pay more attention to the aesthetic attractiveness of female athletes and the physicality of male athletes than their sports performance (Schantz & Gilbert, 2001). From this perspective, male athletes with disabilities seem to take part in sport to show their masculinity and may express physicality and power of strength in sport as a way of perfecting their bodies (Hargreaves, 2000). Female athletes are objectified sexually (Duncan, 1986, 1990; Lumpkin & Williams, 1991; Sabo & Jansen, 1992) when their physical attributes and beauty are focused on (Duncan, 1990). However, these images of physical attributes and charming beauty exclude women with disabilities. Female athletes with disabilities are likely to hide their bodies because they do not fit the stereotyped image of a female athlete. In other words, the image of perfect bodies in the media excludes women with disabilities (Schantz & Gilbert, 2001). Schell and Duncan (1999) and Schantz and Gilbert further suggest that women athletes with disabilities have been marginalized as not being sexual no matter how aesthetically pleasing they are. In this respect, women with disabilities may face a double disadvantage of sexism and disability discrimination even when men and women with disabilities compete in the same sports (Begum, 1992; Hardin & Hardin, 2005; Hargreaves, 2000).

Duncan et al. (1990) found that male athletes in general were constructed as active subjects but female athletes were framed as reactive objects. Moreover, male athletes have a tendency to be described in terms of masculinity and strength while female athletes’ physical appearance and attractiveness are emphasized. More specifically, male athletes are often portrayed as active, aggressive, and spontaneous, whereas female athletes may be depicted as weak, passive, and responsive.
Female athletes were much more likely to given attention in the media when they played in socially acceptable individual sports (Bernstein, 2002; Tuggle & Owen, 1999). Tuggle and Owen found that 61% of media coverage of women’s sports was focused on only three female sports: swimming, diving, and gymnastics. Female athletes in gymnastics and synchronized swimming are related to the value of aesthetics whereas male athletes in boxing, wrestling, and rugby flaunt their masculinity. However, disability sports tend to be excluded as a representation of physicality, masculinity, and sexuality (Hardin et al., 2001).

**Disability Sports, Gender, and Nationalism in the Media**

Since participation and success in international sport events has meanings and functions of projecting a national image to an international public (Bale, 1993; Hargreaves, 1992), athletes and teams have been closely associated with nationalism (Adair & Vamplew, 1997; Kell, 2000; Poulton, 2004). Sport is political in itself because sports competitions are often international (Elder, Pratt, & Ellis, 2006). Nationalism therefore plays a role in international competition, particularly in the patriotism displayed in male sports. Athletes exemplify national characteristics, and the places where sports are played are interspaces for equality between countries (Hardin & Hardin, 2004). International sports events such as the Olympic or Paralympic Games have three functions: to facilitate individual achievement, to show national competence, and to build national identity. Athletes themselves are able to achieve their desire for fame and glory for themselves and their countries by winning Olympic or Paralympic medals in the biggest international sports events in the world (Frommer, 1987).

According to MacClancy (1996), sports are “vehicles of identity, providing people with a sense of difference and a way of classifying themselves and others” (p. 2). Sport is a key in setting up collective identities based on “nation-state, region, race, ethnicity, and even being a
fan of a particular team or sports celebrity” (Cho, 2009, p. 348). As mass media offers access to sports through reporting or broadcasting nationally in real time, people can watch the same national sports events, cheer the same national team, and talk about the same games and events. Through those experiences, people create a national identity (Cho, 2009) as “representative sport acts as a public location for national identity” (Polly, 1998, p. 35). People all over the world experience national identity and emotions related to patriotism and national unity in sports (Billig, 1995; Cho, 2009; Hargreaves, 2002). In this respect, sport events are crucial tools to stimulate nationalism (Levermore, 2004).

Nation-states or nationalities are racing to produce players who display spectacular athletic performance in their fields for international sports events such as the Olympic Games (Bairner, 2005; Cho, 2009). As the Olympic Games are critical national and international sports events, they are socially correlated with nationalistic feelings and perform functions of these feelings (Cho, 2009; Schaffer & Smith, 2000; Tomlinson, 1996). One of the best examples of nationalism is to use national symbols like flags and anthems during international sports events. In addition, teams or athletes represent their nations by wearing national symbols or flags during competition (Wagner, 1990). Cho (2009) examined South Korean newspaper coverage of three Olympics and found that the media emphasized the Korean flag as the national symbol which was worn on the athletes’ uniforms and on taeguk (flag patches) on their chests during the 1968 summer Olympics. During the 1984 Olympics, nationalism was displayed in the newspapers through expressions of national competence or national confidence rather than national unity. By the 2000 Olympics, newspapers focused more on foreign teams’ and athletes’ attractive bodies and faces rather than their records or performances. Female bodies, clothing styles, and beauty were particularly commoditized through the media.
Another way of promoting nationalism is to show more native athletes than foreign athletes in newspapers. Cho (2009) found that among a total of 32 photos of Olympic athletes in Korean newspapers, 29 featuring Korean athletes were placed on the front page, while only 3 pictures of foreign athletes appeared on the front page. Chang and Crossman (2009) found that there were clear differences between the amount of coverage for the 2004 Olympic and Paralympic Games regarding the nationality of athletes. The Olympic Games had a similar ratio for native athletes and international athletes, whereas coverage of the Paralympic Games highlighted native athletes more than international athletes.

Schantz and Gilbert (2001) mentioned that athletes in the Olympic Games were described as winners of national prestige in print media. The main focus of print media is on male sports because there are two or three times more male-oriented sporting events than female-oriented sports. However, nationalism or patriotism is important for female athletes because national pride inspires newspaper reporters to cover more female athletes during the Olympics or the Paralympics as these athletes bring glory to their countries by a variety of newsworthy activities such as action, records, elite performances, aggression, heroic actions, drama, emotions, celebrity, and team and athlete achievement (Schantz & Gilbert, 2001).

Although female sports and athletes have been under-represented in depictions in the media (Buysse & Borcherding, 2010; Chang & Crossman, 2009; Crossman, Hyslop, & Guthrie, 1994; Pirinen, 1997; Duncan et al., 1990; Klein, 1988), they can be used as national symbols. Chisholm (1999) used the media coverage of the gold medal-winning 1996 U.S. women’s gymnastics team to explain how American gymnasts were constituted as symbols of the nation. Previous to these Games, Soviet gymnasts had reigned in world gymnastics competitions. When the U.S. team beat them in 1996, the American media framed this victory as a historic victory.
over the Russians, embodying the victory of American capitalism over Soviet communism. Chisholm (1999) indicated that the female gymnasts were depicted as cute girls and females who had a sort of socially acceptable androgynous appeal. Based on this example, the media does not promote disability sports because they are not perceived as interesting to general audiences and because media companies think they cannot sell newspapers with stories about disability sports and athletes with disabilities. However, reports about disability sports events such as Paralympic Games and athletes with disabilities can be a source of national prestige (Bernstein, 2002).

Media outlets in different countries explain the same sports events in different ways in terms of their international interests and personalize the events to portray their countries in a positive light (Cohen, 1994; Lee & Linda, 1998). Media portrayals are also determined by power structures, cultural background, politico-economic interests, and national identities, symbols, or stereotypes (Lee & Linda, 1998; Pujik, 2000). Nationalism is a person’s feeling about a community, and sport through a national team solidifies the strong feeling of community. Thus, the sense of nationalism is cultivated through sport (Bairner, 1996). For example, the relationship between sport and nationalism is through sporting heroes as symbols of a nation; their victories are symbolic of national victories or superiority (Gilchrist, 2005). Sports set a foundation for one country to show superiority over other countries through media stereotyping of other countries in terms of the amount of coverage, focusing on individual male and female athletes, and emphasizing the host country of international sports events (Brookes, 2002).

In general, sport in the media upholds gendered ideas reinforcing masculinity and femininity. These ideas pose barriers for female athletes including unequal media coverage for female athletes compared to males, differences in media coverage of socially acceptable sports for females, such as tennis and swimming, compared to coverage of female athletes playing
masculine sports, and the media’s focus on female athletes’ femininity as a way to make them a commodity (Tuggle & Owen, 1999; Wann, Schrader, Allison, & McGeorge, 1998).

As the numbers of female athletes with disabilities in international sports events such as the Paralympics have been increasing, female athletes with disability are connected with nationalism. Consequently, the Paralympic Games as an international event raise issues of gender and national identity in the media that are so important they cannot be ignored.
CHAPTER III

METHODOLOGY

The purpose of this chapter is to describe the methods that were used to collect and analyze the data and the statistical methods that were used to test 23 sub-questions in order to answer the 2 main questions. The first section provides an overview of content and conceptual analysis which has been used in several newspaper studies to answer questions about news photographs. The second section explains the data collection process including the sample of newspapers, categorical variables to be examined and constructed by a recording instrument, the coding procedure, and the pilot study that tested for inter- and intra-reliability. The final section describes how the data were analyzed.

This study examined how athletes with disabilities were portrayed during the 2012 Paralympic Games. Specifically, the purpose of this study was to analyze newspaper photographic images of the 2012 Paralympic Games, which involved more than 4,200 athletes with disabilities from 164 countries participating in 21 different sports. The focus of the study was how often athletes with disabilities are portrayed, the frequency of photographs and athletes, the percentage of males featured versus females, and any evidence of nationalism in the photographic images. Differences in frequency and content in the photographic representation of Paralympic athletes across countries were also examined.
Content and Conceptual Analysis

The content and concepts analyzed in this study came from 12 newspapers with top circulation from 5 countries. The sample for the general content analysis included all photographs of athletes in the 2012 Paralympic Games published during the 12 days of competition, August 29 through September 9, 2012.

Content analysis is the systematic and replicable examination of symbols and communication, which have been assigned numeric values according to valid measurement rules and the analysis of relationships involving those values using statistical methods, to describe the communication, draw inferences about its meaning, or infer from the communication to its context, both of production and consumption. (Riffe, Lacy, & Fico, 2005, p. 25)

Content analyses of various types using websites, newspapers, and magazines as well as broadcast media are often used to investigate the underlying attitudes, viewpoints, and media bias in news coverage (Rubin, 1993). A significant component of content analysis is to ensure that coding is credible so that data show consistency in the interpretation and application of the coding categories and not the biases of the coders. Generally defined as a research tool for the objective, systematic, and quantitative description of obvious message content, content analysis is focused on the actual content and internal characteristics of media (Wimmer & Dominick, 1991; Hocking & Stacks, 1998).

Content analysis has been used in several newspaper studies to answer questions about news photographs (Blackwood, 1983; Singletary, 1978; Wells, Burnett, & Moriarty, 1998). Birrell (1988) mentioned that “content analysis is a method for examining the message or content of the media such as newspapers, to draw inferences about encoding and decoding practices of
the communication system” (p. 232). In particular, content analysis has been revealed as an effective way to investigate media images of oppressed minorities (Hocking & Stacks, 1998; Wimmer & Dominick, 1991).

Conceptual analysis and relational analysis are two general categories of content analysis. In this study, conceptual analysis was used to establish the existence and frequency of concepts in photographs, and relational analyses were used to examine the relationship among concepts in photographs (Busha & Stephen, 1980).

Data Collection

Photographs in daily newspapers with top circulation from five countries (Australia, China, Great Britain, South Africa, and the United States) were chosen for this study because photographs carry powerful meaning, especially in sports media. Photographs were selected from 12 newspapers over the 12 days of competition of the 2012 Paralympic Games held in London, England, August 29 through September 9, 2012. These five countries were chosen because they were the top countries on each continent (Africa, Asia, Europe, Oceania and the Americas) in the number of total medals won in the Paralympic Games.

Photographs were considered of athletes with disabilities engaged in all Paralympic sports including but not limited to: archery, athletics, boccia, cycling road, cycling track, equestrian, football 5-a-side, football 7-a-side, goalball, judo, power lifting, rowing, sailing, shooting, swimming, table tennis, sitting volleyball, wheelchair basketball, wheelchair fencing, wheelchair rugby and wheelchair tennis. The data were collected through Press Display, an online portal site that offers current issues of newspapers from all over the world in their original form. Table 1 presents the countries of the selected newspapers and the number of Paralympic medals won by athletes with disabilities from each country.
Table 1

Countries and Medal Counts

<table>
<thead>
<tr>
<th>Rank</th>
<th>Countries</th>
<th>Continent</th>
<th>Medal Counts</th>
</tr>
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<tbody>
<tr>
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<td>Gold</td>
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<tr>
<td>1</td>
<td>China</td>
<td>Asia</td>
<td>95</td>
</tr>
<tr>
<td>2</td>
<td>Great Britain</td>
<td>Europe</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>United States</td>
<td>Americas</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>Australia</td>
<td>Oceania</td>
<td>32</td>
</tr>
<tr>
<td>14</td>
<td>South Africa</td>
<td>Africa</td>
<td>8</td>
</tr>
</tbody>
</table>

Note. The rank is for total number of medals won.

Newspapers

The newspapers selected to be analyzed were China Daily and Shanghai Daily from China, Daily Mail and The Daily Telegraph from the United Kingdom, Los Angeles Times, Star Tribune, The Washington Post and USA Today from the United States, The Australian and The Sydney Morning Herald from Australia, and Cape Times and The Citizen from South Africa.

Four newspapers were selected from the United States to represent three geographic areas (East, Midwest, and West) and one national newspaper. All newspapers used in this study were printed in international English, have national distribution, and represent large cities and regions in broadsheet and tabloid format.

China Daily, established in 1981, is China’s national English-language broadsheet newspaper. It is published every day and has the widest print circulation in China. A lot of Chinese read this newspaper as well as English-speaking readers and Chinese expatriates
Even though it is not one of the top 20 metropolitan newspapers in China, it was selected for its special role in foreign coverage. *Shanghai Daily*, founded in 1999, is the premier English-language broadsheet newspaper in China. It is published every day and is distributed in more than 50 countries and regions around the world (www.shanghaidaily.com). It is an essential information source among foreigners living in Shanghai for study, travel, and business.

*Daily Mail* and *The Daily Telegraph* are among the ten most popular national newspapers in the United Kingdom and reflect a variety of social and political views of newspaper readers (Cook, Heath, & Thompson, 2000). *Daily Mail*, established in 1986, is the second best-selling British daily (Monday through Saturday) tabloid newspaper in the United Kingdom, with gross daily sales of 2,050,132 (Audit Bureau of Circulations, 2011). It has been considered a newspaper for women and was the first newspaper to present features for women. It is the only British newspaper which has more than 50% female readership (Andrews & Talbot, 2000). *The Daily Telegraph*, published in London since 1855, is a daily (Monday through Saturday) morning broadsheet newspaper distributed throughout the United Kingdom and internationally (www.telegraph.co.uk). It has the widest circulation in the United Kingdom with an average daily circulation of 634,113 and has an inclination toward conservatism ("ABCs", 2011).

*The Los Angeles Times* is a daily broadsheet newspaper founded in Los Angeles, California in 1881. It is the fourth largest newspaper overall by circulation and one of the most prominent newspapers in the United States ("2008 Top Newspapers," 2008). It is published every day. *Star Tribune*, founded in 1867 in Minnesota, is the largest daily newspaper with broadsheet format in the United States and is published every day (www.startribunecompany.com). *The Washington Post*, founded in 1877, is the most widely
circulated daily (Monday to Saturday) newspaper with broadsheet format in Washington, DC. *The Washington Post* is a prestigious source of local, national and international news and gives readers entertainment and information they need to know (www.washpostco.com). *USA Today*, a national daily (Monday to Friday) American broadsheet newspaper, was founded in 1982 and has the second largest circulation in the United States with a readership of over 1.7 million. *USA Today* is considered an elite American newspaper that reflects and influences American public opinion through national readership and reputation (Liss, 2003). All of these newspapers are among the 25 newspapers with the largest circulation in the United States (Audit Bureau of Circulations, 2012).

*The Australian*, published since 1964, is the best-selling national weekday newspaper and the only national broadsheet newspaper in Australia (www.newsspace.com.au). Crossman, Vincent, and Gee (2010) mentioned that “the editor of this newspaper focuses on leading and shaping public opinion on the issues that affect Australia, including economic, political and social issues” (p. 231). *The Sydney Morning Herald*, published in Sydney since 1831, is a daily (Monday through Saturday) broadsheet newspaper and is the oldest continuously published newspaper in the Southern Hemisphere (Lagan, 2012). According to the Audit Bureau of Circulations (2012), it is the fourth most widely distributed newspaper in the country.

*Cape Times*, founded in 1876, is the dominant and authoritative weekday broadsheet English newspapers in Cape Town, South Africa (www.iol.co.za/capetimes). As of 2012, it had a daily readership of 261,000 and a circulation of 34,523 (Gill, 2012). *The Citizen*, founded in 1976, is the only major English-language tabloid newspaper in South Africa. It is published from Monday to Saturday and offers some of the best news and sport coverage in South Africa (www.citizen.co.za).
Categorical Variables

A recording instrument using categories from the studies of Cuneen and Sidwell (1998), Duncan and Sayaovong (1990), Hardin et al., (2001), and Buysse and Borcherding (2010) adapted for use with images of disability was adopted to analyze the newspaper photographs. The categorical variables include the following:

1. total number of photographs
2. gender of the athletes (male or female)
3. placement of the photographic images of the athletes (front page, front page of sports/Paralympics section, inside sports section, or inside non-sports section)
4. dominance of the photographic images of the athletes (dominant or non-dominant)
5. angle of the photographic images of the athletes (head shot, upper-body shot, part of body shot, full-body shot)
6. coverage type (in uniform, on the court, or in action shots)
7. theme (athleticism, disability, sympathy, or triumph)
8. sport type (individual or team)
9. presentation of disability (visible or hidden)
10. disability type (amputee, wheelchair, vision-impaired, or other disabilities)
11. nationality of the athletes (domestic athletes or international athletes)

The categorical variables were examined and constructed by a recording instrument to determine how the Paralympic athletes were represented in print media photographs. All photographs were counted if photos were related to athletes with disabilities. Photos used in advertisements were included if Paralympic athletes were involved. However, photographs
including ceremonies, staff members, audience, family, or symbols were excluded even if they were related to the Paralympic Games.

Gender was coded as 1 = male, 2 = female, or 3 = not sure. Gender was identified by caption, visible cue (Hardin & Hardin, 2005), or title of the photo.

Placement of the photographic images of the athletes indicated where athletes appeared and was coded as 1 = front page in non-sports section, 2 = front page of sports/Paralympics section, 3 = inside sports section, or 4 = inside non-sports section. Front page meant the photo was on the front page of the entire newspaper. Front page of sports/Paralympics section meant the photo was on the front page of the sport/Paralympic section of the newspaper. Inside sports section meant the photo appeared inside the sport/Paralympic section of the newspaper (i.e., not on the front page). Inside non-sports section meant the photo appeared inside (i.e., not on the front page) a non-sport/Paralympic section of the newspaper, such as arts, life, environment, fashion, and so forth.

Dominance of the photographic images of the athletes was coded as 1 = dominant, or 2 = non-dominant. Dominant indicated the athlete was dominant on the page. Non-dominant indicates the athlete was not dominant on the page. A big photograph was more dominant than a small photograph. If there were two pictures on the page and they were the same size, neither was dominant.

Type of coverage was coded as 1 = in uniform, 2 = on the court, 3 = in action shots or 4 = not sure. In uniform showed athletes wearing uniforms and sitting or standing. On the court showed athletes wearing a uniform on the court although the athlete was not playing. The court was the main focus rather than the player. In action shots showed athletes in an activity, not standing or sitting. Not sure meant that athletes were shown from the neck up or as children.
The frame of the photographic images of the athletes was coded as 1 = head shot, 2 = upper-body shot, 3 = parts of body shot, or 4 = full-body shot. The head shot showed the whole head, the upper-body shot showed from the waist up, and the full-body shot showed the whole body from head to foot (Chang, 2009; Fink & Kensichi, 2002). A part of the body showed only a body part without a face (e.g., legs or arms).

Theme was coded as 1 = athleticism, 2 = disability, 3 = sympathy, 4 = triumph, or 5 = not sure. Athleticism referred to athletes who were visibly in an activity, not standing or sitting. These were the same as in action shots in the category of type of coverage. Disability referred to a photograph highlighting athletes’ disabilities when they were not playing. Sympathy referred to photos of athletes in displays of feelings such as anger, pity, or crying. Triumph referred to the feeling or exhibition of athletes’ exultation and happiness derived from a victory or major achievement. Not sure referred to athletes shown from the neck up as in head shot photos in the category of angle of the photographs.

Sport type included two parts for individual or team sport. Male or female athletes in the photo were coded as 1 = individual sport, 2 = team sport, or 3 = not sure. Individual sports required just one or two athletes playing separately (Cuneen & Sidwell, 1998) as in archery, athletics, boccia, cycling road, cycling track, equestrian, judo, power lifting, shooting, swimming, and table tennis. Team sports required more than two athletes working together (Cuneen & Sidwell, 1998) and include football 5-a-side, football 7-a-side, goalball, rowing, sailing, sitting volleyball, wheelchair basketball, wheelchair fencing, wheelchair rugby, and wheelchair tennis (doubles and team).

Presentation of disability referred to whether disabilities were presented in the photographs and was coded as 1 = visible, 2 = hidden, or 3 = not sure. Visible meant disabilities
were presented and a body part was pictured with sport equipment or prosthesis. Hidden meant disabilities were not presented, such as in a head shot. Not sure meant the disability could not be recognized because of the photograph quality (e.g., a smoky or blurry image).

Type of disability was coded as 1 = amputee, 2 = wheelchair, 3 = vision-impaired, 4 = all other disabilities, or 5 = not sure. An amputee was an athlete with a partial or total loss of at least one limb as shown in the photograph. Wheelchair referred to an athlete in a wheelchair in the photograph. Vision-impaired meant vision impairment from partial vision to total blindness as shown in the photograph. All other disabilities encompassed physical impairments that did not fall into the other classification categories such as arthrogryposis. Not sure meant the athlete in the picture did not show an indication of disability.

Nationality of the photographic images of the athletes was classified into 1 = domestic athletes, 2 = international athletes, or 3 = not sure. Domestic athletes were of the same country as the newspaper. International athletes were not citizens of the country the newspaper is published in. Not sure meant the nationality of the athlete is unclear.

**Coding Procedure**

An athlete with disability and a photo were the units of analysis. For this study, two independent coders, both graduate students, were involving in the coding work. The principal investigator, who was same as the primary coder, was in a doctoral program in Kinesiology at a university in the Southern United States. The other was in a doctoral program in Engineering at a university in the Southern United States. They were trained by a professor in Kinesiology at a university in the Southern United States, who acted as arbiter so as to not be involved in the intention of the principal investigator. The professor shared an overview of this study and trained both coders how to code each variable on the code sheet and the corresponding
description in the code guideline in order to assure that second coder understood the variables to be coded.

After each coder was aware of what to look for when coding, they coded newspaper photographs of the sample generated for the study. The coders used the coding scheme consistently throughout the entire project to analyze the photographs.

The newspapers selected in this study were downloaded, saved, and printed from the online portal site Press Display (http://www.pressdisplay.com) through the PressReader application. The format and contents are exactly the same as the hard-copy newspapers. Newspaper replica view can be customized, enlarged, or zoomed as desired.

Once they were comfortable with the procedure, both coders collected data by identifying photographs of athletes in the Paralympic Games, made a copy of the full page on which the photograph appeared, and used a code sheet to code the same data at the same time. Both coders tested for reliability by comparing data completed by the other coder. This process was repeated until the two coders reached the acceptable reliability of 90% or above when using Holsti’s reliability formula (Wimmer & Dominick, 1991).

**Pilot Study**

After being trained in coding of the photos and prior to actual data collection, both coders independently coded 100 photographic images of athletes with disabilities from the newspapers selected in this study at random in order to become familiar with the coding process and to reduce discrepancies between coders. They had multiple sessions, compared their results, discussed the discrepancies, and made clarifications or modifications to the codebook if they did not agree. Once trained, both coders tested for reliability by comparing data of their separate
analyses. In order to assess inter-coder reliability over time, the pilot study included three separate reliability analyses for both coders as described below.

1. Initial inter-coder reliability analysis: This reliability analysis consisted of 30% of 100 photographic images (30 photographic images of athletes with disabilities). In the first test, they did not reach the acceptable reliability of 86.9%. They shared and discussed the description of the coding guidelines and made sure both coders agreed on the terminology. After coding again, they had an acceptable reliability of 90.1%.

2. Second inter-coder reliability analysis: This analysis consisted of another 30% of the 100 photographic images (30 photographic images of athletes with disabilities) 24 hours after the initial reliability analysis. The inter-coder reliability was 91.5%.

3. Final inter-coder reliability analysis: Conducted one day after the second reliability analysis, this session consisted of the last 40% of 100 photographic images (40 photographic images of athletes with disabilities). The inter-coder reliability was 92.8%.

Intra-coder reliability was also tested for both coders. Both coders re-analyzed the last 40% of the 100 photographic images (40 photographic images of athletes with disabilities) 24 hours after the final inter-coder reliability analysis. The primary coder had 95.9% intra-coder reliability while the other coder had 96.3%. The reliability of both coders was above the 90% needed to conduct a reliable analysis of content.

Data Analysis

After the data collection, SPSS 21.0 was used to analyze the data. Chi-square analysis was used to look at the relationship between two variables such as gender and the other categorical variables. Statistical analysis included descriptive statistics, frequencies, and crosstabs with chi-square analysis to compare the differences between the variables in this study.
A one-way analysis of variance (ANOVA) was used to determine the presentation of an association between the variables. The level of significance was set at $p < 0.05$. The analysis procedure included the following:

1. Statistical analysis procedures including descriptive statistics, frequencies, and crosstabs with chi-square analysis were used to compare overall significance between the two variables selected.

2. If there was no significant difference, the statistical analysis was stopped.

3. If there was a significant difference, statistical analysis including descriptive statistics, frequencies, and crosstabs with chi-square analysis was conducted again. In this case, since there was a difference, a follow-up chi-square test was performed after omitting the not sure categories from the analysis variables to determine significance between the explained variables in a set data. For instance, if there was a difference between gender and type of sport, male and female except “not sure” and type of sports except “not sure” were tested in a follow-up chi-square test.

4. If there was a significant difference again, simple descriptive statistics and frequency distributions were also used to describe the significant differences obtained from the Tukey post-hoc from the ANOVA.

Reliability is significant in research because the reliability of the coder is determined by whether the same results are achieved when the data coding is repeated. Content analysis is not reliable if it has been done only once and by the same coder (Neuendorf, 2002). In order to ensure that coding is credible so that data show consistency in the interpretation and application of the coding categories and not the biases of the coders, Holsti’s reliability formula was used to assess coder reliability between the two coders (Hocking & Stacks, 1998). To ensure that the
content coding was reliable, this study used inter-coder reliability to measure “the consistency of different raters who respond to the same events by using some sort of a check list” (Reinard, 2008, p. 120). Three analyses of inter-coder reliability were obtained by comparing data completed by the different coders 24 hours apart in each session during pilot study. The formula was \( CR = \frac{2(M)}{N_1 + N_2} \), where \( M \) was the number of times the coders agree, and \( N_1 \) and \( N_2 \) represented the total number of coding decisions made by each coder. The first inter-coder reliability test was 90.1%, the second inter-coder reliability test was 91.5%, and the final analysis was 92.8%. Intra-coder reliability was established by comparing data from the final inter-coder reliability analysis completed by the same coder 24 hours apart. Both inter- and intra-coder reliabilities were tested after the coders were trained in coding of photos and images and prior to actual data collection. The primary coder had 95.9% intra-coder reliability while the other coder had 96.3%. The reliability of both coders was above the 90%.
CHAPTER IV
RESULTS

The purpose of this chapter is to report the results of this study to answer the 2 main and 23 sub-questions.

The 2012 Paralympic Games had the largest number of athletes and nations participating since its founding: a total of 4,302 athletes from 164 countries. This was an increase of 291 athletes and 18 countries from the 2008 Paralympic Games in Beijing. Of the 4,302 athletes, 2,779 (65%) were male and 1,523 (35%) were female (International Paralympic Committee, 2012). The 12 newspapers from 5 countries examined in this study featured a total of 862 photographs related to the Paralympic Games from August 29 to September 9, 2012.

As shown in Table 2, newspapers in the United Kingdom published the most photographs (751, or 87.1%). Of those, 495 (57.4%) were published in The Daily Telegraph and 256 (29.7%) in the Daily Mail. The second largest numbers of photographs were 44 (5.1%) in Australian newspapers and 43 (5.0%) in South African newspapers. Newspapers in the United States published the smallest number of photographs, with only 8 (0.9%).
Table 2

*Number of Photographs of Athletes with Disabilities within Countries and Newspapers*

<table>
<thead>
<tr>
<th>Countries</th>
<th>Newspapers</th>
<th>Photographs</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td><em>China Daily</em></td>
<td>11</td>
<td>(1.2)</td>
<td>16</td>
<td>(1.8)</td>
</tr>
<tr>
<td></td>
<td><em>Shanghai Daily</em></td>
<td>5</td>
<td>(0.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td><em>Daily Mail</em></td>
<td>256</td>
<td>(29.7)</td>
<td>751</td>
<td>(87.1)</td>
</tr>
<tr>
<td></td>
<td><em>The Daily Telegraph</em></td>
<td>495</td>
<td>(57.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td><em>Los Angeles Times</em></td>
<td>0</td>
<td>(0.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Star Tribune</em></td>
<td>3</td>
<td>(0.4)</td>
<td>8</td>
<td>(1.0)</td>
</tr>
<tr>
<td></td>
<td><em>The Washington Post</em></td>
<td>3</td>
<td>(0.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>USA Today</em></td>
<td>2</td>
<td>(0.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td><em>The Australian</em></td>
<td>13</td>
<td>(1.5)</td>
<td>44</td>
<td>(5.1)</td>
</tr>
<tr>
<td></td>
<td><em>The Sydney Morning Herald</em></td>
<td>31</td>
<td>(3.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td><em>Cape Times</em></td>
<td>22</td>
<td>(2.6)</td>
<td>43</td>
<td>(5.0)</td>
</tr>
<tr>
<td></td>
<td><em>The Citizen</em></td>
<td>21</td>
<td>(2.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>862</td>
<td>(100)</td>
<td>862</td>
<td>(100)</td>
</tr>
</tbody>
</table>

**Athletes with Disabilities within Countries and Newspapers**

Sub-question 1 was about the numbers of photographic images of athletes with disabilities allotted among 12 newspapers from 5 countries.

There were 1262 photographic images of athletes with disabilities in the 862 photographs, as shown in Table 3. United Kingdom newspapers published the most photographs, with 1097 (86.9%) photographic images of athletes with disabilities, 753 (59.7%) in *The Daily Telegraph* and 344 (27.3%) in the *Daily Mail*. The second and third largest numbers of photographs were 79 (6.3%) athletes with disabilities shown in Australian newspapers and 56 (4.4%) shown in
South African newspapers. Newspapers in the United States published the least numbers of photographic images of athletes with disabilities, with only 9 (0.7%) pictured. The *Los Angeles Times* did not feature any photographs of athletes with disabilities. Therefore, there was a difference in the number of the photographic images of athletes with disabilities between selected newspapers from five countries. Specifically, *The Daily Telegraph* and *Daily Mail* in the United Kingdom published a statistically significantly higher proportion of photographic images of athletes with disabilities compared with other countries.

Table 3

<table>
<thead>
<tr>
<th>Country</th>
<th>Newspaper</th>
<th>Athletes</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td><em>China Daily</em></td>
<td>14</td>
<td>(1.1)</td>
<td>21</td>
<td>(1.7)</td>
</tr>
<tr>
<td></td>
<td><em>Shanghai Daily</em></td>
<td>7</td>
<td>(0.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td><strong>Daily Mail</strong></td>
<td>344</td>
<td>(27.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>The Daily Telegraph</em></td>
<td>753</td>
<td>(59.7)</td>
<td>1097</td>
<td>(86.9)</td>
</tr>
<tr>
<td>United States</td>
<td><em>Los Angeles Times</em></td>
<td>0</td>
<td>(0.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Star Tribune</em></td>
<td>3</td>
<td>(0.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>The Washington Post</em></td>
<td>3</td>
<td>(0.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>USA Today</em></td>
<td>3</td>
<td>(0.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td><em>The Australian</em></td>
<td>17</td>
<td>(1.3)</td>
<td>79</td>
<td>(6.3)</td>
</tr>
<tr>
<td></td>
<td><em>The Sydney Morning Herald</em></td>
<td>62</td>
<td>(4.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td><em>Cape Times</em></td>
<td>27</td>
<td>(2.1)</td>
<td>56</td>
<td>(4.4)</td>
</tr>
<tr>
<td></td>
<td><em>The Citizen</em></td>
<td>29</td>
<td>(2.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>1262</td>
<td>(100.0)</td>
<td>1262</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>
Male and Female Athletes with Disabilities within Countries and Newspapers

Sub-question 2 was about the proportion of photographic images of male and female athletes with disabilities allotted among 12 newspapers from 5 countries with the actual frequencies. All but one of the newspapers included in the study featured unequal proportions of photographic images of female athletes compared to male athletes. Of the 1262 images of athletes with disabilities, 781 (61.9%) were of males, 426 (33.8%) were of females, and 55 (4.4%) were unclear. This is shown in Table 4.

Table 4

Photographic Images by Gender within Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>20</td>
<td>0</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(95.2)</td>
<td>(0.0)</td>
<td>(4.8)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>672</td>
<td>372</td>
<td>53</td>
<td>1097</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(61.3)</td>
<td>(33.9)</td>
<td>(4.8)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>United States</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(77.8)</td>
<td>(22.2)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Australia</td>
<td>41</td>
<td>37</td>
<td>1</td>
<td>79</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(51.9)</td>
<td>(46.8)</td>
<td>(1.3)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>South Africa</td>
<td>41</td>
<td>15</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(73.2)</td>
<td>(26.8)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>781</td>
<td>426</td>
<td>55</td>
<td>1262</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(61.9)</td>
<td>(33.8)</td>
<td>(4.3)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>
Among 21 images of athletes with disabilities in Chinese newspapers, 20 (95.2%) were of males while no photographic image was of female athlete (the gender of the athlete in one photo was unclear). South Africa and the U.S. portrayed three times as many males as females, and UK newspapers portrayed male athletes a little less than twice as often female athletes. However, male and female athletes were almost equally portrayed in Australian newspapers, with 41 (51.9%) images of male athletes, 37 (46.8%) images of female athletes, and 1 (1.3%) image which was unclear.

A chi-square test was performed to determine the relationship between the two variables (genders and countries). There was a statistically significant relationship in the proportions of the photographic image of male and female athletes with disabilities across countries ($\chi^2 = 24.045, df = 8, p = .002$). A follow-up test between genders and countries revealed that selected countries showed more often presenting male athletes with disabilities in their newspapers ($\chi^2 = 18.445, df = 4, p = .001$).

A one-way ANOVA used to test for the differences in the number of photographic images of male and female athletes with disabilities among the five countries showed a significant difference, $F(4, 1202) = 4.663, p = 0.01$. Tukey post-hoc comparisons of the five countries indicated that China ($M = 1.0, SD = .000$) tended to publish only the photographic images of male athletes with disabilities and Australia ($M = 1.47, SD = .503$) tended to publish more photographic images of female athletes with disabilities than other countries.

The frequency of the photographic images by gender within newspapers is presented in Table 5. Although the numbers of photographic images from China and the United States were small, China Daily published almost all of its pictures of male athletes (92.9%), and Shanghai Daily, The Washington Post and USA Today published pictures of male athletes only (100%).
Table 5

Photographic Images by Gender within Newspapers

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Male</th>
<th>Female</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Daily</td>
<td>13</td>
<td>0</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(92.9)</td>
<td>(0.0)</td>
<td>(7.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Shanghai Daily</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Daily Mail</td>
<td>232</td>
<td>111</td>
<td>1</td>
<td>344</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(67.4)</td>
<td>(32.3)</td>
<td>(0.3)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Daily Telegraph</td>
<td>440</td>
<td>261</td>
<td>52</td>
<td>753</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(58.4)</td>
<td>(34.7)</td>
<td>(6.9)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Los Angeles Times</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Star Tribune</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(33.3)</td>
<td>(66.7)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Washington Post</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>USA Today</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Australian</td>
<td>3</td>
<td>14</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(17.6)</td>
<td>(82.4)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Sydney Morning Herald</td>
<td>38</td>
<td>23</td>
<td>1</td>
<td>62</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(61.3)</td>
<td>(37.1)</td>
<td>(1.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Cape Times</td>
<td>18</td>
<td>9</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(66.7)</td>
<td>(33.3)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Citizen</td>
<td>23</td>
<td>6</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>(% within Newspapers)</td>
<td>(79.3)</td>
<td>(20.7)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>
Nearly all the newspapers pictured males primarily, but four times more female than male athletes were pictured in *The Australian* and two of the three athletes whose pictures were published in *Star Tribune* were female.

A chi-square test was used to determine whether the photographic images of gender was associated with newspapers, and a significant relation was found ($\chi^2 = 69.210, df = 20, p = .001$). The follow-up test between gender and newspapers found that selected newspapers were more likely to picture male athletes than female athletes ($\chi^2 = 37.314, df = 10, p = .001$).

A one-way ANOVA was used to test for differences in the photographic images of male and female athletes with disabilities among 12 newspapers, $F(10, 1196) = 3.815, p = 0.01$. Tukey post-hoc comparisons of the newspaper categories indicated that *The Australian* ($M = 1.82, SD = .393$) tended to publish more photographic images of female athletes with disabilities than *China Daily* ($M = 1.0, SD = .000$), *Shanghai Daily* ($M = 1.0, SD = .000$), *Daily Mail* ($M = 1.32, SD = .469$), *The Daily Telegraph* ($M = 1.37, SD = .484$), *The Sydney Morning Herald* ($M = 1.38, SD = .489$), *Cape Times* ($M = 1.33, SD = .480$), and *The Citizen* ($M = 1.21, SD = .412$).

Therefore, there was a difference in the proportion of the photographic images of male and female athletes with disabilities between selected newspapers. Most of the newspapers selected in this study tended to publish photographic images of male athletes with disabilities more often than those of female athletes with disabilities.

**Placement within Gender**

Sub-question 3 stated that newspapers selected in this study would give photographic images of male athletes with disabilities more prominent placement such as the front page of the entire newspaper or the front of the sports/Paralympics section rather than other pages.
Generally, all newspapers tended to place the photographic images of athletes with disabilities on inside pages of the sports section (71.2%), specifically on inside pages of the sports section (males 71.3% and females 69.0%) and in non-sports sections (males 20.4% and females 23.2%), as shown in Table 6. However, chi-square analysis revealed that there was not a statistically significant difference between placement of photographic images and gender ($\chi^2 = 8.671$, $df = 6$, $p = .193$). Therefore, the data revealed that the selected newspapers did not place the photographic images of male athletes with disabilities in more prominent locations such as the front page of the entire newspaper or the front page of the sports/Paralympics section. Rather, they placed photographic images of both male and female athletes with disabilities in inside sections.

Table 6

_Placement of Photographic Images of Athletes with Disabilities within Genders_

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>FS/P</th>
<th>IS</th>
<th>INS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>27</td>
<td>38</td>
<td>557</td>
<td>159</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(3.5)</td>
<td>(4.9)</td>
<td>(71.3)</td>
<td>(20.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>19</td>
<td>294</td>
<td>99</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(3.3)</td>
<td>(4.5)</td>
<td>(69.0)</td>
<td>(23.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>1</td>
<td>1</td>
<td>48</td>
<td>5</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(1.8)</td>
<td>(1.8)</td>
<td>(87.3)</td>
<td>(9.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>58</td>
<td>899</td>
<td>263</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(3.3)</td>
<td>(4.6)</td>
<td>(71.2)</td>
<td>(20.8)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

*Note:* FP: Front Page, FS/P: Front Sport/Paralympics, IS: Inside Sport, INS: Inside non-sport
Dominance within Gender

Sub-question 4 stated that photographic images of female athletes with disabilities were presented in less dominant size on the page more often than in dominant size.

As shown in Table 7, the photographic images of athletes with disabilities were more likely to be depicted in less dominant size (67.1%) than dominant size (32.9%). However, chi-square analysis revealed that there was no statistically significant difference between dominance of photographic images and gender ($\chi^2 = 5.266, df = 2, p = .072$). Therefore, the data revealed that the photographic images of both male and female athletes with disabilities were not presented in dominant sizes. Rather, both male and female athletes with disabilities were presented in small sized photographs.

Table 7

*Dominance of Photographic Images of Athletes with Disabilities within Genders*

<table>
<thead>
<tr>
<th></th>
<th>Dominant size</th>
<th>Non-dominant size</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>272</td>
<td>509</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(34.8)</td>
<td>(65.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>131</td>
<td>295</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(30.8)</td>
<td>(69.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>12</td>
<td>43</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(21.8)</td>
<td>(78.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>415</td>
<td>847</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(32.9)</td>
<td>(67.1)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>
Angle within Gender

Sub-question 5 about the photographic angle within gender stated that photographic images of female athletes would be taken more often from head or upper-body angles than from full-body angles. Overall, 617 (48.9%) male and female athletes with disabilities were pictured in whole-body shots. More than half of the male athletes with disabilities were framed in full-body angles (54.9%), whereas a much smaller percentage of female athletes were pictured in upper-body (38.5%) and full-body angles (39.4%) as shown in Table 8.

Table 8

<table>
<thead>
<tr>
<th>Angle of Photographic Images of Athletes with Disabilities within Genders</th>
<th>Head</th>
<th>Upper-body</th>
<th>Parts of body</th>
<th>Full- body</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>130</td>
<td>197</td>
<td>25</td>
<td>429</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(16.6)</td>
<td>(25.2)</td>
<td>(3.2)</td>
<td>(54.9)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>89</td>
<td>164</td>
<td>5</td>
<td>168</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(20.9)</td>
<td>(38.5)</td>
<td>(1.2)</td>
<td>(39.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>1</td>
<td>8</td>
<td>26</td>
<td>20</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(1.8)</td>
<td>(14.5)</td>
<td>(47.3)</td>
<td>(36.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>369</td>
<td>56</td>
<td>617</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(17.4)</td>
<td>(29.2)</td>
<td>(4.4)</td>
<td>(48.9)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

A chi-square test used to determine the relationship between two variables (gender images and angles) showed a significant difference ($\chi^2 = 287.471$, $df = 6$, $p = .001$). The follow-up test of whether gender was associated with the angle of the photographic images revealed that
there was a significant difference in the proportions of male and female athletes with disabilities across angles ($\chi^2 = 36.913, df = 3, p = .001$).

A one-way ANOVA used to test for the differences between the photographic angle and the photographic images of male and female athletes indicated a significant difference, $F(3, 1203) = 12.650, p = .001$. Tukey post-hoc comparisons of the categories of the angles indicated the photographic images of female athletes were taken from the head angle ($M = 1.41, SD = .492$) and from the waist up (upper-body) ($M = 1.45, SD = .499$) more often than from a parts of body ($M = 1.17, SD = .379$) or full-body angle ($M = 1.28, SD = .450$). In other words, the photographic images of male athletes were more often taken from a parts of body ($M = 1.17, SD = .379$) or full-body angle ($M = 1.28, SD = .450$) than from the whole head shot ($M = 1.41, SD = .492$) and from the waist up (upper-body) ($M = 1.45, SD = .499$).

Therefore, the data revealed that the photographic images of male athletes were more often taken from full-body angles whereas those of female athletes were more often taken from head or upper-body angles.

**Coverage Type within Gender**

Sub-questions 6 and 7 dealt with the coverage type of the photographic images of male and female athletes with disabilities.

Among the categories of coverage type, athletes with disabilities were depicted most frequently in uniform (41.8%) and in action shots (43.1%). Male athletes were more likely to be featured in action shots (46.2%) as visibly involved in a sport competition, while nearly half of the photographic images of female athletes were in uniform (48.6%) and depicted with a head shot or upper-body shot and not engaging an activity. See Table 9.
Table 9

Coverage Type of Photographic Images of Athletes with Disabilities within Genders

<table>
<thead>
<tr>
<th></th>
<th>In uniform</th>
<th>On the court</th>
<th>In action shots</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>311</td>
<td>10</td>
<td>361</td>
<td>99</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(39.8)</td>
<td>(1.3)</td>
<td>(46.2)</td>
<td>(12.7)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>207</td>
<td>7</td>
<td>155</td>
<td>57</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(48.6)</td>
<td>(1.6)</td>
<td>(36.4)</td>
<td>(13.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>9</td>
<td>5</td>
<td>28</td>
<td>13</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(16.4)</td>
<td>(9.1)</td>
<td>(50.9)</td>
<td>(23.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>527</td>
<td>22</td>
<td>544</td>
<td>169</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(41.8)</td>
<td>(1.7)</td>
<td>(43.1)</td>
<td>(13.4)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

The chi-square statistics tested whether gender images were associated with coverage type. There was a significant difference in the two variables ($\chi^2 = 43.587, df = 6, p = .001$). The follow-up test between gender images and coverage type revealed that there was a relationship in the proportions of male and female athletes with disabilities across coverage type ($\chi^2 = 11.451, df = 2, p = .003$).

A one-way ANOVA showed that there is a statistically significant relationship between variables ($F(2, 1048) = 5.772, p = .003$). Tukey post-hoc comparisons of the categories of the coverage types indicated that male athletes with disabilities were more often portrayed in action shots ($M = 1.3, SD = .459$) than in uniform ($M = 1.4, SD = .490$), while female athletes with disabilities were more often portrayed in uniform ($M = 1.4, SD = .490$) than in action shots ($M = 1.3, SD = .459$).
Therefore, the data revealed that athletes with disabilities were shown more often in action shots than in uniform overall. Male athletes with disabilities were more often shown in action shots than in uniform, while female athletes with disabilities were more often shown in uniform than in action shots.

**Theme within Gender**

Sub-questions 8 and 9 dealt with how the photographic images of athletes with disabilities reflected themes such as athleticism, disability, sympathy, or triumph.

The largest percentage but still fewer than half of the photographic images of athletes reflected the theme of athleticism (44.2%). The next most common theme was triumph (25.2%). Specifically, photographic images of male athletes with disabilities focused on athleticism (e.g., visibly involved in a sport competition) made up 45.7% and those focused on triumph made up 23.0% of the total number of male images. On the other hand, most photographic images of female athletes with disabilities were associated with athleticism (39.2%) and triumph (32.3%). See Table 10.

**Table 10**

*Theme in Photographic Images of Athletes with Disabilities within Genders*

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>D</th>
<th>S</th>
<th>T</th>
<th>NS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>357</td>
<td>96</td>
<td>30</td>
<td>180</td>
<td>118</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(45.7)</td>
<td>(12.3)</td>
<td>(3.8)</td>
<td>(23.0)</td>
<td>(15.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>167</td>
<td>41</td>
<td>2</td>
<td>137</td>
<td>79</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(39.2)</td>
<td>(9.6)</td>
<td>(0.5)</td>
<td>(32.3)</td>
<td>(18.5)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>34</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(61.8)</td>
<td>(20.0)</td>
<td>(3.6)</td>
<td>(1.8)</td>
<td>(12.7)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>558</td>
<td>148</td>
<td>34</td>
<td>318</td>
<td>204</td>
<td>1262</td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(44.2)</td>
<td>(11.7)</td>
<td>(2.7)</td>
<td>(25.2)</td>
<td>(16.2)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

*Note: A: Athleticism, D: Disability, S: Sympathy, T: Triumph, NS: Not Sure*

A chi-square test performed to see whether gender was associated with themes showed a significant difference between the two variables ($\chi^2 = 47.512$, $df = 8$, $p = .001$). The follow-up test between photographic image of gender and theme also revealed a significant difference ($\chi^2 = 24.874$, $df = 3$, $p = .001$).

A one-way ANOVA showed that there was a statistically significant relationship of the proportions of male and female athletes with disabilities across themes, $F(3, 1006) = 8.467, p = .001$. Tukey post-hoc comparisons of theme categories indicated that photographic images of female athletes with disabilities more frequently highlighted the theme of triumph ($M = 1.43, SD = .496$) than athleticism ($M = 1.32, SD = .466$), disabilities ($M = 1.30, SD = .460$), or sympathy ($M = 1.06, SD = .246$). Photographic images of male athletes with disabilities more frequently highlighted the theme of sympathy ($M = 1.06, SD = .246$) than athleticism ($M = 1.32, SD = .466$) or triumph ($M = 1.43, SD = .496$). However, there was no statistically significant relationship between athleticism ($M = 1.32, SD = .466$) and disabilities ($M = 1.30, SD = .460$) as well as between sympathy ($M = 1.06, SD = .246$) and disabilities ($M = 1.30, SD = .460$).

Therefore, the data revealed that the theme of disabilities was not more focused on than athleticism in the photographic images of athletes with disabilities. Overall, the theme of athleticism was present most often, but sympathy was more often highlighted in photographic images of male athletes with disabilities and triumph was more often stressed in those of female athletes.
**Sport Type within Gender**

Sub-question 10 stated that female athletes with disabilities would be represented in photographic images participating in an individual sport more often than in team sports.

About two-thirds (68.0%) of the athletes with disabilities in the photographic images played an individual sport such as archery, athletics, boccia, cycling (single), equestrian, judo, powerlifting, shooting, swimming, or table tennis. Both male (70.8%) and female (64.3%) athletes with disabilities were more likely to be photographed in individual sports than team sports as shown in Table 11.

Table 11

*Sport Type of Pictured Athletes with Disabilities within Genders*

<table>
<thead>
<tr>
<th></th>
<th>Individual</th>
<th>Team</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>553</td>
<td>165</td>
<td>63</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(70.8)</td>
<td>(21.1)</td>
<td>(8.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>274</td>
<td>108</td>
<td>44</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(64.3)</td>
<td>(25.4)</td>
<td>(10.3)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>31</td>
<td>15</td>
<td>9</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(56.4)</td>
<td>(27.3)</td>
<td>(16.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>858</td>
<td>288</td>
<td>116</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(68.0)</td>
<td>(22.8)</td>
<td>(9.2)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

A chi-square test was used to determine the relationship between the variables gender and sport type. The result revealed that there was a significant difference ($\chi^2 = 10.258 \ df = 4, p$)
The follow-up test between gender and sport type indicated that there was no statistically significant difference ($\chi^2 = 3.742, df = 1, p = .053$).

Therefore, even though both male and female athletes with disabilities who participated in individual sports were shown more often than those in team sports in actual frequencies, the data revealed that there was not a relationship in the proportions of the photographic images of male and female athletes across sport types.

**Disability Presentation within Gender**

Sub-questions 11 and 12 dealt with whether the disabilities of the athletes are visible or not. A little more than half of the photographic images (50.5%) showed the athletes’ disabilities, with 56.7% of male athletes’ disabilities pictured compared to 40.1% of female athletes. See Table 12.

Table 12

*Disability Presentation in Photographic Images of Athletes with Disabilities within Genders*

<table>
<thead>
<tr>
<th></th>
<th>Visible</th>
<th>Hidden</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>443</td>
<td>259</td>
<td>79</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(56.7)</td>
<td>(33.2)</td>
<td>(10.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>173</td>
<td>189</td>
<td>66</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(40.1)</td>
<td>(44.4)</td>
<td>(15.5)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>23</td>
<td>12</td>
<td>20</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(41.8)</td>
<td>(21.8)</td>
<td>(36.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>637</td>
<td>460</td>
<td>165</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(50.5)</td>
<td>(36.5)</td>
<td>(13.0)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>
A chi-square test was performed to determine whether gender was associated with presentation of disabilities. There was a significant difference between the two variables ($\chi^2 = 58.691$, $df = 4$, $p = .001$). The follow-up test between gender and presentation of disabilities revealed that there was a significant difference in the proportions of the photographic images of male and female athletes with disabilities across the categories of disability presentations ($\chi^2 = 23.761$, $df = 1$, $p = .001$).

A one-way ANOVA showed a relationship between the two variables ($F(1, 1060) = 24.259$, $p = .001$). Specifically, the disabilities of male athletes tended to be visible ($M = 1.28$, $SD = .449$), whereas the disabilities of female athletes tended to be hidden ($M = 1.42$, $SD = .494$). Tukey post-hoc test was not performed for gender because there are fewer than three groups.

Therefore, the data revealed that disabilities of athletes were more often presented than not in the selected newspapers. However, these data are only partially acceptable as barely over half of the pictures showed disabilities. The disabilities of male athletes tended to be visible, while those of female athletes were not visible.

**Disability Type within Gender**

Sub-question 13 dealt with the kinds of disabilities photographed athletes have. Of the 614 photographic images of athletes whose disabilities were visible and identifiable, wheelchair (40.1%) and amputee (38.3%) were most likely to be shown. Amputee (41.0%) was most often featured in photographic images of male athletes, and wheelchair (38.9%) was the second most visible. Wheelchair (43.0%) was also prominently featured in photographic images of female athletes as shown Table 13.
Table 13

Disability Type of Pictured Athletes with Disabilities within Genders

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>W</th>
<th>V-I</th>
<th>AOD</th>
<th>NS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>181</td>
<td>172</td>
<td>35</td>
<td>54</td>
<td>339</td>
<td>781</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(23.2)</td>
<td>(22.0)</td>
<td>(4.5)</td>
<td>(6.9)</td>
<td>(43.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
<td>74</td>
<td>4</td>
<td>40</td>
<td>254</td>
<td>426</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(12.7)</td>
<td>(17.4)</td>
<td>(0.9)</td>
<td>(9.4)</td>
<td>(59.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>32</td>
<td>55</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(12.7)</td>
<td>(20.0)</td>
<td>(5.5)</td>
<td>(3.6)</td>
<td>(58.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>242</td>
<td>257</td>
<td>42</td>
<td>96</td>
<td>625</td>
<td>1262</td>
</tr>
<tr>
<td>(% within gender)</td>
<td>(19.2)</td>
<td>(20.4)</td>
<td>(3.3)</td>
<td>(7.6)</td>
<td>(49.5)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Note: A: Amputee, W: Wheelchair, V-I: Vision-impaired, AOD: All other disabilities, NS: Not Sure

The chi-square test showed a significant difference between the variables disability type and gender ($\chi^2 = 50.125, df = 8, p = .001$). The follow-up test between gender and type of disability revealed a significant difference ($\chi^2 = 19.428, df = 3, p = .001$).

A one-way ANOVA showed that there was a significant difference in the proportions of the photographic images of male and female athletes across disability types, $F(3, 610) = 6.644, p = .001$. Tukey post-hoc comparisons of the categories of disability type indicated that amputee ($M = 1.23, SD = .422$) and vision-impaired ($M = 1.10, SD = .307$) were featured more often in the photographic images of male athletes than any other disabilities ($M = 1.43, SD = .497$). All other disabilities ($M = 1.43, SD = .497$) and wheelchair ($M = 1.30, SD = .460$) were shown more often in photographic images of female athletes with disabilities than vision-impaired ($M = 1.10, SD = .307$).
Therefore, the data revealed that male athletes who were vision-impaired or amputees were more frequently shown, while female athletes in wheelchairs and in all other disabilities were more frequently shown in selected newspapers.

**Nationality of Athletes within Countries and Newspapers**

Sub-question 14 dealt with whether athletes with disabilities from the same country as the newspaper are pictured more frequently than foreign athletes with disabilities.

As shown in Table 14, 796 (63.1%) of the 1262 photographic images of athletes with disabilities featured athletes of the same nationality as the newspapers. Domestic athletes were featured more often in the United Kingdom (63.2%), the United States (55.6%), Australia (67.1%), and South Africa (78.6%), while foreign athletes were featured more often in China (90.5%).

A chi-square test used to determine the relationship between the variables nationality and country found a significant difference ($\chi^2 = 45.616, df = 8, p = .001$). The follow-up test between the two variables also revealed a significant difference ($\chi^2 = 43.198, df = 4, p = .001$).

A one-way ANOVA showed that there is a statistically significant difference in the nationality of the pictured athletes depending on country of the newspaper, $F(4, 1196) = 11.156, p = .001$. Tukey post-hoc comparisons of the categories of country indicated that newspapers in China ($M = 1.95, SD = .224$) showed photographic images of foreign athletes with disabilities more frequently than newspapers in the United Kingdom ($M = 1.34, SD = .473$), Australia ($M = 1.27, SD = .449$), and South Africa ($M = 1.15, SD = .364$). South African newspapers ($M = 1.15, SD = .364$) showed higher proportions of photographic images of domestic athletes with disabilities than the United Kingdom ($M = 1.34, SD = .473$).
Table 14

Nationality of Pictured Athletes with Disabilities within Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Domestic</th>
<th>International</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1</td>
<td>19</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(4.8)</td>
<td>(90.5)</td>
<td>(4.8)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>693</td>
<td>354</td>
<td>50</td>
<td>1097</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(63.2)</td>
<td>(32.3)</td>
<td>(4.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>United States</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(55.6)</td>
<td>(44.4)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Australia</td>
<td>53</td>
<td>20</td>
<td>6</td>
<td>79</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(67.1)</td>
<td>(25.3)</td>
<td>(7.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>South Africa</td>
<td>44</td>
<td>8</td>
<td>4</td>
<td>56</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(78.6)</td>
<td>(14.3)</td>
<td>(7.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>796</td>
<td>405</td>
<td>61</td>
<td>1262</td>
</tr>
<tr>
<td>(% within Country)</td>
<td>(63.1)</td>
<td>(32.1)</td>
<td>(4.8)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Of the 12 newspapers included in this study, Daily Mail (70.9%), The Daily Telegraph (59.6%), Star Tribune (66.7%), The Washington Post (100.0%), The Australian (64.7%), The Sydney Morning Herald (67.7%), Cape Times (85.2%), and The Citizen (72.4%) featured photographs of more domestic athletes with disabilities than foreign athletes with disabilities, whereas China Daily (85.7%), Shanghai Daily (100.0%), and USA Today (100.0%) showed more photographs of foreign athletes with disabilities than domestic athletes with disabilities as shown in Table 15.
<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>International</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Daily</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(7.1)</td>
<td>(85.8)</td>
<td>(7.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Shanghai Daily</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(0.0)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Daily Mail</td>
<td>244</td>
<td>99</td>
<td>1</td>
<td>344</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(70.9)</td>
<td>(28.8)</td>
<td>(0.3)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Daily Telegraph</td>
<td>449</td>
<td>255</td>
<td>49</td>
<td>753</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(59.6)</td>
<td>(33.9)</td>
<td>(6.5)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Los Angeles Times</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(0.0)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Star Tribune</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(66.7)</td>
<td>(33.3)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Washington Post</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>USA Today</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(0.0)</td>
<td>(100.0)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Australian</td>
<td>11</td>
<td>1</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(64.7)</td>
<td>(5.9)</td>
<td>(29.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Sydney Morning Herald</td>
<td>42</td>
<td>19</td>
<td>1</td>
<td>62</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(67.8)</td>
<td>(30.6)</td>
<td>(1.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Cape Times</td>
<td>23</td>
<td>4</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(85.2)</td>
<td>(14.8)</td>
<td>(0.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>The Citizen</td>
<td>21</td>
<td>4</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(72.4)</td>
<td>(13.8)</td>
<td>(13.8)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Table 15

Nationality of Pictured Athletes with Disabilities within Newspapers
A chi-square test used to determine the relationship between the variables nationality and newspapers found that there was a significant difference in nationality and newspapers frequencies data ($\chi^2 = 109.090, df = 20, p = .001$). The follow-up test between the two variables also found a significant difference in the proportions of domestic and foreign athletes with disabilities across newspapers ($\chi^2 = 58.209, df = 10, p = .001$).

A one-way ANOVA was conducted to compare the differences between the photographic images of nationality in the newspapers, and a significant difference in the proportions of photographic images of nationality was found, $F(10, 1190) = 6.061, p = .001$. Tukey post-hoc comparison of the newspaper categories indicated that *Daily Mail* ($M = 1.29, SD = .454$), *The Daily Telegraph* ($M = 1.36, SD = .481$), *The Australian* ($M = 1.08, SD = .289$), *The Sydney Morning Herald* ($M = 1.31, SD = .467$), *Cape Times* ($M = 1.15, SD = .362$), and *The Citizen* ($M = 1.16, SD = .374$) featured more photographs of domestic athletes with disabilities than *China Daily* ($M = 1.92, SD = .277$) and *Shanghai Daily* ($M = 2.00, SD = .000$).

Therefore, the data revealed that most of the selected newspapers tended to more frequently present photographic images of domestic athletes with disabilities than of foreign athletes.

<table>
<thead>
<tr>
<th></th>
<th>796</th>
<th>405</th>
<th>61</th>
<th>1262</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(% within newspapers)</td>
<td>(63.1)</td>
<td>(32.1)</td>
<td>(4.8)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>
Genders within Nationality

Sub-question 15 addressed whether photographic images of male athletes with disabilities are more often of the same nationality as the newspapers.

As shown in Table 16, the photographic images of foreign athletes with disabilities tended to be of male athletes (77.3%), while images of female athletes with disabilities tended to be of domestic athletes (42.2%).

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>439</td>
<td>336</td>
<td>21</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(55.2)</td>
<td>(42.2)</td>
<td>(2.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>313</td>
<td>83</td>
<td>9</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(77.3)</td>
<td>(20.5)</td>
<td>(2.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>29</td>
<td>7</td>
<td>25</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(47.5)</td>
<td>(11.5)</td>
<td>(41.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>781</td>
<td>426</td>
<td>55</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(61.9)</td>
<td>(33.8)</td>
<td>(4.3)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

A chi-square test used to determine whether gender was associated with nationality found that there was a significant difference ($\chi^2 = 267.709$, $df = 4$, $p = .001$). The follow-up test between the two variables also found a significant difference in the proportions of the photographic images of domestic and foreign athletes with disabilities across gender ($\chi^2 = 57.205$, $df = 1$, $p = .001$).
A one-way ANOVA showed a statistically significant relationship between gender and nationality, \( F(1, 1169) = 60.040, p = .001 \). Tukey post-hoc comparisons of the categories of gender were not performed because there were fewer than three categories. However, photographic images of domestic athletes who appeared to be female (\( M = 1.20, \ SD = .399 \)) were shown more often than those of males (\( M = 1.42, \ SD = .493 \)). In other words, photographic images of foreign athletes who appeared to be male (\( M = 1.42, \ SD = .493 \)) were shown more often than images of females (\( M = 1.20, \ SD = .399 \)).

Therefore, the data revealed that foreign male athletes were more often pictured than domestic male athletes, and domestic female athletes were more often pictured than foreign female athletes.

**Placement within Nationality**

Sub-question 16 addressed whether photographic images of domestic athletes with disabilities are placed on the front page of the entire newspaper more often than inside the sports section.

As shown in Table 17, most photographic images of domestic and foreign athletes with disabilities appeared inside the sports section (71.2%) of the newspapers rather than on the front pages.

A chi-square test used to determine whether nationality of the athlete was associated with placement of photographic image found that there was a significant relationship in the proportions of photographic placement of athletes across nationalities (\( \chi^2 = 32.232, \ df = 6, \ p = .001 \)). The follow-up test also found a significant relationship between placement of photographic images and nationality (\( \chi^2 = 18.491, \ df = 3, \ p = .001 \)).
Table 17

*Placement of Photographic Images of Athletes with Disabilities within Nationalities*

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>FS/P</th>
<th>IS</th>
<th>INS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>37</td>
<td>42</td>
<td>532</td>
<td>185</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(4.6)</td>
<td>(5.3)</td>
<td>(66.8)</td>
<td>(23.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>4</td>
<td>15</td>
<td>311</td>
<td>75</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(1.0)</td>
<td>(3.7)</td>
<td>(76.8)</td>
<td>(18.5)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>1</td>
<td>1</td>
<td>56</td>
<td>3</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(1.6)</td>
<td>(1.6)</td>
<td>(91.8)</td>
<td>(4.9)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>58</td>
<td>899</td>
<td>263</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(3.3)</td>
<td>(4.6)</td>
<td>(71.2)</td>
<td>(20.8)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Note: FP: Front Page, FS/P: Front Sport/Paralympics, IS: Inside Sport, INS: Inside non-sport

A one-way ANOVA conducted to compare the differences of the placement of photographic images depending on athlete’s nationality showed that there is a statistically significant difference, $F(3, 1197) = 6.239, p = .001$. Tukey post-hoc comparisons of the categories of placements of photographic images indicated domestic athletes with disabilities were more frequently shown on the front page of the entire newspaper ($M = 1.10, SD = .300$) than inside the sports section ($M = 1.37, SD = .483$).

Therefore, the data revealed that more domestic athletes with disabilities were featured on the front page of the entire newspaper, while more foreign athletes with disabilities were featured on inside pages of the sports section.
Dominance within Nationality

Sub-question 17 addressed whether domestic athletes with disabilities are more frequently shown in dominant size than in non-dominant size.

As shown in Table 18, non-dominant sizes of photographic images (67.1%) of both domestic and foreign athletes with disabilities were more common than dominant photographic images.

Table 18

<table>
<thead>
<tr>
<th></th>
<th>Dominant size</th>
<th>Non-dominant size</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>239</td>
<td>557</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(30.0)</td>
<td>(70.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>158</td>
<td>247</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(39.0)</td>
<td>(61.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>18</td>
<td>43</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(29.5)</td>
<td>(70.5)</td>
<td>(100.0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>415</strong></td>
<td><strong>847</strong></td>
<td><strong>1262</strong></td>
</tr>
<tr>
<td>(% within nationality)</td>
<td><strong>(32.9)</strong></td>
<td><strong>(67.1)</strong></td>
<td><strong>(100.0)</strong></td>
</tr>
</tbody>
</table>

A chi-square test used to determine whether nationality of athletes was associated with dominance of photographic images in selected newspapers showed a significant difference ($\chi^2 = 10.154, df = 2, p = .006$). The follow-up test also revealed a significant relationship in the proportions of domestic and foreign athletes across the category of dominance ($\chi^2 = 9.798, df = 1, p = .002$).
A one-way ANOVA conducted to compare the differences of dominance categories in the nationality of athletes showed that there is a statistically significant difference ($F(1, 1199) = 9.862, p = .002$). Tukey post-hoc comparisons of the categories of dominance of photographic images were not performed for nationality because there were fewer than three groups. However, descriptive statistics indicated that photographic images of foreign athletes with disabilities were more often dominant size ($M = 1.40, SD = .490$) than non-dominant size ($M = 1.31, SD = .462$).

Therefore, the data revealed that photographic images of foreign athletes with disabilities were dominantly portrayed in selected newspapers and those of domestic athletes with disabilities were non-dominantly portrayed. In other words, photographic images of foreign athletes with disabilities were pictured in large photos and those of domestic athletes were pictured in small photos.

**Angle within Nationality**

Sub-question 18 asked whether photographic images of domestic athletes would be more often taken from head or upper-body angles than from a full-body angle.

In general, photographic images of domestic athletes with disabilities were more often taken from upper-body shots (32.9%) and head shots (22.0%), whereas foreign athletes with disabilities were taken from a whole-body angle (57.3%), as shown in Table 19.

A chi-square test used to determine whether nationality was associated with angle found that there was a significant difference in the proportions of domestic and foreign athletes across the categories of photographic angle ($\chi^2 = 141.099, df = 6, p = .001$). The follow-up test also found a significant difference between nationality and angle ($\chi^2 = 52.091, df = 3, p = .001$).
Table 19

*Angle of Photographic Images of Athletes with Disabilities within Nationalities*

<table>
<thead>
<tr>
<th></th>
<th>Head</th>
<th>Upper-body</th>
<th>Parts of body</th>
<th>Full-body</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>175</td>
<td>262</td>
<td>14</td>
<td>345</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(22.0)</td>
<td>(32.9)</td>
<td>(1.8)</td>
<td>(43.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>43</td>
<td>104</td>
<td>26</td>
<td>232</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(10.6)</td>
<td>(25.7)</td>
<td>(6.4)</td>
<td>(57.3)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>2</td>
<td>3</td>
<td>16</td>
<td>40</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(3.3)</td>
<td>(4.9)</td>
<td>(26.2)</td>
<td>(65.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>369</td>
<td>56</td>
<td>617</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(17.4)</td>
<td>(29.2)</td>
<td>(4.4)</td>
<td>(48.9)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

A one-way ANOVA conducted to compare the relationship between the angle of photographic images and nationality showed that there is a statistically significant relationship, $F(3, 1197) = 18.090, p = .001$. Tukey post-hoc comparisons of the categories of angles indicated that photographic images of foreign athletes with disabilities were more often taken of the full body ($M = 1.40, SD = .491$) rather than head shots ($M = 1.20, SD = .399$) and upper-body shots ($M = 1.28, SD = .452$).

Therefore, the data revealed that photographic images of domestic athletes were more often taken from head or upper-body angles than full-body angles, while photographic images of foreign athletes with disabilities were more often taken of the full body.
Coverage Type within Nationality

Sub-question 19 was about whether domestic athletes with disabilities are more often pictured in action shots than in uniform shots.

As shown in Table 20, about half of the domestic athletes with disabilities were portrayed in uniform (51.1%), while more than half of foreign athletes with disabilities were visibly involved in action shots (58.8%).

Table 20

Coverage Type of Photographic Images of Athletes with Disabilities within Nationalities

<table>
<thead>
<tr>
<th></th>
<th>In uniform</th>
<th>On the court</th>
<th>In action shots</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>407</td>
<td>7</td>
<td>261</td>
<td>121</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(51.1)</td>
<td>(0.9)</td>
<td>(32.8)</td>
<td>(15.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>119</td>
<td>6</td>
<td>238</td>
<td>42</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(29.4)</td>
<td>(1.5)</td>
<td>(58.8)</td>
<td>(10.4)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>1</td>
<td>9</td>
<td>45</td>
<td>6</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(1.6)</td>
<td>(14.8)</td>
<td>(73.8)</td>
<td>(9.8)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>527</td>
<td>22</td>
<td>544</td>
<td>169</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(41.8)</td>
<td>(1.7)</td>
<td>(43.1)</td>
<td>(13.4)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

A chi-square test used to determine whether nationality was associated with coverage type found that there was a significant relationship in the proportions of domestic and foreign athletes with disabilities across the categories of coverage type ($\chi^2 = 179.194$, $df = 6$, $p = .001$). The follow-up test also showed a significant relationship between nationality and coverage type ($\chi^2 = 71.505$, $df = 2$, $p = .001$).
A one-way ANOVA conducted to examine the relationship of nationality with type of coverage showed that there is a statistically significant relationship, $F(2, 1035) = 38.287$, $p = .001$. Tukey post-hoc comparisons of the categories of coverage type indicated that domestic athletes with disabilities were more frequently portrayed in uniform ($M = 1.23, SD = .419$) than in action shots ($M = 1.48, SD = .500$), while foreign athletes with disabilities were more frequently portrayed in action shots ($M = 1.48, SD = .500$) than in uniform ($M = 1.23, SD = .419$).

Therefore, the data revealed that domestic athletes with disabilities were not pictured in action shots more often than in uniform shots. Rather, domestic athletes with disabilities were more often pictured in uniform shots than in action shots. Foreign athletes with disabilities were more frequently portrayed in action shots.

**Theme within Nationality**

Sub-question 20 dealt with the photographic themes in the photographic images of domestic and foreign athletes with disabilities.

As shown in Table 21, most of the pictured athletes with disabilities (44.2%) were visibly involved in sport competitions. The photographic images of domestic athletes with disabilities highlighted athleticism (34.7%) and triumph (32.7%) about equally, while the photographic images of foreign athletes with disabilities highlighted athleticism most often (57.5%).

A chi-square test used to determine whether photographic theme was associated with nationality found that there was a significant difference ($\chi^2 = 119.354$, $df = 8$, $p = .001$), and the follow-up test also found a significant difference in the proportions of the photographic images of domestic and foreign athletes across the categories of theme ($\chi^2 = 68.614$, $df = 3$, $p = .001$).
Table 21

*Theme of Photographic Images of Athletes with Disabilities within Nationalities*

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>D</th>
<th>S</th>
<th>T</th>
<th>NS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>276</td>
<td>86</td>
<td>23</td>
<td>260</td>
<td>151</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(34.7)</td>
<td>(10.8)</td>
<td>(2.9)</td>
<td>(32.7)</td>
<td>(19.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>233</td>
<td>58</td>
<td>8</td>
<td>57</td>
<td>49</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(57.5)</td>
<td>(14.3)</td>
<td>(2.0)</td>
<td>(14.1)</td>
<td>(12.1)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>49</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(80.3)</td>
<td>(6.6)</td>
<td>(4.9)</td>
<td>(1.6)</td>
<td>(6.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>558</td>
<td>148</td>
<td>34</td>
<td>318</td>
<td>204</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(44.2)</td>
<td>(11.7)</td>
<td>(2.7)</td>
<td>(25.2)</td>
<td>(16.2)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Note: A: Athleticism, D: Disability, S: Sympathy, T: Triumph, NS: Not Sure

A one-way ANOVA conducted to compare the relationship between theme of photographic images and nationality showed a statistically significant relationship, $F(3, 997) = 24.456, p = .001$. Tukey post-hoc comparisons of the categories of photographic theme indicated that photographic images of domestic athletes with disabilities emphasized the theme of triumph ($M = 1.18, SD = .385$) more often than athleticism ($M = 1.46, SD = .499$) and disabilities ($M = 1.40, SD = .492$). Photographic images of foreign athletes with disabilities clearly stressed athleticism ($M = 1.46, SD = .499$) and disabilities ($M = 1.40, SD = .492$) more than triumph ($M = 1.18, SD = .385$). However, there was no relationship between athleticism and disabilities. Therefore, the data revealed that the themes of athleticism and disabilities were more often emphasized in images of foreign athletes with disabilities, while the theme of triumph was more often emphasized in images of domestic athletes with disabilities.
**Sport Type within Nationality**

Sub-question 21 was about whether domestic athletes with disabilities would be pictured participating in team sports more often than in an individual sport.

As shown in Table 22, most of the domestic and foreign athletes with disabilities shown in the photographic images played in an individual sport.

Table 22

<table>
<thead>
<tr>
<th>Sport Type of Athletes with Disabilities in Photographic Images within Nationalities</th>
<th>Individual</th>
<th>Team</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>539</td>
<td>172</td>
<td>85</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(67.7)</td>
<td>(21.6)</td>
<td>(10.7)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>277</td>
<td>100</td>
<td>28</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(68.4)</td>
<td>(24.7)</td>
<td>(6.9)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>42</td>
<td>16</td>
<td>3</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(68.9)</td>
<td>(26.2)</td>
<td>(4.9)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>858</td>
<td>288</td>
<td>116</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(68.0)</td>
<td>(22.8)</td>
<td>(9.2)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

A chi-square test used to determine whether nationality was associated with sport type found that there was no significant relationship in the frequencies data between the two variables ($\chi^2 = 6.883$, $df = 4$, $p = .142$).

Therefore, the data revealed that domestic athletes with disabilities participating in team sports were not represented more often than those in an individual sport.
**Disability Presentation within Nationality**

Sub-question 22 was about whether disabilities of domestic athletes would not often be presented in the selected newspapers compared to those of foreign athletes with disabilities.

Disabilities of domestic athletes were presented only 43.5% of the time, while 68.4% of the pictures of foreign athletes presented their disabilities (see Table 23).

Table 23

*Differences of Disability Presentation within Nationalities*

<table>
<thead>
<tr>
<th></th>
<th>Visible</th>
<th>Hidden</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>336</td>
<td>346</td>
<td>114</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(42.2)</td>
<td>(43.5)</td>
<td>(14.3)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>277</td>
<td>104</td>
<td>24</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(68.4)</td>
<td>(25.7)</td>
<td>(5.9)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>24</td>
<td>10</td>
<td>27</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(39.3)</td>
<td>(16.4)</td>
<td>(44.3)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Total 637 460 165 1262

(\(\chi^2 = 130.567, df = 4, p = .001\))

A chi-square test used to determine whether nationality was associated with disability presentation found that there was a significant difference (\(\chi^2 = 130.567, df = 4, p = .001\)), and the follow-up test between the two variables found a significant difference in the proportions of domestic and foreign athletes with disabilities across the categories of disability presentation (\(\chi^2 = 54.999, df = 1, p = .001\)).
A one-way ANOVA conducted to compare the relationship between disability presentation and nationality showed that there was a statistically significant difference, $F(1, 1061) = 57.891, p = .001$. Tukey post-hoc comparisons of the categories of disability presentation indicated that the disabilities of domestic athletes were not presented in the photographs ($M = 1.23, SD = .422$) more often than disabilities of foreign athletes were ($M = 1.45, SD = .498$).

Therefore, the data revealed that the disabilities of domestic athletes were not often presented in the selected newspapers, whereas those of foreign athletes were often visibly presented.

**Disability Type within Nationality**

Sub-question 23 was about whether photographic images of domestic athletes with disabilities would show wheelchairs more often than other categories of disabilities.

Of the 613 photographic images of athletes whose disabilities were visible and identifiable, wheelchair (38.8%) and amputee (38.3%) were most likely to be shown. Amputee (44.8%) was most often featured in photographic images of foreign athletes, and wheelchair (36.1%) was the second most visible. Wheelchair (41.1%) was also prominently featured in photographic images of domestic athletes as shown Table 24.
Table 24

Disability Type of Pictured Athletes with Disabilities within Nationalities

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>W</th>
<th>V-I</th>
<th>AOD</th>
<th>NS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>114</td>
<td>138</td>
<td>17</td>
<td>67</td>
<td>460</td>
<td>796</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(14.3)</td>
<td>(17.3)</td>
<td>(2.1)</td>
<td>(8.4)</td>
<td>(57.8)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>International</td>
<td>124</td>
<td>100</td>
<td>24</td>
<td>29</td>
<td>128</td>
<td>405</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(30.6)</td>
<td>(24.7)</td>
<td>(5.9)</td>
<td>(7.2)</td>
<td>(31.6)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Not Sure</td>
<td>4</td>
<td>19</td>
<td>1</td>
<td>0</td>
<td>37</td>
<td>61</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(6.6)</td>
<td>(31.1)</td>
<td>(1.6)</td>
<td>(0.0)</td>
<td>(60.7)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Total</td>
<td>242</td>
<td>257</td>
<td>42</td>
<td>96</td>
<td>625</td>
<td>1262</td>
</tr>
<tr>
<td>(% within nationality)</td>
<td>(19.2)</td>
<td>(20.4)</td>
<td>(3.3)</td>
<td>(7.6)</td>
<td>(49.5)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

Note: A: Amputee, W: Wheelchair, V-I: Vision-impaired, AOD: All other disabilities, NS: Not Sure

A chi-square test used to determine whether nationality was associated with disability type found a significant difference ($\chi^2 = 109.617$, $df = 8, p = .001$). The follow-up test also showed a significant difference in the proportions of the photographic images of domestic and foreign athletes with disabilities across the categories of disability type ($\chi^2 = 17.205$, $df = 3, p = .001$).

A one-way ANOVA conducted to compare the relationship between disability type and nationality showed that there is a statistically significant difference, $F(3, 609) = 5.862, p = .001$. Tukey post-hoc comparisons of the categories of type of disability indicated that all other types of disability were shown more often for domestic athletes ($M = 1.30, SD = .462$) than amputee ($M = 1.52, SD = .501$) and vision-impaired ($M = 1.59, SD = .499$). However, there was no relationship between wheelchair ($M = 1.42, SD = .495$) and other categories of disabilities.
Therefore, the data revealed that the photographic images of domestic athletes with disabilities did not show the disability type of wheelchair more often than other categories of disabilities. Rather, photographs of domestic athletes with disabilities more often showed all other type of disability while those of foreign athletes with disabilities more often showed amputee and vision-impaired.

**Summary of the Results**

**Sub-question 1**: Is there a difference in the numbers of photographic images of athletes with disabilities between selected newspapers from five countries?

There was a difference in the number of the photographic images of athletes with disabilities between selected newspapers from five countries. Specifically, *The Daily Telegraph* and *Daily Mail* in the United Kingdom published a statistically significantly higher proportion of photographic images of athletes with disabilities compared with other countries.

**Sub-question 2**: Is there a difference in the proportions of male and female athletes with disabilities in the photographic images featured in selected newspapers from five countries?

There was a difference in the proportion of the photographic images of male and female athletes with disabilities between selected newspapers. Most of the newspapers selected in this study tended to publish photographic images of male athletes with disabilities more often than those of female athletes with disabilities.

**Sub-question 3**: Do newspapers selected in this study give the photographic images of male athletes with disabilities more prominent placement such as on the front page of the entire newspaper or on the front page of the sports/Paralympics section?

The selected newspapers did not place the photographic images of male athletes with disabilities in more prominent locations such as the front page of the entire newspaper or the
front page of the sports/Paralympics section. Rather, they placed photographic images of both male and female athletes with disabilities in inside sections.

**Sub-question 4:** Are the photographic images of female athletes with disabilities presented in less dominant size on the page more often than in dominant size?

The photographic images of both male and female athletes with disabilities were not presented in dominant sizes. Rather, those of both male and female athletes with disabilities were presented in small sizes.

**Sub-question 5:** Are photographs of female athletes more often taken from head or upper-body angles than from full-body angles?

The photographic images of male athletes were more often taken from full-body angles whereas those of female athletes were more often taken from head or upper-body angles.

**Sub-question 6:** Are athletes with disabilities portrayed more often in uniform than in action shots?

Athletes with disabilities were shown more often in action shots than in uniform overall.

**Sub-question 7:** Are male athletes with disabilities portrayed in action shots more often than in uniform?

Male athletes with disabilities were more often shown in action shots than in uniform, while female athletes with disabilities were more often shown in uniform than in action shots.

**Sub-question 8:** Do photographs of athletes with disabilities highlight the theme of disability more often than the theme of athleticism?

The theme of disabilities was not more focused on than athleticism in the photographic images of athletes with disabilities. Overall, the theme of athleticism was most often focused on.
**Sub-question 9:** Do photographs of male athletes with disabilities highlight the theme of athleticism more often than the theme of disability?

Photographic images of male athletes with disabilities more often highlighted the theme of sympathy than athleticism or triumph, whereas photographic images of female athletes with disabilities more often stressed the theme of triumph than athleticism, disability, or sympathy.

**Sub-question 10:** Are female athletes with disabilities participating in an individual sport represented more often than those participating in team sports?

Both male and female athletes with disabilities who participated in individual sports were shown more often than those in team sports in actual frequencies.

**Sub-question 11:** How often are disabilities of athletes presented in selected newspapers?

The disabilities of athletes were more often presented than not in the selected newspapers.

**Sub-question 12:** Are disabilities of female athletes presented less often than those of male athletes?

The disabilities of male athletes tended to be visible, while those of female athletes were not visible.

**Sub-question 13:** Are female athletes in wheelchairs shown more often than other categories of disabilities in selected newspapers?

Male athletes who were vision-impaired or amputees were more frequently shown, while female athletes in wheelchairs and with all other disabilities were more frequently shown in selected newspapers.

**Sub-question 14:** Are athletes with disabilities from the same country as the newspaper pictured more frequently than foreign athletes with disabilities?
Most of the selected newspapers tended to more frequently present photographic images of domestic athletes with disabilities than of foreign athletes.

**Sub-question 15**: Are domestic male athletes with disabilities more frequently pictured than foreign male athletes with disability?

Foreign male athletes were more often pictured than domestic male athletes, and domestic female athletes were more often pictured than foreign female athletes.

**Sub-question 16**: Are photographs of domestic athletes with disabilities placed on the front page of the entire newspaper more often than inside the sport section?

More domestic athletes with disabilities were featured on the front page of the entire newspaper, while more foreign athletes with disabilities were featured on inside pages of the sports section.

**Sub-question 17**: Are domestic athletes with disabilities more frequently shown in dominant size than in non-dominant size?

Photographic images of foreign athletes with disabilities were dominantly portrayed in selected newspapers and those of domestic athletes with disabilities were non-dominantly portrayed. In other words, photographic images of foreign athletes with disabilities were pictured in large photos and those of domestic athletes were pictured in small photos.

**Sub-question 18**: Are domestic athletes more frequently pictured with head or upper-body shots than with full-body shots?

Photographic images of domestic athletes were more often taken from head or upper-body angles than full-body angles, while photographic images of foreign athletes with disabilities were more often taken of the full body.
Sub-question 19: Are domestic athletes with disabilities pictured in action shots more frequently than in uniform shots?

Domestic athletes with disabilities were not pictured in action shots more often than in uniform shots. Rather, domestic athletes with disabilities were more often pictured in uniform shots than in action shots. Foreign athletes with disabilities were more frequently portrayed in action shots.

Sub-question 20: Do the photographic images of domestic athletes with disabilities highlight the theme of athleticism more frequently than that of disability?

The themes of athleticism and disability were more often emphasized in images of foreign athletes with disabilities, while the theme of triumph was more often emphasized in images of domestic athletes with disabilities.

Sub-question 21: Are domestic athletes with disabilities participating in team sports represented more often than those participating in an individual sport?

Domestic athletes with disabilities participating in team sports were not represented more often than those in an individual sport. Both domestic and foreign athletes with disabilities who participated in individual sports were shown more often than those in team sports in terms of actual frequencies.

Sub-question 22: Are disabilities of domestic athletes not often presented in the selected newspapers compared to foreign athletes with disabilities?

The disabilities of domestic athletes were not often presented in the selected newspapers, whereas those of foreign athletes were often visibly presented.

Sub-question 23: Do the photographic images of domestic athletes with disabilities more often show wheelchairs than other categories of disabilities?
The photographic images of domestic athletes with disabilities did not show the disability type of wheelchairs more often than other categories of disabilities. Rather, photographs of domestic athletes with disabilities more often showed all other type of disability, while those of foreign athletes with disabilities more often showed in amputee and vision-impaired.
CHAPTER V

DISCUSSION AND CONCLUSIONS

The purpose of this chapter is to discuss the conclusions that can be drawn from the results of this study and to suggest streams of future research.

This study examined photographic images of athletes with disabilities in 12 newspapers from 5 countries during the 2012 Paralympic Games in London, analyzing the images by gender and by nationality. The findings from this study have added to the data from previous studies concerning media coverage of athletes with disabilities and given information about how often athletes with disabilities are portrayed, the frequency of photographs and athletes, what proportions of males were featured versus females, and nationalism in the photographic images. Differences in frequency and content in the photographic representation of Paralympic athletes across nationalities were also examined. An overall difference between male and female as well as between domestic and foreign was found in the amount, coverage type, and disability of the athletes featured in the photographic images.

Amount of Coverage of the Photographic Images within Gender

Even though the 2012 Paralympic Games had the largest number of athletes and nations participating, the proportions of male and female athletes in the 2012 Paralympic Games were almost the same as in the 2008 Paralympics: 66% were male and 34% were female in the 2008 Paralympic Games, while 65% were male and 35% were female in the 2012 Paralympic Games.
Many scholars have pointed out that male and female athletes with disabilities have been treated differently in media both in quantity and quality (Bernstein, 2002; Bishop, 2003; Buysse & Borcherding, 2010; Chang & Corssman, 2008; Eastman & Billings, 2000; Kane & Greendorfer, 1994). In this study, 1262 photographic images of athletes with disabilities among 862 photographs in 12 newspapers from China, the United Kingdom, the United States, Australia, and South Africa were analyzed. Most of the photographic images of athletes with disabilities were in The Daily Telegraph and Daily Mail, both published in the United Kingdom, where the Paralympics were held. In this case, the newspapers of the host country published many more photographic images of athletes with disabilities in the Paralympic Games than newspapers in other countries. One interesting pattern is that the smallest number of photographs of athletes with disabilities was found in US newspapers in both the 2012 and 2008 Paralympic Games. Miller (1975) found that big US newspapers were interested primarily in professional sports that were actually making a lot of money; their sports sections were dominated by the photographs of male athletes. Corrigan, Paton, Holt, and Hardin (2010) mentioned that major US media ignored disability sports. It is possible that the four US newspapers in this study did not devote much space to photographic images of athletes with disabilities during the 2012 Paralympic Games because the Paralympic Games are not as profitable as professional sports. Accordingly, athletes with disabilities may not be treated as competent athletes and the Paralympics may not be considered important enough to be newsworthy in the United States.

One finding of this study has provided additional support for the argument that male athletes with disabilities are featured in media coverage more often than female athletes with disabilities (Buysse & Borcherding, 2010). Specifically, female athletes with disabilities (33.8%) were not portrayed in as many photographic images as male athletes with disabilities.
(61.9%) in the selected newspapers. This result reconfirmed that gender inequality reinforced by the hegemony of the concept of males as ideal athletes suggested in previous research. Buysse and Borcherding (2010) found that in the 2008 Paralympics 58% of the athletes portrayed were male and 41% were female. Chang and Crossman (2009) found that males were pictured 58.8% of the time and females 41.2% of the time in the 2004 Paralympic Games. Thomas and Smith (2003) found that male athletes made up 53.2% and female athletes 36.2% of the subjects of photos of the 2000 Paralympic Games. The number of male athletes with disabilities pictured in the media has slightly increased while that of female athletes with disabilities has been inconsistent.

There are some possible explanations for the under-representation of female athletes with disabilities in mass media. For example, it is sometimes assumed that the relative lack of photos is due to the small number of female athletes with disabilities participating in the Paralympic Games (Schantz & Marty, 1995; Sherrill, 1993, 1997). An optimistic viewpoint is that the proportion of the photographic images of female athletes with disabilities in the newspapers has been similar to the proportion of female athletes with disabilities who participated in the Paralympics; this result was supported in previous studies (Buysse & Borcherding, 2010; Chang & Corssman, 2008; Thomas & Smith, 2003). A more negative viewpoint is that the hegemony of the ideals of male athletic superiority and able-bodiedness in sports was the cause of the under-representation of female athletes with disabilities. Consequently, double discrimination (able-bodiedness and gender) for female athletes with disabilities (Hardin & Hardin, 2005; Hargreaves, 2000) seems to consistently lead to a lower amount of coverage.
Placement and Dominance of the Photographic Images within Gender

This study dealt with whether selected newspapers gave photographic images of athletes with disabilities more prominent placement within gender. There was not a significant relationship between gender and placement, nor between gender and dominant size of photographs. Overall, small photographic images of male and female athletes with disabilities were primarily located inside the sport section. Through smaller photographs, the print media may reinforce the prejudice that not only are athletes with disabilities less important, interesting, and newsworthy than other news, but that the Paralympic Games themselves should not be treated seriously as a sporting event (Chang & Crossman, 2009; Buysse & Borcherding, 2010).

Photograph size and placement were the dominant factors between male and female athletes in terms of how well genders were covered in the newspapers and of the pattern of trivialization (Bryant, 1980) in coverage of athletes with disabilities in the Paralympic Games. In this study, only 3.3% of the photographic images of athletes with disabilities were on the front page, and only 4.6% were on the front page of the sports section. When Paralympic athletes were covered, they were usually quite poorly photographed with small pictures in less dominant places. In this way, athletes with disabilities and the Paralympic Games may be marginalized as “fake” athletes in a trivial sporting event (Schantz & Gilbert, 2001; Thomas & Smith, 2003).

Type of the Photographic Images within Gender

Buysse and Borcherding (2010) found that male athletes (68%) were much more likely to be pictured in action shots than female athletes (32%). In this study, 43.1% of the photographic images of athletes were action shots. Male athletes with disabilities were shown in 70.0% of these pictures, and the largest percentage of the photos was focused on the theme of athleticism (44.2%). However, almost half of the photographic images of athletes fell into the categories of
in uniform and on the court, highlighting the themes of disability, sympathy, and triumph. This means that athletic performance abilities were not primarily highlighted in the media. Athletes with disabilities were portrayed with the theme of athleticism but were still shown as persons with disabilities.

Male athletes with disabilities in the selected newspapers were pictured being visibly involved in sport competitions, while female athletes with disabilities were more often shown posed in uniform shots. Photos of male athletes more prominently emphasized athleticism, while the main focus of photos of female athletes was on medal winners. Female athletes with disabilities were presented differently in sports than males in that female athleticism was taken less into account.

Even though there was not a significant relationship between gender and sport type, athletes with disabilities were shown more often in individual sports (68.0%) than team sports (22.8%). According to Hardin et al. (2002), individual sports are considered more feminine and team sports are more masculine. Taking this into account, male athletes with disabilities are still not portrayed in stereotypically masculine ways even when they have muscles, power, and strength. Hegemonic masculinity is considered the dominant form of masculinity while hegemonic femininity may exist in opposition to hegemonic masculinity and be portrayed as powerless and nonexistent. Consequently, male athletes in the active shots transmitted the cultural concept of masculinity whereas female athletes in the posed shots were shown being unathletic (Thomas & Smith, 2003).

**Disability of the Athletes within Gender**

In general, photographs of athletes with disabilities in the media have a tendency to hide their disabilities by using different angles (Thomas & Smith, 2003). However, Chang and
Crossman (2009) found that the Paralympians were shown from a whole body angle, reflecting positive attitudes toward athletes with disabilities. In this study, almost half of the athletes with disabilities visibly presented their disabilities in whole body shots. Even though athletes with disabilities do not fit the physical ideal for body images in sports, exposure to athletes with disabilities in the media may break down the typical prejudices against disability sports and athletes with disabilities.

When the disability was visible, athletes in wheelchairs (40.1%) and amputees (38.3%) were featured most prominently. This was consistent with previous findings that most photographic images of athletes with disabilities featured wheelchairs (Buysse & Borcherding, 2010; Thomas & Smith, 2003). Hardin and Hardin (2003) explained that “the closest to the ideal competitor among athletes with disabilities have been males who use wheelchairs” (p. 248). This frequent portrayal of athletes in wheelchairs reflects the fact that people are more comfortable with wheelchairs than with other types of disability (Grey-Thompson, 2001). In addition, by focusing on wheelchair athletes and constructing photos that appeared to hide an athlete’s impairment, it could be suggested that much of this coverage appeared to deny the featured athlete’s identity as a person with a disability and possibly reinforced rather narrow stereotypical perceptions of disability and people with disabilities. (Thomas & Smith, 2003, p. 176)

In this study, male amputees were most often shown from full-body angles. In previous studies, a hierarchy of disabilities was seen in which individuals with and without disabilities ranked themselves in respect to other people with disabilities (Mastro et al., 1996; Thomas, 2000; Tringo, 1970; Tripp, 1988). In these studies, individuals without disabilities and athletes
with disabilities seem to “prefer” amputation. In other words, individuals without disability and athletes with disabilities are more comfortable with individuals with amputation. The media’s frequent portrayal of amputees seems to support this hierarchy. Because amputation is seen as the least disabling condition, it is closest to the norm of male strength and superiority, so showing male amputees is almost like showing an athlete with no disability.

Since the media emphasizes sexual differences in sports events (Hardin et al., 2002) and tends to represent female athletes in individual sports that highlight aesthetics, such as grace, form, and beauty (Lee, 1991; Schantz & Gilbert, 2001), the visible disability of female athletes is often dealt with using negative stereotypes to represent them. Disabilities are a part of athletes in the Paralympic Games, and neglecting the disability seems to ignore who athletes with disabilities are (Buysse & Borcherding, 2010). All in all, female athletes with disabilities in the media were often excluded because they did not match the image of perfect bodies and physical attributes and marginalized when they were included by hiding their bodies with head shots or upper-body shots.

**Nationality of the Athletes within Gender**

Nationalistic hegemony in sport is created by the media and serves as a means of conveying the country’s superiority, strength, and power. One way superiority of a country is supported by the media is stereotyping other countries (Brookes, 2002). Athletes with disabilities are regarded as national figures who represent their countries, and they build the idea of national identity through masculinity in sport. Therefore, nationalistic portrayals tend to focus on masculine traits; and feminine traits are not usually represented in nationalistic displays.

In this study, the photographic images of foreign athletes with disabilities tended to be of male athletes, while images of female athletes with disabilities tended to be of domestic athletes.
Keeping in mind that sport is male-dominated and that sports reporting highlights masculine characteristics of power, strength, and dominance, photographic images of male athletes with disabilities might be used to express a prominent figure of the country and to construct the ideal of national identity. However, the reason female domestic athletes with disability were given more coverage might be that female medal winners are used to emphasize triumph which was associated with a victory or major achievement in an international sports event. In short, male and female athletes with disability were characterized according to national traits; male athletes with disabilities were pictured as more physical and athletic to show national power, strength, dominance, and athleticism, whereas female athletes with disabilities were pictured in upper-body or head shots as successful and victorious while wearing uniforms with national symbols. Consequently, female athletes with disabilities can be used differently than male athletes in relation to their nationality. It is likely that medal winning or victory in competition in the Paralympic Games was a crucial factor in determining whether female athletes with disabilities and their sport performance were covered. Photographic images of female athletes with disabilities within their own country’s newspapers seemed to reflect successful performance in sports as they frequently highlighted the theme of triumph. In other words, the more medals won by female athletes with disabilities, the more photographic images seemed to be given to them.

Amount of Coverage of the Photographic Images within Nationality

One of the main questions guiding this study was about how athletes with disabilities were portrayed by nationality as sport becomes a means of fostering national identity. The newspapers selected in this study represented their own country’s athletes with disabilities differently from athletes with disabilities from other countries. In other words, the selected
newspapers showed different patterns of coverage in terms of nationality. All the countries except China seemed to picture domestic athletes more often than foreign athletes.

Nevertheless, hosting the Paralympic Games created a totally different situation. The comparatively better coverage of foreign athletes in the host country’s newspapers was regarded as a reflection of their interests. In general, the selected newspapers portraying the athletes from their own countries tended to reinforce their national identity internationally. Domestic athletes were portrayed as victorious when they won, but foreign athletes were portrayed as supercrips rather than winners (Hardin & Hardin, 2004; Smart, 2001). Therefore, domestic athletes with disabilities in the Paralympic Games tend to become the embodiment of a nation’s power and privilege, whereas foreign athletes with disabilities reflect powerlessness and lack of ability. Success in the Paralympics may stimulate national pride, and a victory in disability sports would be a victory for them. Through the amount of coverage given to domestic and foreign athletes, the newspapers in this study seemed to use domestic athletes with disabilities to show national power and privilege and portrayed foreign athletes with disabilities as disempowered and peripheral.

**Placement and Dominance of the Photographic Images within Nationality**

This study dealt with whether selected newspapers give photographic images of athletes with disabilities more prominent placement depending on nationality. Domestic athletes with disabilities were placed more often on the front page of the entire newspaper in small photographs, while foreign athletes were placed more often on inside pages of the sport section in the largest photographs. Even though photos of domestic athletes tended to be placed in good locations in the selected newspapers, foreign athletes were more dominantly portrayed in large photographs than domestic athletes.
Locating the photographic images of domestic athletes with disabilities on the front pages of the entire newspaper shows that the print media may consider domestic athletes with disabilities in the Paralympics to be worthy of serious coverage. By placing foreign athletes dominantly inside the sport section, the media may reinforce the prejudice that not only are athletes with disabilities considered to be less important, interesting, and newsworthy than other news issues, but also the Paralympic Games do not need to be treated seriously as a sporting event (Buysse & Borcherding, 2010; Chang & Crossman, 2009).

This finding indicates that the page placement and dominant size of photographic images was influenced by nationality. However, it is difficult to conclude that domestic athletes were dominantly treated as they were located on the front pages of the entire newspapers in small photos, while foreign athletes were dominantly portrayed on inside sport section in large photos.

**Type of Photographic Images within Nationality**

Overall, photographic images of domestic athletes with disabilities were more often taken from upper-body shots and head shots and in uniform, highlighting triumph. On the other hand, foreign athletes with disabilities were most often shown from a whole-body angle in sport competitions, stressing athleticism and disabilities. By focusing on head and upper-body shots of domestic athletes, the selected newspapers had an intention to hide their disabilities and to highlight competition and medal winning. By using whole body shots of foreign athletes, the newspapers seemed to be attempting to show disability first and athleticism second. Even though foreign athletes with disabilities are pictured in sport competitions, the whole body shots tended to focus on disabilities that are inferior, weak, or unathletic. Newspaper coverage of disability sports may downplay the adversity of domestic athletes and challenges they face while
spotlighting triumph. The photographic images of athletes within their own country’s newspapers seemed to reflect successful performance rather than nationality.

Most of the domestic and foreign athletes with disabilities shown in the photographic images played in individual sports rather than team sports. Chang and Crossman (2008) also found that newspapers had more coverage of athletes with disabilities participating in individual sports because individual sports have more opportunities to win medals than teams. Therefore, it was presumed that the photographic images of athletes with disabilities in this study were more frequently of domestic athletes who won medals because they are more interesting to readers, help readers feel like winners, and trigger national pride as well.

**Disability of the Athletes within Nationality**

In this study, almost half of the photos of domestic athletes with disabilities did not show their disabilities, but more than half of the disabilities of foreign athletes were prominently pictured. Amputee and wheelchair disabilities were shown most often among 613 photographic images of athletes with disabilities that featured an identifiable type of disability. Domestic athletes in wheelchairs and foreign athletes who were amputees were most often featured, perhaps because they are considered more like athletes without disabilities (Mastro et al., 1996). Schantz and Gilbert (2001) suggested that wheelchairs are a stereotype related to athletes with disabilities and are acceptable to most print media. Focusing on wheelchair athletes and hiding the disabilities of others in sports emerged from sports media’s tendency to deny the identities of athletes with disabilities and strengthen stereotypical perceptions of them and their sports (Thomas & Smith, 2003). However, comparing the category of disabilities by nationality, all other types of disability including arthrogryposis, dwarfism, limb deficiencies, muscular dystrophy, osteogenesis imperfecta, postpolio conditions and multiple sclerosis were shown
more often for domestic athletes, while amputation and vision-impairment were shown more often for foreign athletes. Two possible reasons for showing so many domestic athletes with all other disabilities are that these athletes were medalists and the photographs highlighted their achievement or that the stereotypical perception of athletes with disabilities has changed so that domestic athletes with various disabilities were perceived as more acceptable. Foreign athletes with disabilities were still limited by the stereotype and perception that some types of disabilities are better than others. Showing various disabilities through the media may provide understanding that affects behaviors and attitudes toward athletes with disabilities in the Paralympics, and understanding can promote greater acceptance of athletes with various disabilities. Nevertheless, even though athletes with some types of disabilities garner more attention, there is still prejudice and discrimination against them in the media portrayal.

Conclusions

Mass media is beneficial for sports because many people enjoy sports through mass media. In addition, the mass media provides up-to-date information and knowledge, encourages people to try sports, makes athletes into role models, and brings sports to people who do not care much for sports (Shin & Jang, 2008).

The Paralympic Games were conceived as the Olympic-style games for athletes with disabilities, and as in the Olympics, the number of female athletes with disabilities participating in the Paralympics has been increasing, but they are still barred from widespread public exposure by the hegemony of masculine and able-bodied ideals. Not only sports competitions, but sports media tend to ignore and marginalize female athletes with disabilities.

The media should try to cover many athletes with disabilities and disability sports regardless of gender and nationality, but the selected newspapers in this study devoted most
coverage to domestic athletes. The better coverage of domestic athletes may be in part due to the desire to gain international status and support their own country as a dominant nation.

**Gender**

One goal of this study was to better understand how athletes with disabilities were portrayed in the print media by gender. The content analysis of the photographic images of athletes with disabilities within gender shows that unequal treatment of female athletes with disabilities still exists in the media, as they received much less coverage in the selected newspapers than male athletes with disabilities.

The selected newspapers strengthen the masculine hegemony in sports through the unequal amount of photographic images between male and female athletes with disabilities (Hardin et al., 2002). Even though female athletes with disabilities were represented in the media in proportion to their numbers in the Paralympics, most newspapers failed to represent female athletes with disabilities as athletic and instead focused on gender stereotypes. They continue to be stigmatized because their bodies do not meet the hegemonic ideals of physicality and masculinity (Nixon, 2007), and the unequal coverage they receive contributes to reinforcing the hegemony of the able-bodied and masculine.

Athleticism was also an important theme for female athletes with disabilities. The focus on athleticism appeals to masculine stereotypes that exist within sports. However, the performance of female athletes with disabilities was often pictured with particular emphasis on medals without their disability. They still deal with the social barrier of being female and having a disability.

Many researchers have indicated that athletes in wheelchairs are regarded as the ideal competitors in disability sports and that they are not considered as athletes with disabilities.
(Hardin & Hardin, 2003; Schantz & Gilbert, 2001; Schell & Duncan, 1999; Sherrill, 1997; Thomas & Smith, 2003). This study found that male athletes with amputation were most frequently portrayed in full-body shots and female athletes in wheelchairs were most often portrayed in head or upper-body shots.

By frequently representing athletes with disabilities with amputation and in wheelchairs, the print media confirmed that amputee and wheelchair were still the most socially acceptable disabilities.

**Nationality**

Gender is not the only characteristic that may influence the portrayal of athletes with disabilities within the printed media. Nationalism plays a role specifically in international competitions such as the Paralympic Games (Elder, Pratt, & Ellis, 2006). Gender and nationality are socially constructed to have meaning. In sports, nationality is not relevant if athletes do not participate in an international sports event. The other attempt of this study was to better understand how the print media portrayed athletes with disabilities by nationality during the 2012 Paralympic Games.

Although there are many contributing factors that foster nationalism in sports, one simple example is the tendency to picture more domestic athletes than foreign athletes in the media. In fact, further evidence of uneven distribution of photographic images of domestic and foreign athletes with disabilities was evidenced in this study. Domestic athletes with disabilities were more frequently portrayed in the selected newspapers than foreign athletes with disabilities. In addition, the newspapers provided medal-winning domestic athletes with prominent visibility as the embodiment of a nation’s power and privilege.
Even though foreign athletes with disabilities play an important role in improving the performance of domestic athletes by setting higher standards, most foreign athletes with disabilities are ignored in media. However, the newspapers in this study tended to feature smaller photographs of domestic athletes located on the front page of the entire newspaper, while foreign athletes were pictured in large photographs located in less dominant locations, such as inside sport sections or in non-sport sections. In consideration of fair representation for athletes with disabilities in the Paralympic Games, the selected newspapers over-represented domestic athletes within the first pages of the entire newspapers to show their power and sport achievement but tended to dominantly place photographic images of foreign athletes inside the sport section to show the international scope of the event and give equal coverage to foreign athletes. Furthermore, domestic athletes with disabilities tended to be covered in such a way as to minimize their adversities and visibly maximize their successful performance regardless of disabilities. However, the reproduction and reinforcement of traditional attitudes and perceptions were found through the portrayal of foreign athletes with disabilities such as in their frequent portrayal as supercrips rather than competitors.

The Paralympic Games allow the possibility of the cultural, political and social connection between different countries through the media. In this process, the media from different countries make possible a national value for each country through events that show their superiority over other countries. Countries can be stereotyped as superior and inferior according to how athletes in individual and team sports perform well in international sports events. The more medals a country wins in the Paralympics, the more it can be stereotyped as powerful, privileged, and superior. On the other hand, countries that win few medals in the Paralympics can be marginalized as less powerful, unprivileged, and inferior.
Gender vs. Nationality

This study compared photographic images of athletes with disabilities within gender as well as within nationality. These traits may determine the coverage amount, placement and dominance, coverage type, and disability type in the print media.

One interesting finding was that the portrayal of athletes with disabilities depending on gender was similarly framed by principally represented nationality characteristics. There were similar characteristics between female athletes and domestic athletes, and between male athletes and foreign athletes except in the amount of coverage.

By portraying plenty of photographic images of male and domestic athletes with disabilities, the newspapers serve to produce and reinforce the cultural hegemony of male dominance and superiority. By picturing fewer female and foreign athletes with disabilities, the newspapers marginalize and trivialize them as inferior and unathletic. In this view, female athletes seem to be used as a metaphor for foreign athletes, who are also portrayed as relatively unathletic, trivial, and marginal.

In terms of placement, coverage type, theme, and disability presentation and type, both male and foreign athletes with amputation and vision impairments were most frequently presented. These athletes were placed on inside pages of sport section in full-body shots visibly involved in sport competitions emphasizing athleticism or sympathy. By contrast, both female and domestic athletes with all other disabilities were portrayed and were featured less dominantly in head shots or upper-body shots emphasizing triumph and hiding their disabilities.

In regard to disability type, there is a disability hierarchy among athletes with disabilities who compete in the Paralympic Games. Athletes with certain types of disabilities are represented in discriminatory ways depending on their gender or nationality. The newspapers in this study
tended to highlight the strength and make up for the weakness of male and domestic athletes with disabilities while they tended to point out the weakness and balance commendable qualities against small shortcomings for female and foreign athletes, reflecting and maximizing their successful performance.

**Future Study**

These results for the 2012 Paralympic Games can serve as a baseline for comparisons of future Paralympics newspaper coverage. First, this study could be the basis of a longitudinal, cross-country study of newspaper photographic images of athletes with disabilities in the Paralympic Games. Photographic images of athletes with disabilities could be collected every four years and analyzed by gender and by nationality to investigate how athletes with disabilities are portrayed in newspapers from different countries. Second, other studies can be conducted with various media sources such as Internet or magazines in different countries. These sources may have different portrayals of athletes with disabilities. Third, it would be helpful to investigate specifically the media’s coverage of medalists with disabilities by gender and nationality. Fourth, future researchers should examine whether there is a disability hierarchy in media portrayals of athletes in the Paralympic Games and whether the media seem to treat certain disabilities more favorably.

Future study of the Paralympic Games may show improvements over time regarding changes in the portrayal of gender and nationality as reflected in images of athletes with disabilities in newspaper photographs and may describe a more accurate and detailed relationship among these variables.
Summary of Discussion and Conclusions

1. The proportions of male and female athletes in the 2012 Paralympic Games were almost the same as in coverage of the 2008 Paralympics.

2. The newspapers of the host country published many more photographic images of athletes with disabilities in the Paralympic Games than newspapers in other countries.

3. The four US newspapers in this study did not devote much space to photographic images of athletes with disabilities during the 2012 Paralympic Games because the Paralympic Games are not as profitable as professional sports. Accordingly, athletes with disabilities may not be treated as competitive athletes and the Paralympics may not be considered important enough to be newsworthy in the United States.

4. The hegemony of the ideals of male athletic superiority and able-bodiedness in sports was the cause of the under-representation of female athletes with disabilities. Consequently, double discrimination (able-bodiedness and gender) for female athletes with disabilities seems to consistently lead to a lower amount of coverage.

5. Female athletes with disabilities continue to be stigmatized because their bodies do not meet the hegemonic ideals of physicality and masculinity, and the unequal coverage they receive contributes to reinforcing the hegemony of the able-bodied and masculine.

6. When Paralympic athletes were covered, they were usually quite poorly photographed and shown in small pictures in less dominant places. Athletes with disabilities and the Paralympic Games may thereby be marginalized as “fake” athletes in a trivial sporting event.

7. Athletes with disabilities were portrayed with the theme of athleticism but were still shown as persons with disabilities.
8. Male athletes in the active shots transmitted the cultural concept of masculinity, whereas female athletes in the posed shots were shown being unathletic.

9. Even though athletes with disabilities do not fit the physical ideal for body images in sports, exposure to photos of athletes with disabilities in the media may break down some of the typical prejudices against disability sports and athletes with disabilities.

10. By frequently representing athletes with disabilities with amputation and in wheelchairs, the print media confirmed that these were still the most socially acceptable disabilities.

11. Female athletes with disabilities in the media were excluded from coverage because they did not match the image of perfect bodies and physical attributes and marginalized when they were included by hiding their bodies with head or upper-body shots.

12. The photographic images of foreign athletes with disabilities tended to be of male athletes, while images of female athletes with disabilities tended to be of domestic athletes.

13. Male and female athletes with disability were characterized according to national traits. Male athletes with disabilities were pictured as more physical and athletic to show national power, strength, dominance, and athleticism, whereas female athletes with disabilities were pictured in upper-body or head shots as successful and victorious while wearing uniforms with national symbols.

14. It is likely that medal winning or victory in competition in the Paralympic Games was a crucial factor in determining whether female athletes with disabilities and their sport performance were covered.
15. Photographic images of female athletes with disabilities within their own country’s newspapers seemed to reflect successful performance in sports as they frequently highlighted the theme of triumph.

16. The more medals won by female athletes with disabilities, the more photographic images seemed to be given to them.

17. The newspapers selected in this study represented their own country’s athletes with disabilities differently from athletes with disabilities from other countries.

18. Through the amount of coverage given to domestic and foreign athletes, the newspapers in this study seemed to use domestic athletes with disabilities to show national power and privilege and portrayed foreign athletes with disabilities as disempowered and peripheral.

19. Locating the photographic images of domestic athletes with disabilities on the front pages of the entire newspaper shows that the print media may consider domestic athletes with disabilities in the Paralympics to be worthy of serious coverage.

20. By placing foreign athletes dominantly inside the sports section, the media may reinforce the prejudice that not only are athletes with disabilities considered to be less important, interesting, and newsworthy than other news issues, but also that the Paralympic Games do not need to be treated seriously as a sporting event.

21. By focusing on head and upper-body shots of domestic athletes, the selected newspapers had an intention to hide their disabilities and to highlight competition and medal winning.

22. By using whole-body shots of foreign athletes, the newspapers seemed to be attempting to show disability first and athleticism second.

23. Newspaper coverage of disability sports may downplay the adversity of domestic athletes and challenges they face while spotlighting triumph.
24. The photographic images of athletes within their own country’s newspapers seemed to reflect successful performance rather than nationality.

25. Two possible reasons for showing so many domestic athletes with all other disabilities are that these athletes were medalists and the photographs highlighted their achievement or that the stereotypical perception of athletes with disabilities has changed so that domestic athletes with various disabilities were perceived as more acceptable.

26. The more medals a country wins in the Paralympics, the more it can be stereotyped as powerful, privileged, and superior. On the other hand, countries that win few medals in the Paralympics can be marginalized as less powerful, unprivileged, and inferior.

27. Foreign athletes with disabilities were still limited by the stereotype and perception that some types of disabilities are better than others.

28. Countries can be stereotyped as superior and inferior according to how well their athletes perform in international sports events.

29. The newspapers in this study tended to highlight the strength and make up for the weakness of male and domestic athletes with disabilities while they tended to point out the weakness and balance commendable qualities against small shortcomings for female and foreign athletes, reflecting and maximizing their successful performance.
REFERENCES


# APPENDIX A

## CODE SHEET FOR PHOTOS OF ATHLETES WITH DISABILITIES

<table>
<thead>
<tr>
<th>Newspaper / Publication Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coder / Coding Date:</td>
</tr>
<tr>
<td>Photo # :</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>1 = male</th>
<th>2 = female</th>
<th>3 = not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement of the athletes</td>
<td>1 = front page in non-sports section</td>
<td>2 = front page of sports/Paralympics section</td>
<td>3 = inside sports section</td>
</tr>
<tr>
<td>Dominance of the athletes</td>
<td>1 = dominant</td>
<td>2 = non-dominant</td>
<td></td>
</tr>
<tr>
<td>Angle of photographs</td>
<td>1 = head</td>
<td>2 = upper-body</td>
<td>3 = parts of body</td>
</tr>
<tr>
<td>Type of coverage</td>
<td>1 = in uniform</td>
<td>2 = on the court</td>
<td>3 = in action shots</td>
</tr>
<tr>
<td>Theme</td>
<td>1 = athleticism</td>
<td>2 = disability</td>
<td>3 = sympathy</td>
</tr>
<tr>
<td>Sport Type</td>
<td>1 = individual sport</td>
<td>2 = team sport</td>
<td>3 = not sure</td>
</tr>
<tr>
<td>Presentation of disability</td>
<td>1 = visible</td>
<td>2 = hidden</td>
<td>3 = not sure</td>
</tr>
<tr>
<td>Type of disability</td>
<td>1 = amputee</td>
<td>2 = wheelchair</td>
<td>3 = vision-impaired</td>
</tr>
<tr>
<td>Nationality of athletes</td>
<td>1 = domestic athletes</td>
<td>2 = international athletes</td>
<td>3 = not sure</td>
</tr>
</tbody>
</table>

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## APPENDIX B

**CODE SHEET FOR PHOTOS OF ATHLETES WITH DISABILITIES**

<table>
<thead>
<tr>
<th>Country / Newspaper / Date:</th>
<th>Coder / Coding Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Page of</td>
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<td>Newspaper</td>
<td></td>
</tr>
<tr>
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<tr>
<td>Location</td>
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<td>Dominance</td>
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<td>Coverage</td>
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</tr>
<tr>
<td>Type of Angle</td>
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<tr>
<td>Theme</td>
<td></td>
</tr>
<tr>
<td>Type of Presentation</td>
<td></td>
</tr>
<tr>
<td>Type of Disability</td>
<td></td>
</tr>
<tr>
<td>Type of Disabilities of Athletes</td>
<td></td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
</tr>
</tbody>
</table>

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APPENDIX C

CODE GUIDELINES

1. **Name of Newspaper**: Write the name of the newspaper.

2. **Publication date**: Write in the publication’s day, month, and year. Each is a separate variable.

3. **Total numbers of the photographs**:
   - Each athlete in photos is coded.
   - The photographs including staff members, ceremonies, audience, family, sports instruments without athletes or only symbols are excluded UNLESS the picture shows a body part of an athlete with sport equipment or prosthesis.
   - Photographs of athletes with disabilities in advertisements are included if the athletes are used as models.
   - The same photo in different sizes and different places is coded separately. For example, if a small photo is used on the front page as an advertisement to indicate that there is an article later in the paper, and a larger version of the same photo is used in the sport section to illustrate an article, it is counted as two photos and analyzed two times.

4. **Gender**: Gender is identified by caption, visible cue, or name on the title of the photo. If there is more than one athlete, each athlete is coded individually.
   - 1 = male
   - 2 = female
   - 3 = not sure: The photo shows a body part of an athlete with sport equipment or prosthesis, or the athletes cannot be identified as male or female.

5. **Placement of the athletes**: Placement of athletes indicates where athletes appear in the newspaper.
   - 1 = front page: The athlete is in the page number one of the entire newspaper.
   - 2 = front sports/Paralympics section: The athlete is in the front page of the sport/Paralympics section of the newspaper.
3 = inside sports section: The athlete is appeared on inside sport/Paralympic section of the newspaper.

4 = inside non-sports section: The athlete is appeared on inside non-sport/Paralympic

6. **Dominance of the athletes:** A big photograph was more dominant than a small photograph. There were not the dominant photographic images of athletes if there were same size of photos.

1 = dominant: The largest photograph of the athlete is dominant on the page.

2 = non-dominant: Non-dominant photograph of the athlete is all photographs on the page except a largest photograph of the athlete.

7. **Angle of the photograph:**

1 = head shot: The photo shows from the whole head to the shoulder.

2 = upper-body shot: The athlete is shown from the waist up.

3 = parts of body shot: The photo shows only a body part without a face (e.g., legs).

4 = full-body shot: The athlete’s whole body from head to foot is pictured.

8. **Type of coverage:**

1 = in uniform: The athlete is portrayed in uniform with a head shot or upper-body shot but is not engaging in an activity.

2 = on the court: The athlete is portrayed wearing a uniform on the court but is not playing. The court is the main focus of the photo, or the athlete is posed on the court but not in an activity.

3 = in action shots: The athlete is visibly involved in an activity, not standing or sitting.

4 = not sure: The athlete is the focus of the camera from the neck up as in a head shot.

Photographs presenting the athlete as a child or with non-sports clothes belong to this category.
9. **Theme:**

1 = athleticism: Athletes are visibly in an activity rather than standing or sitting.

2 = disability: The camera focuses on the disability if the photo shows the athlete’s disability (e.g., wheelchair) rather than the athlete's sport performance.

3 = sympathy: The photo is associated with displays of feelings such as anger, pity, or crying.

4 = triumph: The photo is associated with the feeling or display of exultation and happiness derived from a victory or major achievement.

5 = not sure: The athlete is shown only from the neck up as if in a head shot.

10. **Sport Types:** The photograph presents sport types in terms of individual or team sport.

1 = individual sport: The athlete in the photo plays an individual sport such as archery, athletics, boccia, cycling (road), cycling (track), equestrian, judo, powerlifting, shooting, swimming, or table tennis.

2 = team sport: The athlete or athletes in the photo play a team sport such as cycling (road), cycling (track), football 5-a-side, football 7-a-side, goalball, rowing, sailing, sitting volleyball, wheelchair basketball, wheelchair fencing, wheelchair rugby or wheelchair tennis.

3 = not sure: Sport type is not shown in the photograph.

11. **Presentation of disability:**

1 = visible: Disabilities are presented and a body part is pictured with sport equipment or prosthesis.

2 = hidden: Disabilities are not presented, such as in a head shot.
3 = not sure: The disability cannot be recognized because of the photograph quality (e.g., a smoky or blurry image).

12. **Type of disability:**

1 = amputee: The athlete has a partial or total loss of at least one limb.

2 = wheelchair: The athlete has spinal cord injury or other disability that requires the use of a wheelchair.

3 = vision-impaired: The athlete has vision impairment from partial vision to total blindness.

4 = all other disabilities: The athlete has a physical impairment that does not fall into the other classification categories (e.g., arthrogryposis).

5 = not sure: The disability cannot be identified in the photograph.

13. **Nationality of athletes:** If the photograph does not present the nationality of the athlete, the coder decides the categories after reading the related article or title of the photos.

1 = domestic athletes: The athlete in the photo is of the same nationality as the newspaper.

2 = international athletes: The athlete in the photo is of a different nationality than the newspaper.

3 = not sure: The nationality of the athlete is unclear.
APPENDIX D

EXAMPLES OF PHOTOGRAPHS FROM NEWSPAPERS¹

Photographs from *The Australian*

August 31, 2012, The Nation section, p. 3

¹ All photographs reprinted with permission from PressDisplay.com.
Photographs from *The Australian*

September 3, 2012, Sport section, p. 34
Photographs from *The Australian*

September 7, 2012, Sport section, p. 33
Photographs from *The Sydney Morning Herald*

August 30, 2012, p. 1
Photographs from *The Sydney Morning Herald*

August 30, 2012, Sport section, p. 20
August 30, 2012, Weekend Sport section, p. 13
August 30, 2012, Sport section, p. 23
Photographs from *China Daily*

September 2, 2012, Sport section, p. 8
Photographs from *China Daily*

September 8, 2012, Sport section, p. 15
South Africa's Oscar Pistorius crosses the finish line to win the men’s T44 200 meters first heat during the London Paralympic Games at the Olympic Stadium on Saturday. — AFP
Photographs from *Shanghai Daily*

Photographs from *Shanghai Daily*

Photographs from *Daily Mail*

August 29, 2012, pp. 26-27
Photographs from *Daily Mail*

August 31, 2012, p. 1
Photographs from Daily Mail

September 1, 2012, “London 2012” special section, pp. 102-103
Photographs from *Daily Mail*

Wheelschair racer David Weir powered to an epic victory in a thrilling 5,000m last night.

By David Williams, Tom Kelly and Louise Eccles

The 23-year-old double gold medallist from Beijing four years ago capped a magnificent day for Paralympic GB in the final event at the stadium by propelling his custom-built £3,000 carbon fibre racing wheelchair to the front with just 400m to go.

The father of two, from South London, has been unable to use his legs after difficulties at birth and suffered a spine injury that left him walking with calipers.

In all, there were medals across athletics, rowing, dressage, table tennis, swimming and cycling yesterday – taking the overall total to 16 golds, 24 silver and 14 bronze. It puts Paralympic GB in second place in the medal table, with 54 in all.

The cyclists led the way with a gold for Anthony Kappes and pilot Craig MacLean after victory in an all-British tandem final.

Elsewhere 16-year-old Jadesia-Jane Kappes, who has Asperger's syndrome, won a gold in the women's 200m freestyle.

September 3, 2012, p. 6
Photographs from *Daily Mail*

September 6, 2012, p. 1
Photographs from *Daily Mail*

September 6, 2012, pp. 8-9
ONE of our original Magnificent 7, Rachael made two swimming finals in Beijing four years ago but injuries forced her to retire in 2010. Now she is part of Channel 4’s team covering the Games and here she selects her daily viewing highlights for day nine ...

RICHARD WHITEHEAD (ATHLETICS)

The 36-year-old goes for a sprint double in the T42 100m after storming to gold in the 200m last week. Children round the Olympic Park have been imitating his style of running and I wouldn’t bet against a repeat. TIME: 10.15am, 9.25pm.

JIM ANDERSON (SWIMMING)

Jim ‘The Swim’ is 49 with cerebral palsy. He has won 17 Paralympic medals since 1992. He races the 50m freestyle. Jim is in the C2 class, the most disabled in the pool. TIME: Heats 10.36am, final 6.51pm.

SCOTT MOORHOUSE (ATHLETICS)

Scott had to have his left leg amputated as a baby after he was burned by boiling water. He was identified as an F42 javelin talent in 2008 and came fourth at this year’s European Championships. TIME: 11.33am.

RACHEL MORRIS (CYCLING)

Rachel sustained an ankle injury in 1996 which triggered the onset of a rare illness which led to her left leg being amputated and she lost her right a few years later. She took up handcycling and became double world champion in 2007, then won time-trial gold in Beijing. She goes in the HI-3 road race. TIME: 10.30am.

KATIE HOLLOWAY (VOLLEYBALL)

USA v China is always going to be an exciting match, whatever sport is being played. The two superpowers battle for gold in sitting volleyball and American Katie could be key. She has been top scorer throughout the tournament and the Chinese will need to be wary of her spike shot. TIME: 9pm.
Photographs from *The Daily Telegraph*
Photographs from *The Daily Telegraph*

August 29, 2012, pp. 40-41
Photographs from *The Daily Telegraph*

Photographs from *The Daily Telegraph*

Photographs from *The Daily Telegraph*

Photographs from *The Daily Telegraph*

September 1, 2012. p. 1
Photographs from The Daily Telegraph

September 1, 2012, p. 4
Photographs from The Daily Telegraph

September 1, 2012, p. 13

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Photographs from *The Daily Telegraph*

September 3, 2012, p. 4
Photographs from *The Daily Telegraph*

Photographs from *The Daily Telegraph*

Photographs from The Daily Telegraph

September 4, 2012, p. 4
Photographs from *The Daily Telegraph*

Photographs from The Daily Telegraph

September 6, 2012, p. 4
Photographs from The Daily Telegraph

Photographs from *The Daily Telegraph*

Photographs from Cape Times

September 3, 2012, p. 1
Photographs from *Cape Times*

September 4, 2012, p. 1
Photographs from *Cape Times*

September 6, 2012, p. 24
Photographs from *The Citizen*

August 29, 2012, p. 1
Photographs from *The Citizen*

September 4, 2012, p. 1
Photographs from *The Citizen*

September 4, 2012, p. 31
Photographs from *The Citizen*

September 7, 2012, p. 37
Photographs from Star Tribune

August 31, 2012, p. 26
Photographs from *The Washington Post*

August 30, 2012, p. A17
Photographs from The Washington Post

September 3, 2012, p. A12
Photographs from *USA Today*

September 7, 2012, p. 3C
APPENDIX E

EXAMPLES OF PHOTOGRAPHS OF ATHLETICISM

Photographs from The Daily Telegraph

Photographs from The Daily Telegraph

Photographs from *The Daily Telegraph*

August 29, 2012, p. 54
APPENDIX F

EXAMPLES OF PHOTOGRAPHS OF DISABILITY

Photographs from *The Daily Telegraph*

September 5, 2012, “London 2012” special section, p. 10
A LEG UP
PHOTO BY ANDREW WINNING / REUTERS
Poland’s Łukasz Mamczarz starts his run up during the men’s high jump F42 final at the London Paralympic Games at the Olympic Stadium on Monday. Mamczarz won the bronze medal.

September 5, 2012, Sport section, p. 23
Photographs from *Daily Mail*

September 5, 2012, “London 2012” special section, p. 79
APPENDIX G

EXAMPLES OF PHOTOGRAPHS OF SYMPATHY

Photographs from *The Daily Telegraph*

September 1, 2012, p. 3
APPENDIX H

EXAMPLES OF PHOTOGRAPHS OF TRIUMPH

Photographs from *The Daily Telegraph*

Photographs from *Cape Times*

September 7, 2012, p. 12
Photographs from *The Daily Telegraph*