CHAPTER 4

SPORT AND HEALTH[1]

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LEARNING OBJECTIVES

After reading this chapter, you should be able to:

1. Summarize different sociological perspectives of the study of sport and health.
2. Paraphrase the complex and often-contradictory relationship between sport and health outcomes.
3. Identify the ways in which different socialization processes and constraints in adolescence restrict access to many of sport's health promoting benefits for some social groups across the lifespan.
4. Articulate strategies for organizing and promoting sport to develop positive health outcomes.

INTRODUCTION

Of the many suggested individual and societal benefits attributed to sport, one has been its ability to promote health. The World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity" (World Health Organization, 1946, p. 2). Physical health refers to the overall functioning of the human body. Mental health includes self-efficacy and self-esteem, coping with stress, and ability to work productively and successfully contribute to society (World Health Organization, 2018a). Social health has been conceptualized from many different perspectives, but largely it relates to how individuals interact with others and function as members of a community (Durkheim, 1966; Renne, 1974). An individual's health status is theorized as a continuum, with death at one end and maximum well-being on the other (Patrick, Bush, & Milton, 1973). Rather than being an objective set of measures, health represents an ideal state where individuals make judgments about their functional status as informed by social and cultural norms.

A 2017 index by the insurance company Blue Cross Blue Shield listed hypertension (i.e., high blood pressure), depression, high cholesterol, coronary heart disease, and Type 2 diabetes as the five conditions most likely to lower the quality of health in Americans (Morgan, 2018). A 2012 Mott poll suggested that not getting enough exercise, childhood obesity, and stress were among the top concerns for children's health (C.S. Mott Children's Hospital, 2012). In terms of global health, the World Health Organization has identified ischemic heart disease (i.e., disease that restricts normal blood supply) as the leading cause of death worldwide (World Health Organization, 2016). They also suggested that eight risk factors (alcohol use, tobacco use, high blood pressure, high body mass index, low fruit and vegetable intake, and physical inactivity) account for over ¾ of the likelihood of developing heart disease (World Health Organization, 2009). What is notable about the WHO's report for the study of sport is that they suggested physical inactivity is as important of a risk factor as smoking. The question is what is the efficacy of sport to promote physical, mental, and social health and to mitigate some of the risk factors associated with health concerns?

To examine this question, we take a sociological perspective to examine the relationship between sport and health. Sociologists attempt to understand how different social institutions and social interactions affect health behaviors (Hyman, 1967). Many sociologists are also interested in understanding how social structures and social problems create inequality in health benefits and access to health promoting resources and, relatedly, what socio-economic groups benefit and suffer in this process (Hyman). The influence of community and social environments on individual health and well-being has been a common theme in sociology

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since Durkheim's (1966) analysis in the late 19th century of the roles of social structures to influence differences in suicide rates (Lee & Ferraro, 2007). This concept informed social ecological views of health and social behavior that emerged in the 1990s to examine how individuals interact with their multiple environments (e.g., social, physical, natural) and how these environments either facilitate or constrain healthy behaviors (McLeroy, Bibeau, Steckler, & Glanz, 1988; see Chapter 2). This movement reflects an overall approach of social sciences to move beyond individualistic perspectives that suggest, for example, that poor health is a result of individual choices and behaviors, to an orientation that examines the influences of structural environments on shaping those choices and behaviors (Edwards, Jilcott, Floyd, & Moore, 2011; Macintyre, Ellaway, & Cummins, 2002).

In this chapter, our approach to examining the efficacy of sport to promote health blends multiple sociological approaches. First, we use the functionalist approach to health advocated by Parsons (1951), who emphasized illness and poor health is dysfunctional to society. In this sense, sport is positioned as a beneficial part of the social system. It should be noted, however, that criticisms related to functionalist approaches to health suggest this perspective fails to critically examine the role of legitimate institutions of health and issues related to power and social inequality. In this sense, definitions of health and the status of "acceptable" institutions that determine treatment and prevention strategies are socially constructed and may exclude marginalized perspectives. Even the WHO's definition of health comes under criticism in this way (Callahan, 1973). Therefore, we also incorporate an examination of sport from a conflict perspective advocated by Starr (2008) and Sage (1998), among other. From this perspective, social institutions like sport are seen primarily as serving as a mechanism for social control and reproduction where benefits and dominance of some groups come at the expense of others (Starr). Rather than being universally positive, sport may instead be a site of exploitation and coercion that undermines its assumed benefits (Eitzen, 2016). It should be noted that while we address sport in different ways, based on the relative low rates of sport participation among adults, the emphasis on sport participation in this chapter will often focus on youth sport. See Chapter 2 for an overview of the functionalist and conflict perspectives.

HISTORY OF SPORT AS A HEALTH REFORM TOOL

The perception of sport's ability to provide positive health outcomes has provided the primary justification for the subsidization of sport by governmental authorities as well as the continual promotion of sport as a societal good (Eitzen, 2016; Hoekstra et al., 2018). This belief traces its roots back to the ancient Greeks and the writings of Plato (1902) in particular. Plato held that participation in sport and physical activity was necessary for building healthy bodies and the development of moral character in Athenian elites. While historical sport served other utilitarian roles as well, particularly in military-related skills (e.g., archery, jousting), proponents of the *Muscular Christianity* movement in 19th Century Britain and the U.S. were important in the promotion of sport as a health tool (Dunning, 1971). This movement rejected the anti-leisure narrative of Puritanism to advocate for constructive use of leisure time. Leaders of the *Muscular Christianity* movement argued that sport participation was important to develop a balance of physical and spiritual harmony (Putney, 2001). Their ideology resonated with Industrial Revolution-era social reformers who argued sport participation would help improve the quality of life for the urban poor by making them stronger and more physically healthy (Dunning, 1971). Sport was also seen as an important mechanism to help assimilate immigrants to U.S. cities and to promote community interaction (Riess, 1991). These arguments provided the catalyst for public space to be set aside for parks and the creation of public and private recreational sport programs (Riess).

Critics of the health promotion legacy of sport argue that sport during the industrial-era reform period was used more as a means of social control and for promotion of capitalist ideology than to improve the population's well-being. Social reformers of this era were concerned about promoting sport to maintain order by providing a constructive alternative to perceived deviant and unsupervised leisure activities among working class urban dwellers that supposedly threatened moral values and civic political structures (Riess, 1991). Coakley (2017) also points out that the promotion of sport to improve fitness and physical abilities was largely related to increasing economic productivity. In addition to increasing the ability of workers to handle

their often poor working conditions, some argued that particular sports (often the ones promoted for public participation) could teach workers the production-oriented values of obedience, punctuality, dependability, self-sacrifice, and the value of hard work as the means to success (Miracle & Rees, 1994).

It is also important to note that sport was organized exclusively as a masculine domain. Females were excluded from full participation in organized sport. Physicians warned that sport participation could reduce women's abilities to conceive and bear healthy children (Coakley, 2017). Luther Gulick, a physician regarded as one of the pioneers in the recreation movement, believed sport was harmful to women's minds and bodies, saying, "Athletics do not test womanliness as they test manliness" (cited in Riess, 1991, p. 160). While occasional sporting opportunities existed for women, critics are right to point out that the historical marginalization of women continues to affect the inclusion of females in sport and the beliefs about physical benefits of sport for women, even after the passage of Title IX.

HEALTH BENEFITS OF SPORT

Physical activity is "bodily movement produced by skeletal muscles that results in energy expenditure" (Caspersen, Powell, & Christenson, 1985, p. 126). The enduring popularity of sport's promotion for health benefits is largely based on the increased levels of physical activity realized by its participants. The promotion of sport participation as a central means of increasing physical activity has intensified since growing global concerns about population health and the economic costs of public health issues have increased awareness of the importance of physical activity to maintaining health (Coakley, 2017; World Health Organization, 2003). One important health concern related to levels of physical activity has been increasing obesity rates, particularly among children and adolescents, which tripled since the 1970s. Nearly 1 in 5 school aged children in the US were obese as of 2015-2016 (Fryar, Carroll, & Ogden, 2014; Hales, Carroll, Fryar, & Ogden, 2016). With significant decreases in occupational physical activity (i.e., physical activity on the job) in developed nations occurring with increases in workforce automation and service sector careers, increased attention has been placed on increasing leisure-time physical activity in these countries (Kaczynski & Henderson, 2007).

Lack of leisure-time physical activity is a direct antecedent to obesity (Cawley, Meyerhoefer, & Newhouse, 2007) and strong associations exist between obesity rates and rates of physical inactivity (Brock et al., 2009). However, physical inactivity serves to combat public health issues beyond obesity (Floyd, Bocarro, & Thompson, 2008). While obesity itself is a risk factor for most identified health concerns, increased physical activity has been shown to decrease health risks independent of weight status (Blair & Brodney, 1999; World Health Organization, 2003). A report by the United Kingdom's Department of Health (2001) suggested that regular physical activity can decrease cardiovascular mortality; reduce high blood pressure; improve bone health, increase cognitive functioning; reduce risk of cancers; reduce risk of depression; and provide positive benefits for mental health, including reducing anxiety and enhancing self-esteem. Sport is not only believed to increase physical activity in participants, but it is regarded as a more enjoyable, satisfying, and motivating way to be physically active (Right to Play International, 2008).

Based on this position, organized sport programs remain an important mechanism to promote physical activity worldwide (Marques et al., 2016; Moore & Werch, 2005). In fact, the World Health Organization (2003) suggests that participation in sport programs is an essential part of a healthy lifestyle. This proposition has received support in research showing individuals who participate in sport average more weekly physical activity than those who do not participate in sports (Phillips & Young, 2009). Additionally, evidence suggests that physically active children grow up to be physically active adults (Green, Smith, & Roberts, 2005; Kjønniksen, Anderssen, & Wold, 2009). Getting involved in sports in childhood is important to staying involved as a teenager and pursuing physical activity as an adult. Researchers have found that joining youth sports at an early age and continuation through adolescence appears to increase the likelihood for physically activity for young and middle-aged adults (Perkins, Jacobs, Barber, & Eccles, 2004). For example, women who participated in team sports in their youth are more likely to be physically active, and as a result

they have decreased risk factors for heart disease, including healthier weight and body mass index (BMI) (Alfano, Klesges, Murray, Beech, & McClanahan, 2002).

Physical activity is the primary direct health benefit associated with sport participation. Beyond the suggested increased levels of physical activity, sport may provide multiple secondary health benefits based on participation as well as using sport as a communication platform to promote health. Connections have been made between sport participation and improved social, emotional, and mental health as well as decreased risks of engaging in presumed risky health behaviors. Most frequently, this association has been examined with youth sport participants. Compared to non-participants, adolescent sport participants consume higher levels of fruits and vegetables (Pate, Trost, Levin, & Dowda, 2000) and report lower use of cigarettes (Palomäki et al., 2018)) and hard drugs (Pate et al., 2000). Many of these healthy habits of youth sport participants carry into adulthood (Palomäki et al.). Adolescent girls who participate in sport are also less likely to engage in risky sexual behavior or have an unwanted pregnancy (Kulig, Brener, & McManus, 2003; Miller, Melnick, Barnes, Farrell, & Sabo, 2005). Sport participation is also associated with lower anxiety and depression and higher levels of self-esteem and social competence (Babiss & Gangwich, 2009; McHale et al., 2005).

In terms of increasing social health, sport is portrayed as a source of social connectivity that creates opportunities for individuals and communities to come together (Edwards, 2015; Hoye, 2015). Regular participation in organized sport provides opportunities for social interaction, and is associated with increased social connectivity among co-participants (Hoye). Youth sports also allow families not only to bond with each other through their different roles in playing, spectating, and organizing teams and leagues, but also families can develop relationships with other sports families (Trussell, 2009). Finally, spectator sports are perceived to increase collective experiences among fans (i.e., sport participants in a different context) that lead to more social cohesion across communities, ethnic groups, and economic classes (with the notable exceptions created through racism, hooliganism, and sectarian violence; Smith, 1988; Stieler & Germelmann, 2016).

Sport may also provide indirect health benefits through the entertainment appeal of elite athletes and sport organizations. Here, these entities serve as a mechanism to deliver health education information and support health initiatives (Edwards & Rowe, 2019). For example, the National Football League in the US has launched a campaign, "Play 60", to promote youth physical activity and play (Bamesberger, 2011). While critics have suggested initiatives like Play 60 have little evidence base to ensure successful health promotion (e.g., Sparvero & Warner, 2019), leveraging the popularity of high-performance sport to raise awareness of health issues and behaviors is increasing. English soccer clubs have become increasingly active in promoting men's health issues (e.g., prostate cancer and mental health) to spectators with public awareness campaigns and themed matches (Curran, Drust & Richardson, 2014; Summers, 2018). US sports leagues and teams have also frequently focused on breast cancer awareness by holding themed promotions with pink uniforms (Feinsand, 2011). The demonstration of sport's effectiveness as a health awareness tool was also seen in the prominent role of basketball star Earvin "Magic" Johnson to change public perceptions about HIV/AIDS and push for increased research for the disease following his HIV-positive diagnosis (Casey et al., 2003). This aspect of sport's role in promoting positive health outcomes may be worth exploring in the future, although sport seems to deliver its main health benefits through direct participation.

CRITICISMS OF THE SPORT – HEALTH RELATIONSHIP

The benefits of regular engagement in leisure-time physical activity are obvious. This relationship has been central to arguments made by advocates for increased expenditures on and promotion of recreational sport since antiquity. However, this advocacy approach often fails to distinguish between the benefits of broader physical activities and sport more specifically (Robson, 2001). Sport, of course, is a specialized form of leisure-time physical activity, but not all leisure-time physical activity is sport (see Chapter 1). Particularly in the US, sport is organized to emphasize competition, specialization, and rule structures (Coakley, 2017). While, to a point, the physical activity and training required of sport participation is beneficial, this may not

be an intentional outcome of participation in competitive sport (Eitzen, 2016). Indeed, even Plato insisted that competitive sport was not a suitable source for health-promoting physical activity, citing that its focus on winning encouraged training regimes that were ill-designed to foster comprehensive physical fitness.

This position has also received increased attention in research. For example, Walters, Barr-Anderson, Wall, and Neumark-Sztainer (2007) found that while former youth sport participants remained more physically active than non-participants in adulthood, physical activity levels dropped more significantly among youth sports participants in adulthood. In their longitudinal study, these researchers also suggested that socio-economic status and gender was an important moderator of the retention of physical activity levels into adulthood among youth athletes, with lower socioeconomic class male youth sport participants showing the most significant declines in physical activity. Additionally, the U.S. childhood obesity crisis has occurred despite dramatic increases in youth sport participation (Louv, 2005). Thus, organized, competitive sport may not deliver recommended levels of physical activity to enough participants in comparison to unstructured sport or non-competitive physical activities (Kanters, Bocarro, & Edwards, 2011).

The evidence of sport to deliver positive health outcomes has been inconsistent and it may depend on how sport is delivered (Edwards & Rowe, 2019). The Healthy Sport Index, a web-based tool from the Aspen Institute's Project Play, looked at many of the most popular sports played in US high schools and suggested that some sports provide better health outcomes than others in terms of physical activity, risk of injury, and psychosocial benefits (Lee, 2018). Therefore, when examining the relationship between sport and health outcomes, the specific setting, rules, and culture of a sport should be considered. For example, to maximize performance at some positions, American football players may be encouraged by coaches to become overweight or obese (Kaplan, Digel, Scavo, & Arellana, 1995; Matthews & Wagner, 2008). Bat and ball sports (e.g., baseball and softball) may also provide fewer opportunities for physical activity than other sports (Bocarro et al., 2014; Floyd, Spengler, Maddock, Gobster, & Suau, 2008) perhaps due to the games' requirements for more sedentary time (e.g., sitting in the dugout waiting to bat or standing in the field). Conversely, Ainsworth et al. (2000) found that participants in sports which encourage more continuous play (e.g., handball, rugby, soccer, racquet sports, and swimming) recorded higher levels of physical activity.

In addition to questions about the efficacy of sport to universally deliver recommended levels of physical activity, many scholars have argued that sport may be as likely to provide poorer health outcomes as positive health outcomes. Injuries are common to sport participants. Many former athletes are able to quickly point out nagging aches and pains that remain from their playing days. For example, many retired players from the National Football League report living with chronic pain and musculoskeletal disabilities due to the extreme physical contact endured in that sport (Schwenk, Gorenflo, Dopp, & Hipple, 2007). Some have suggested that injuries are so common to sport that they have been normalized as an accepted part of the culture of playing games (Curry & Strauss, 1994), especially in many historically male-dominated contact sports (Coulter, Mallett, & Singer, 2016). Athletes are even celebrated for "playing hurt" or returning to games too quickly after a serious injury, even if the decision to continue participation increases the likelihood of more permanent disability (Nixon, 1993). Additionally, the nature of many sports encourages violence that is both legitimate (i.e., within the rule of the game, like hard hits in football or body checks in hockey) and illegitimate (i.e., outside the rules of the game, like fighting). These acts heighten the risk of injuries to participants. Coaches and sport leagues encourage much of this violence and aggressive behavior as ways of intimidating opponents and increasing the excitement of the sport performance, respectively. Some research has even suggested that when coaches encourage aggression and violent behavior, athletes have an increased likelihood of being aggressive or violent off the field (Wagmiller, Kuang, Aber, Lennon, & Alberti, 2006).

There have also been dramatic increases in sport injuries to children. Over half of all youth sport participants have experienced injuries due to their participation (Fabricant et al., 2016). In one study, children in Portugal who played sport at any level were significantly more likely to suffer injuries than children who did not play sports (Costa e Sliva et al., 2017). What may be most troubling is that the most common

injuries to adolescent sport participants are musculoskeletal overuse injuries due to increased and specialized training regimens designed to assist these young athletes reach elite status (Hawkins & Metheny, 2001; Stracciolini et al., 2013). Intense training routines for sport are also responsible for another condition described as the "female athlete triad" (Birch, 2005). This condition refers to three prominent risks to female athletes who exceed healthy levels of physical activity in their training programs: Amenorrhea (i.e., premature cessation or delay of menstruation), anorexia athletica (i.e., eating disorders associated with weight control for training and sport performance), and osteoporosis (i.e., loss of bone mineral density).

There have also been questions raised about sport's ability to promote mental and emotional health, particularly high-performance sport. Too often the focus on winning and getting to elite levels changes the meaning of sport and discourages participation. Many individuals stop playing sport due to low self-competence, that is low evaluation of themselves compared to peers (Hedstrom & Gould, 2004). Instead of being a place to encourage self-esteem and promote self-confidence, sport often has the opposite effect for less skilled athletes. Additionally, one of the most common negative resultants of high-performance sports is increased stress resulting in burnout. Competitive sport places excessive levels of stress on athletes, particularly children, who often burnout as a result. Some of the most common factors associated with sport burnout are: high expectation, a win at all cost attitude, parental pressure, long repetitive practices with little variety, inconsistent coaching practices, overuse injuries, excessive practices and time demands, social support displayed on the basis of winning and losing and perfectionism (Wienberg & Gould, 2003). These factors suggest that sport has the potential to also negatively impact socio-emotional and mental development.

Finally, critics have examined sport's ability to promote healthy social interactions among participants and spectators. Dyreson (2001) argued that trash talking, which is often racist, misogynistic, and homophobic in nature, often permeates interactions on the court or playing field, calling "in-your-face rather than face-to-face communication" (p. 23). Far from Putnam's (2000) ideal of sport as a fountain of bridging social capital, Dyreson argues that playing sport often fosters an "us" versus "them" mentality. This sentiment, frequently fueled by media glamorization, has elevated many groups of players and spectators to violent acts against each other.

Sometimes, this violence transcends sport such as in the case of religious sectarianism that underlies some soccer rivalries. For example, supporters of the biggest soccer clubs in Glasgow, Scotland, have experienced numerous high-profile violent clashes rooted in their historical religious, economic, and cultural animosity (the city's Protestants have historically associated with Rangers Football Club and Catholics with The Celtic Football Club) (Coroniti, 2014; Roadburg, 1980). Other times however, the sports rivalry or culture itself can fuel fan violence leading to severe injury and death. For example, in August 2011, 70 fans were ejected from an exhibition game between the National Football League rivals San Francisco Forty-Niners and Oakland Raiders for violent acts against opposing fans; 12 fans were arrested, two were shot in the parking lot, and one was assaulted and beaten in a stadium restroom (Klemko, 2011).

Many pundits and scholars have suggested that this type of behavior, historically absent from North American sport, is on the rise (Rich & Babb, 2016). Additionally, while research on youth sport violence is limited, it is easy to find numerous instances in the media about confrontational and even violent behaviors at youth sporting events, including acts of aggression by parents toward coaches, officials, and even youth sport participants (Heinzmann, 2002). It seems that when the stakes of winning and losing and the performance ethic in sports get high, emotional stress and anxiety may interfere with healthy social functioning. It is also important to note that the stress of high-performance sport may affect spectators in other unhealthy ways too. While evidence is still inconclusive, there are suggestions that spectator attachment to teams can have a negative effect on cardiovascular health when watching games (Čulić, 2011). For example, a 2008 study in the *New England Journal of Medicine* found that watching World Cup soccer matches more than doubled the risk of acute cardiovascular events (e.g., heart attacks) among Germans during the 2006 World Cup (Wilbert-Lampen et al., 2008).

Overall, the ability of sport to provide expected levels of healthy physical activity and promote mental and social health may be contextual to how specific sports are organized and delivered. The current way many sports are managed and marketed in our society may inhibit sport's direct contribution to health promotion (Chalip, 2006). Sport's efficacy to promote positive health outcomes may only be realized if sport is organized in a way that deemphasizes competitive performance and intentionally promotes health, positive social interaction, and inclusive participation across all population groups (Coakley, 2017).

ACCESSIBILITY OF "HEALTHY" SPORT ACROSS THE LIFESPAN

As previously indicated, one important aim of sociological approaches to health is to understand inequalities associated with differential access to health promoting resources based on wealth or social status (Hyman, 1967). It has been well established that the risk of poor health is not distributed equally across the social hierarchy of populations. For example, disadvantaged socio-economic groups such as the poor, racial/ethnic minorities, women, people with disabilities, and senior citizens are more likely to have poorer health outcomes than advantaged socio-economic groups (Braveman, 2006). Not surprisingly, these disadvantaged groups are also more likely to be physically inactive both in childhood and as adults (Coakley, 2017; Day, 2006; Floyd, Bocarro et al., 2008; Richmond, Hayward, Gahagan, Field, & Heisler, 2006; Young et al., 2007).

Exhibit 4.1 shows differences in youth sport participation by race and gender, and Exhibit 4.2 shows group differences in participating in recommended levels of leisure-time physical activity. As indicated, some groups, particularly racial and ethnic minority females, are more at risk for physical inactivity than others.

Exhibit 4.1: US Youth Team Sport Participation Rates, by Race and Gender

Racial Group	Gender	Participate in Sport
White, Non-Hispanic	Boys	61%
	Girls	50%
Black, Non-Hispanic	Boys	68%
	Girls	51%
Hispanic	Boys	57%
	Girls	47%

Source: CDC HS YRBS 2017

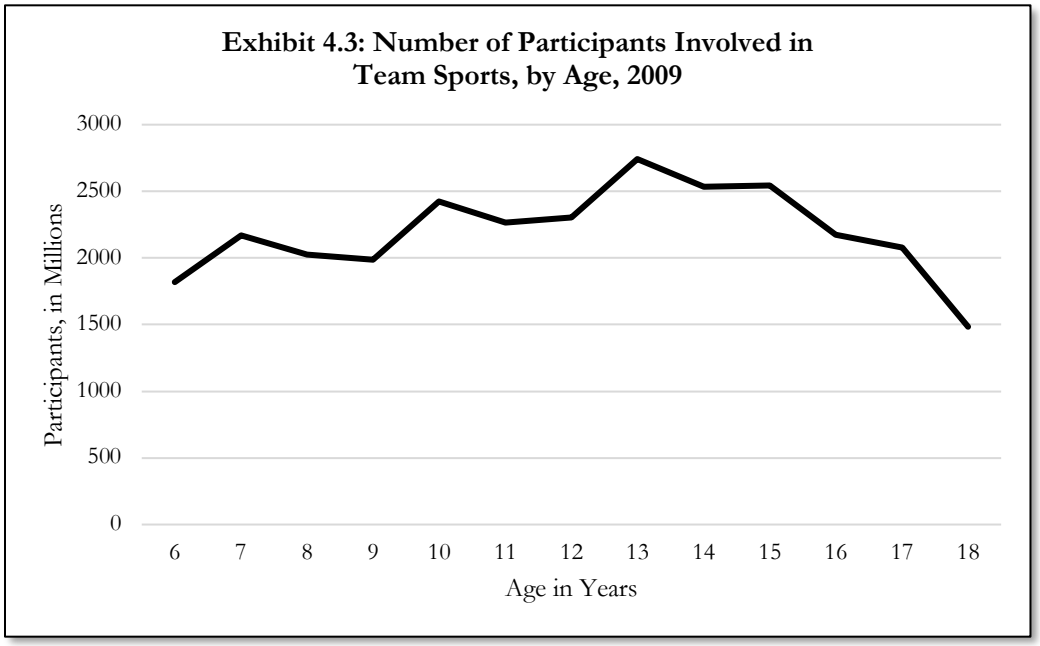
Exhibit 4.2: US Adults Meeting Recommended Activity Levels, by Race and Gender

Racial Group	Meet Recommended Activity Levels
White,	53%
Black	43.5%
Hispanic	43.8%

Source: CDC BRFSS 2017

Sociologists and health researchers have sought to determine how differences in access to supportive environmental resources (e.g., programs, facilities, safe neighborhoods), and differences in social and cultural practices function to either reduce or maintain these health disparities. As an important social and cultural institution, sport has also been examined from this perspective. As we have suggested, sport's health benefits are not necessarily universal and must be intentional to the organization and management of specific sport activities. Therefore, we should examine the ways in which some groups may have better access to participating in the types of sport that promotes health.

As mentioned previously, playing sports across the lifespan may lead to many desirable physical, mental, and social health outcomes. Therefore, continued sport participation across a lifespan is important. Exhibit 4.3 shows sport participation rates in the U.S. based on age. Sport participation rates peak around age 13 and then decline for older age cohorts. The most noticeable decline in sport participation is the older adolescent age group. Researchers have suggested that participation in sport at exactly this stage of adolescence is a critical mediator for keeping young people physically active into adulthood (Curtis, McTeer, & White, 1999; MacPhail & Kirk, 2006). Therefore, the likelihood of maintaining healthy levels of physical activity through sport participation becomes much lower if youth are discontinuing sport at this period in their lives.



Source. SGMA/Sports Market Research

In addition to age discrepancies with respect to physical activity, the fact that rates of participation in sport and attrition from sport are not the same across socio-economic groups is troubling. For example, girls, particularly those from racial and ethnic minority groups, drop out of sport at higher rates than boys do during the adolescent years (Phillips & Young, 2009; Young et al., 2007). Sport participation over time is often directly linked to economic status because of significant barriers (e.g., increased financial costs and lack of spare time) faced by low income youth (Day, 2006). Youth with physical and mental disabilities also have increasing difficulty participating in sport (Murphy & Carbone, 2008). Additionally, the universal negative effects of aging on preventing participation in sport increases for minorities, members of lower socio-economic classes, and persons with disabilities (Adler & Rehkopf, 2008). To better understand how social inequality may prevent many people from accessing the positive health benefits sport may offer, we need to examine the process by which different groups become socialized into sport as well as understand the constraints different groups experience to participating in "healthy" sport.

Mechanisms for Socializing Youth into Sport

Socialization is fundamental to understanding sport participation across the lifespan. The basic premise is that understanding sport participation requires a social element, arguing that people can learn new information and behaviors by watching other people. Socialization is the process of learning to live in and

understand a culture or subculture by internalizing its values, beliefs, attitudes, and norms (Long & Hadden, 1985). It is an active process of learning and social development and occurs as we interact with others.

Socialization is the cornerstone of the functionalist approach to sociology. Social order is maintained through the process of learning and development that transmits central values and culture of a society to individuals (Rojek, 2005; Ruddell & Shinew, 2006). Socialization involves the formation of ideas about who we are and what is important in our lives. In sport, socialization occurs through contact with socialization agents (e.g., family, peers, and media) from which individuals interpret what is societally approved behavior. Parents serve as the dominant socialization agent for children in these formative years prior to adolescence (Dotson & Hyatt, 2005; Moschis, 1987). Parents are also most likely to introduce their children to sport (Green & Chalip, 1998; Greendorfer, Lewko, & Rosengren, 2002). Children are likely to adopt their parents' beliefs and motivations toward sport (Eccles, 1993). Siblings may also provide an intragenerational influence that becomes stronger in the transition from childhood to adolescence (Cotte & Wood, 2004; Pechmann & Knight, 2002). Because children have indicated that their desire for affiliation, and social recognition is a primary motive for their involvement in sport programs (Weiss & Petlichkoff, 1989), peer influence is likely to be integral in a child's sport behavior. In addition to peers and siblings, teachers and school-specific peer groups also affect the socialization of youth (Moschis, 1987). Lastly, the influence of the mass media may also be especially important in the development of attitudes about participating in sport because of the significant presence of sports on television and video games. For example, the portrayal of athletes as celebrities and actions of athletes promoted in these media may encourage some children to participate in certain sports (Bailey & Sage, 1988). However, this relationship may be far less significant than more proximate and intentional role models that demonstrate and encourage sport participation to young people (Payne et al., 2003).

Another way in which researchers have approached socialization is to examine the sociological factors that encourage participation across parts of the lifespan. In particular, sociologists are interested in social inequality and its reproduction based on three prominent socially constructed contexts for inequality: gender, race, and social class. This research focuses on why some social groups maintain sport and physical activity participation from childhood and adolescence into adulthood, and why other groups are more likely to withdraw from these activities at different transitional points in their lifespan. This approach suggests adults learn their role as a sport participant based upon the opportunities they had to participate during childhood and adolescence. As individuals age, they will seek to maintain some level of continuity in their lifestyle (Atchley, 1989). In order to encourage people to participate in recreational sport throughout their lifespan, they must be provided with the opportunity to participate in a broad range of activities in childhood and adolescence that can be realistically maintained in adulthood (Green et al., 2005). Throughout the lifespan, it is expected that participation in many of these activities will cease, but having a wider pool from which to choose may encourage the continuation of participation in some activities (Green et al.). Therefore, youth sports that can be played across the lifespan are especially important in facilitating physical activity into adulthood. Thus, the Centers for Disease Control and Prevention (CDC) guidelines indicates that community sports and recreation program coordinators can help increase physical activity among youth in a variety of ways including providing a mix of competitive team and non-competitive teams, lifelong fitness and recreational activities.

In addition to exploring the process by which youth engage in sport participation and then maintain participation into adulthood, research has also examined why youth do not engage in sport. Understanding constraints to sport participation could help explain the decline in youth sport participation across different social groups (Casper, Bocarro, Kanters, & Floyd, 2011). Constraints theory suggests that individuals perceive various intrapersonal, interpersonal, and structural barriers that inhibit or prohibit participation and enjoyment in leisure activities (Crawford, Jackson, & Godbey, 1991). Sallis, Prochaska, and Taylor (2000) showed that perceived constraints were the most consistent negative psychological correlate of physical activity among children. The most salient constraints that limit or prevent sport participation include a lack of time, partners, facilities and equipment, and a perceived lack of skill or confidence. While the types of

constraints that often prevent youth from continuing sport participation are similar across groups, socio-economic disadvantage seems to intensify the strength of constraints to prevent participation (Cunningham, 2008). Constraints are especially prevalent in predicting decreased sport participation for girls, Latinos, and youth from lower socioeconomic backgrounds.

Socialization and Disparities in Sport's Health Benefits

We have provided some understanding of the ways sport can be organized to increase the likelihood of providing desired health outcomes. Additionally, we have discussed the process that encourages or constrains some individuals from participating in sport from childhood into adulthood. Now, we will use these concepts to better understand how the organization and delivery of sport in our society may serve to reproduce health disparities. In particular, why are many socio-economically disadvantaged groups less likely to engage in some lifetime sports and more likely to abandon sport participation after adolescence and become mere sports spectators (Bourdieu, 1978)? Some authors have suggested that the organizational system in the US promotes participation for elite athletes as age increases and consequently benefiting already advantaged groups while simultaneously discriminating against the disadvantaged (Barr-Anderson et al., 2007; Edwards, 1986). In the long term, the exclusion of certain groups from participation in sports may lead to less leisure time physical activity and more health risks in adulthood. In this case, sport practices may serve to reproduce health inequality among marginalized groups in society.

In addition to requiring a high level of skill, competitive sports participation generally demands a greater commitment of time for practices and traveling to competitions. Kimm et al. (2006) discovered that lack of time was the primary reason girls in this age group dropped out of sport. Adolescent girls also seek out a broader range of cooperative physical activities than are offered in traditional recreational sports programs. For example, Barr-Anderson et al. (2007) found that adolescent girls favored participation in swimming, dance, cheerleading, and gymnastics rather than traditional competitive team sports. Traditional programs of competitive sports may also emphasize socially constructed masculine values such as violence and aggression (Hanson & Kraus, 1999). In communities that promote more traditional gender ideologies, sport and physical activity may be viewed as a male domain. In these contexts, athletic ability and participation in sport and physical activity should only be celebrated among men, and women who participate in physical activities, other than for cosmetic fitness, beyond a certain age may be labeled as 'masculine' (Shakib & Dunbar, 2004, p. 286). Adolescent girls also often model their mother's physical activity behavior (Shakib & Dunbar) and may not perceive adult women as being physically active in sport environments. These characteristics may discourage interest in sport by girls who might view playing sport solely within the context of masculine values historically promoted in sports (Coakley, 2017).

Members of higher socio-economic classes participate in sport, particularly lifetime sports, more and longer than do members of lower socio-economic classes. It is understood that certain economic and structural constrains (e.g., available spare time, transportation, money for equipment) are heightened for members of lower socio-economic classes. Parents' level of education, one of the key markers of social class, continues to be the most significant factor in predicting sport participation (Young et al., 2007), particularly in females (Hasbrook, 1987). Additionally, public and private opportunities that support sports participation (e.g., parks, recreation programs) are less likely to be found in low income and minority communities and neighborhoods (Edwards, Kanters, & Bocarro, 2011; Smoyer-Tomic, Hewko, & Hodgson, 2004). While in Europe, some of the social class differences in participation have diminished (Scheerder, Vanreusel, Taks, & Renson, 2005), community resources for these activities in the US are often distributed unequally based upon social class (Eitzen, 2016). Education budgets have also been cut dramatically across the US. Increasing emphasis is being placed on academic achievement measured through standardized testing leading to a significant reduction in financial resources for physical education and co-curricular physical activities (especially non-revenue sports, intramurals, and non-competitive physical activities). While reduced school-based activities, and its negative effects on health across the lifespan, has been experienced across our society, the most severe cuts have occurred in socio-economically disadvantaged schools with high popu-

lations of low-income and minority populations, in inner cities, and rural areas (Edwards, Kanters, & Bocarro, 2011; Outley & Floyd, 2002). Thus, socio-economically disadvantaged youth are increasingly becoming the least likely to have access to the resources necessary to provide support for public opportunities for physical activity (Sallis et al., 2001).

Some researchers have also attempted to explain social class disparities in sport participation through both structural and cultural conditions using the theoretical framework of Bourdieu (1978). Bourdieu argued that the meaning we attach to socially constructed institutions and leisure activities, like sport, and the appropriateness of how we participate in these activities is shaped by historical and cultural structures. From this perspective, sport may be viewed in the more practical terms of social and financial mobility for members of lower socio-economic classes, rather than for health and fitness outcomes. In this case, sport becomes seen as a setting to sacrifice the physical health of the body for extrinsic gain, rather than a health promoting mechanism. According to Bourdieu, sport participation therefore becomes limited for lower socio-economic classes beyond adolescence based on their concentration in intensive contact team sports (e.g., football) that pay off in status attainment and possible social mobility. Conversely, the upper class tends to participate in sports (e.g., golf, tennis) that offer more health benefits and participation opportunities long into adulthood. These sports, practiced for their functions of physical maintenance and for the social profit they bring, have in common the fact that their age-limit lies far beyond youth" (Bourdieu, p. 837).

The reasons for racial differences in participation in sport are complex (Philipp, 1998). In adolescence, racial identity becomes central to peer group approval of leisure activities (Phillip), and there is evidence that barriers created by racially segregated social groups may create sport culture that is also segregated by race with some individuals feeling unwelcome in sport settings where they are the minority race (Bopp et al., 2017). The interpersonal influences of friends, family members, and other adult role models are critical for getting children to participate in sport (Crossman, Sullivan, & Benin, 2006). Children of racial and ethnic minority groups are therefore often socialized to participate in activities that are culturally appropriate and discouraged from participating in sports in which are not. However, there is some evidence that sport can help break down some racial barriers and encourage cross-racial friendships if different racial and ethnic groups do participate together (Jones et al., 2016).

For many racial and ethnic minorities, sport is seen in the utilitarian terms described by Bourdieu, offering faint hope of a college football or basketball scholarship and social mobility (Eitle & Eitle, 2002). Additionally, sport participation is often considered suitable for males but not necessarily for females within the cultural traditions of many racial and ethnic minority populations. Therefore, culture may explain why racial and ethnic variations in physical activity participation are often found among girls, but not boys (Phillips & Young, 2009). In contrast, other differences in participation are a result of poverty, historic discrimination of minority groups, and neighborhood locations (Washburne, 1978). For example, African Americans have historically been excluded from public spaces for swimming and therefore may be less likely to develop the skills necessary or the interest in participating in swimming activities (Hastings, Zahran, & Cable, 2006). Additionally, soccer gained popularity in the United States as a middle-class suburban sport and therefore middle-class children are more likely to play it (Goldsmith, 2003). Based on their family's socio-economic status or residence within less-deprived neighborhoods, White children have earlier access to swimming and soccer and may be more likely to develop the skills and attitudes toward the sport required to continue their participation.

Overall, sport's ability to provide health promoting benefits across the lifespan requires accessibility to sport programs and facilities, as well as to specific lifetime sports that provide participants with recommended levels of physical activity from adolescence into adulthood. The inclusion of all socio-economic groups into these sport experiences is vital to reducing health disparities and promoting population health. Unfortunately, divergent socialization patterns and cultural constructions of the meaning of sport participation may prevent all socio-economic groups from accessing and being included in sport participation.

CONCLUSIONS AND RECOMMENDATIONS

The relationship between sport and health is complex. Rather than promoting universal physical, mental, and social health benefits as advocated in the functionalist perspective, sport can also heighten risks of injury, produce emotional stress and anxiety, and encourage violence and social conflict. However, rather than focusing on the negative aspects of sport, as often becomes the case in the conflict perspective, it is more constructive to acknowledge the potential for sport as a site to promote lifetime physical activity and reduce health disparities to seek strategies to improve sport's efficacy in this regard.

According to Edwards and Rowe (2019), sport's efficacy to promote positive health outcomes is maximized when programs focus on community needs and empower participants, when the sport culture adapts and evolves to be more inclusive and focused on health as the primary goal, and sport organizations use partnerships with health-related organizations to ensure best practices of health promotion. This characterization of healthy sport suggests sport must be organized and delivered in a way that reduces the emphasis on high performance and competition and more intentionally emphasizes promotion of physical activity, positive social and mental health outcomes, and the encouragement of healthy lifestyles across the lifespan. Policy and practices related to sport programs would also need to ensure the reduction of cultural and structural constraints that have traditionally prevented the full inclusion of all demographic groups from sport participation.

Given these findings, we offer nine recommendations to increase sport's efficacy to promote maximum health benefits and reduce health risks and disparities.

1. Recreation and school extracurricular programs must increasingly offer and encourage a broad range of competitive sport and non-competitive physical activities that appeal to all interests and abilities and can be continued across the lifespan.
2. Youth sport specialization must be limited, and children and adolescents should be encouraged to participate in many different sports.
3. To reduce some barriers to entry that have developed as youth sport became more competitive and selective, education programs should be implemented to teach youth sport skills and build competence to engage in new sports.
4. Sport programs should also be developed and supported to allow participation across all skill levels, physical abilities, and commitment levels.
5. Financial barriers (e.g., entry fees, cost of equipment and uniforms, and travel) should be reduced at all competitive levels.
6. Within sport programs, opportunities to move and be physically active should be increased, and time spent sitting on the sidelines or standing around should be reduced.
7. Excessive violent contact and physicality should be discouraged at all levels of competitive sport.
8. Sport programs should intentionally encourage positive interaction between opposing players and fans to build a culture of ethics and good sporting behaviors.
9. Continuous youth coaching certification and education programs should be developed and implemented to ensure best practices are promoted and encouraged. These education programs should also move beyond sport skills and game management and include content related to inclusion and increasing health outcomes.

While these recommendations are not comprehensive, they present clear strategies to improve sport's ability to promote positive physical, mental, and social health. As with any imbedded social institution, attempts to change sport in this way will likely be met with some resistance, most notably from those individuals and groups who have a vested interest in maintaining the status quo. Sport has become a powerful cultural and economic phenomenon that prioritizes the performance ethic and commercialization of the entertainment experience of spectator sports. Additionally, myths related to sport's role in society overstate sport's positive health outcomes and ignores many of the negative aspects of sport. However, sport is socially

constructed and therefore can be changed for the better. This chapter has provided an outline of sport's potential for delivering positive health outcomes, and suggested how sport can be intentionally transformed to promote health to individuals and society.

CHAPTER SUMMARY

The purpose of this chapter was to examine the relationship between sport and positive health outcomes from a sociological perspective. First, we defined health and discussed two primary sociological approaches, functionalism and conflict, that frame different perspectives about sport and health. We then discussed many of the health benefits of sport participation found in the research, including increased physical activity, reduced risk behaviors, lower anxiety and depression, higher levels of self-esteem, social competence, and social connectivity. Next, we presented criticisms of sport's health efficacy that suggested sport can also lead to increased injuries, higher emotional distress, and violence, particularly when it focuses on elite performance and competition. We then described different health disparities related to socio-economic status and described how levels of sport participation across the lifespan, particularly in sports more likely to encourage healthy lifestyles, are higher for individuals from more privileged socio-economic status groups. These group differences were shown to be based on differences in socialization methods and social, cultural, and economic barriers to participation in adolescence. We ended the chapter by presenting some potential strategies for organizing sport programs in ways that may maximize sport's health efficacy and promote inclusion across all socio-economic groups.

DISCUSSION QUESTIONS

1. Think back to your own participation or non-participation in youth sport. How were you socialized into specific types of sport participation? What were some of the significant facilitators or constraints to your sport participation as you entered adulthood?
2. Considerable attention has been focused on suggested increases in violence in sport. Do you think violence is an issue in sports today? Why or why not?
3. Some critics of Title IX argue that it has only helped increase sport and physical activity participation for White girls. Is this criticism justified? How can we increase opportunities for girls of color to engage in healthy sport and physical activity across the lifespan?
4. Examine the sport programs in your community (from youth sports up to college and professional sports) from both a functionalist and conflict perspective. Describe the relationship of these programs to promote physical, mental and social health based on each of these perspectives.
5. We presented some strategies to improve the efficacy of sport to promote positive health outcomes across the population. What other strategies can you suggest to improve the ability of sport to promote health?

SUGGESTED READINGS

Aspen Institute (2015). *Project Play Playbook*. This 50-page report aggregates the eight most promising strategies in identifying strategies that can address barriers limiting access to early sport activity that fosters the development of healthy children and communities. The playbook can be downloaded at: https://www.aspeninstitute.org/publications/sport-all-play-life-playbook-get-every-kid-game/

Right to Play International. (2008). Harnessing the power of sport for development and peace: Recommendations to governments. Toronto, ON: Sport for Development and Peace International Working Group. (A United Nations working group report that comprehensively discusses global health and social issues and the ways in which sport can be used to alleviate these issues. It is a very comprehensive examination of sport in this context and provides excellent examples.)

Eitzen, D. S. (2016). *Fair and Foul: Beyond the Myths and Paradoxes of Sport*. New York: Rowman & Littlefield. (One of the best and most direct critical examinations of sport, Eitzen lays out the paradoxes of sports and its dual benefits and issues across numerous topics. Particular attention should be paid to Chapter 5: Sport is Healthy, Sport is Destructive (pp. 83-100) for more detail about some of the issues with sport and health.)

Riess, S. A. (1991). *City Games: The Evolution of American Urban Society and the Rise of Sports*. Urbana, IL: University of Illinois Press. (Although nearly 30 years old, this book still provides one of the best comprehensive descriptions of the rise of sport as a health and social reform tool during industrial-era urbanization period.)

REFERENCES

Adler, N. E., & Rehkopf, D. H. (2008). U.S. disparities in health: Descriptions, causes, and mechanisms. *Annual Review of Public Health, 29*(1), 235-252.

Ainsworth, B. E., Haskell, W. L., Whitt, M. C., Irwin, M. L., Swartz, A. M., Strath, S. J. et al. (2000). Compendium of physical activities: An update of activity codes and MET intensities. *Medicine & Science in Sports & Exercise, 32*(9), S498-S516.

Alfano, C. M., Klesges, R. C., Murray, D. M., Beech, B. M., & McClanahan, B. S. (2002). History of sport participation in relation to obesity and related health behaviors in women. *Preventive Medicine, 34*(1), 82-89.

Atchley, R. (1989). The continuity theory of normal aging. *The Gerontologist, 29*, 183-190.

Babb, K & Rich, S (2016, October 28). A quietly escalating issue for NFL: Fan violence and how to contain it. *Washington Post, Retrieved from* https://www.washingtonpost.com/sports/redskins/a-quietly-escalating-issue-for-nfl-fan-violence-and-how-to-contain-it/2016/10/28/4ec37964-9470-11e6-bb29-bf2701dbe0a3_story.html?noredirect=on&utm_term=.c354f3d32257

Babiss, L. A., & Gangwich, J. E. (2009). Sports participation as a protective factor against depression and suicidal idealation in adolescents as mediated by self-esteem and social support. *Journal of Developmental & Behavioral Pediatrics*, *30*(5), 376-384.

Bailey, C. I., & Sage, G. H. (1988). Values communicated by a sports event: The case of the Super Bowl. *Journal of Sport Behavior, 11*(3), 126-143.

Bamesberger, M. (2011, December 3). 'Fuel up to Play 60' Puts Focus on Food and Fitness, *Omaha World-Herald*. Retrieved from http://www.omaha.com/article/20111203/LIVEWELL02/712039878

Barr-Anderson, D. J., Young, D. R., Sallis, J. F., Neumark-Sztainer, D. R., Gittelsohn, J., Webber, L. et al. (2007). Structured physical activity and psychosocial correlates in middle-school girls. *Preventive Medicine, 44*(5), 404-409.

Birch, K. (2005). Female athlete triad. *BMJ, 330*(7485), 244-246.

Blair, S. N., & Brodney, S. (1999). Effects of physical inactivity and obesity on morbidity and mortality: Current evidence and research issues. *Medicine & Science in Sports & Exercise, 31*(11), S646-S662.

Bocarro, J. N., Kanters, M. A., Edwards, M. B., Casper, J. M., & McKenzie, T. L. (2014). Prioritizing school intramural and interscholastic programs based on observed physical activity. *American Journal of Health Promotion*, *28*(3_suppl), S65-S71.

Bopp, T., Turick, R., Vadeboncoeur, J. D., & Aicher, T. J. (2017). Are you welcomed? A racial and ethnic comparison of perceived welcomeness in sport participation. *International Journal of Exercise Science*, *10*(6), 833-844.

Bourdieu, P. (1978). Sport and social class. *Social Science Information, 17*, 819-840.

Braveman, P. (2006). Health disparities and health equity: Concepts and measurement. *Annual Review of Public Health, 27*(1), 167-194.

Brock, D. W., Thomas, O., Cowan, C. D., Allison, D. B., Gaesser, G. A., & Hunter, G. R. (2009). Association between insufficiently physically active and the prevalence of obesity in the United States. *Journal of Physical Activity and Health, 6*(1), 1-5.

C.S. Mott Children's Hospital (2012). Top 10 child health concerns: Exercise, obesity & smoking lead list. *National Poll of Children's Health.* Ann Arbor, Michigan: CS Mott Children's Hospital, University of Michigan. https://mottpoll.org/sites/default/files/documents/082012Top10report.pdf

Callahan, D. (1973). The WHO definition of 'health'. *The Hastings Center Studies, 1*(3), 77-87.

Casey, M. K., Allen, M., Emmers-Sommer, T., Sahlstein, E., Degooyer, D. A. N., Winters, A. M. et al. (2003). When a celebrity contracts a disease: The example of Earvin "Magic" Johnson's announcement that he was HIV positive. *Journal of Health Communication, 8*(3), 249-265.

Casper, J., Bocarro, J. N., Kanters, M. A., & Floyd, M. F. (2011). "Just let me play!" Understanding constraints that limit adolescent sport participation. *Journal of Physical Activity and Health, 8*(S32-39).
Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: Definitions and distinctions for health-related research. *Public Health Reports, 100*(2), 126-131.
Cawley, J., Meyerhoefer, C., & Newhouse, D. (2007). The correlation of youth physical activity with state policies. [Article]. *Contemporary Economic Policy, 25*(4), 506-517.
Chalip, L. (2006). Toward a distinctive sport management discipline. *Journal of Sport Management, 20*, 1-21.
Coakley, J. J. (2017). *Sport in society: issues & controversies* (12th ed.). Boston: McGraw-Hill.
Coroniti, T. (2014). The old firm and the old prejudice: The imagined community of football hooliganism and rivalry. *Ethnographic Encounters*, *5*(1).
Costa e Silva, L., Fragoso, M. I., & Teles, J. (2017). Physical activity–related injury profile in children and adolescents according to their age, maturation, and level of sports participation. *Sports Health*, *9*(2), 118-125.
Cotte, J., & Wood, S. L. (2004). Families and innovative consumer behavior: A triadic analysis of sibling and parental influence. *Journal of Consumer Research, 31*, 78-86.
Coulter, T. J., Mallett, C. J., & Singer, J. A. (2016). A subculture of mental toughness in an Australian Football League club. *Psychology of Sport and Exercise*, *22*, 98-113.
Crawford, D. W., Jackson, E. L., & Godbey, G. C. (1991). A hierarchical model of leisure constraints. *Leisure Sciences, 13*, 309-320.
Crossman, A., Sullivan, D. A., & Benin, M. (2006). The family environment and American adolescents' risk of obesity as young adults. *Social Science & Medicine, 63*, 2255-2267.
Čulić, V. (2011). Football matches and acute cardiac events: potential effects of a complex psychosocial phenomenon on cardiovascular health. *International Journal of Epidemiology*, *40*(5), 1422-1425.
Cunningham, G. B. (2008). The influence of race on barriers to physical activity. *Applied Research in Coaching and Athletics Annual, 23*, 175-193.
Curran, K., Drust, B., & Richardson, D. (2014). 'I just want to watch the match': a practitioner's reflective account of men's health themed match day events at an English Premier League football club. *Soccer & Society*, *15*(6), 919-933.
Curry, T. J., & Strauss, R. H. (1994). A little pain never hurt anybody; a photo-essay on the normalization of sport injuries. *Sociology of Sport Journal, 11*(2), 195-208.
Curtis, J., McTeer, W., & White, P. (1999). Exploring effects of school sport experiences on sport participation in later life. *Sociology of Sport Journal, 16*(4), 348-365.
Day, K. (2006). Active living and social justice - Planning for physical activity in low-income, black and Latino communities. *Journal of the American Planning Association, 72*(1), 88-99.
Department of Health. (2001). *Exercise referral systems: A national quality assurance framework*. London, UK: Department of Health.
Dotson, M. J., & Hyatt, E. M. (2005). Major influence factors in children's consumer socialization. *Journal of Consumer Marketing, 22*(1), 35-42.
Dunning, E. (1971). The development of modern football. In E. Dunning (Ed.), *The sociology of sport* (pp. 133-151). London: Frank Cass Publishing.
Durkheim, É. (1966). *Suicide: a study in sociology* (J. A. Spaulding & G. Simpson, Trans.). New York: Free Press.
Dyreson, M. (2001). Maybe it's better to bowl alone: Sport, community and democracy in American thought. *Culture, Sport, Society, 4*(1), 19-30.
Eccles, J. S. (1993). School and family effects on the ontogeny of children's interests self perceptions, and activity choices. In J. Jacobs (Ed.), *Developmental perspectives on motivation: Vol. 40 of the Nebraska symposium on motivation* (pp. 145-208). Lincoln, NE: University of Nebraska Press.
Edwards, H. (1986). The collegiate arms race. In R. A. Lapchick (Ed.), *Fractured Focus*. Lexington, MA: Lexington Books.
Edwards, M. B. (2015). The role of sport in community capacity building: An examination of sport for development research and practice. *Sport management review*, *18*(1), 6-19.

Edwards, M. B., Jilcott, S. B., Floyd, M. F., & Moore, J. B. (2011). County-level disparities in access to recreational resources and associations with adult obesity. *Journal of Park & Recreation Administration, 29*(2), 39-54.

Edwards, M. B., Kanters, M. A., & Bocarro, J. N. (2011). Opportunities for extracurricular physical activity in North Carolina middle schools. *Journal of Physical Activity and Health, 8*(5), 597-605.

Edwards, M. B., & Rowe, K. (2019). Managing sport for health: An introduction to the special issue. *Sport Management Review*, *22*(1), 1-4.

Eitle, T. M., & Eitle, D. J. (2002). Just don't do it: High school sports participation and young female adult sexual behavior. *Sociology of Sport Journal, 19*, 403-418.

Eitzen, D. S. (1996). Classism in sport: the powerless bear the burden. *Journal of Sport & Social Issues, 20*(1), 95-105.

Eitzen, D. S. (2016). *Fair and foul: Beyond the myths and paradoxes of sport* (6th Edition). New York: Rowman & Littlefield.

Fabricant, P. D., Lakomkin, N., Sugimoto, D., Tepolt, F. A., Stracciolini, A., & Kocher, M. S. (2016). Youth sports specialization and musculoskeletal injury: a systematic review of the literature. *The Physician and Sportsmedicine*, *44*(3), 257-262.

Feinsand, M. (2011). Nick Swisher thrilled about MLB Breast Cancer awareness initiative featuring Mother's Day pink gear, *New York Daily News*. Retrieved from http://articles.nydailynews.com/2011-05-08/sports/29541976_1_pink-ribbon-pink-bats-cancer-research

Floyd, M. F., Bocarro, J. N., & Thompson, T. D. (2008). Research on Race and Ethnicity in Leisure Studies: A Review of Five Major Journals. *Journal of Leisure Research, 40*(1), 1-22.

Floyd, M. F., Spengler, J. O., Maddock, J. E., Gobster, P. H., & Suau, L. (2008). Environmental and social correlates of physical activity in neighborhood parks: An observational study in Tampa and Chicago. *Leisure Sciences, 30*(4), 360 - 375.

Fryar, C. D., Carroll, M. D., & Ogden, C. L. (2014). Prevalence of overweight and obesity among children and adolescents: United States, 1963–1965 through 2011–2012. *Atlanta, GA: National Center for Health Statistics*.

Goldsmith, P. A. (2003). Race relations and racial patterns in school sports participation. *Sociology of Sport Journal, 20*(2), 147-171.

Green, B. C., & Chalip, L. (1998). Antecedents and consequences of parental purchase decision involvement in youth sport. *Leisure Sciences, 20*, 95-109.

Green, K., Smith, A., & Roberts, K. (2005). Young people and lifelong participation in sport and physical activity: a sociological perspective on contemporary physical education programmes in England and Wales. *Leisure Studies, 24*(1), 27-43.

Greendorfer, S. L., Lewko, J. H., & Rosengren, K. S. (2002). Family and gender-based influences in sport socialization of children and adolescents. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopsychosocial perspective* (2nd ed., pp. 153-186). Dubuque, IA: Kendall-Hunt Publishing.

Hales, C. M., Carroll, M. D., Fryar, C. D., & Ogden, C. L. (2017). Prevalence of obesity among adults and youth: United States, 2015–2016. *NCHS Data Brief*. 2017; 288, 1-8.

Hanson, S. L., & Kraus, R. S. (1999). Women in male domains: Sport and science. *Sociology of Sport Journal, 16*, 92-110.

Hasbrook, C. A. (1987). The sport participation-social class relationship among a selected sample of female adolescents. *Sociology of Sport Journal, 4*, 37-47.

Hastings, D. W., Zahran, S., & Cable, S. (2006). Drowning in inequalities: Swimming and social justice. *Journal of Black Studies, 36*(6), 894-917.

Hawkins, D., & Metheny, J. (2001). Overuse injuries in youth sports: biomechanical considerations. *Medicine & Science in Sports & Exercise, 33*(10), 1701-1707.

Hedstrom, R., & Gould, D. (2004). Research in youth sports: Critical issues status. Retrieved January 28, 2009, from http://www.educ.msu.edu/ysi/project/CriticalIssuesYouthSports.pdf

Heinzmann, G. S. (2002). Parental violence in youth sports: Facts, myths, and videotape. *Parks & Recreation, 37,* 66-75.

Hoekstra, F., Roberts, L., van Lindert, C., Martin Ginis, K. A., van der Woude, L. H., & McColl, M. A. (2019). National approaches to promote sports and physical activity in adults with disabilities: examples from the Netherlands and Canada. *Disability and rehabilitation*, *41*(10), 1217-1226.

Hoye, R., Nicholson, M., & Brown, K. (2015). Involvement in sport and social connectedness. *International Review for the Sociology of Sport*, *50*(1), 3-21.

Hyman, M. D. (1967). Medicine. In P. F. Lazarsfeld, W. H. Sewell & H. L. Wilensky (Eds.), *The uses of sociology* (pp. 119-155). New York: Basic Books, Inc.

Jones, G., Bunds, K. S., Carlton, T. A., Edwards, M. B., & Bocarro, J. N. (2016). The salience of sport in cross-race friendship selection. *Journal of Amateur Sport*, *2*(1), 73-98.

Kaczynski, A. T., & Henderson, K. A. (2007). Environmental correlates of physical activity: A review of evidence about parks and recreation. *Leisure Sciences, 29*(4), 315-354.

Kanters, M. A., Bocarro, J. N., & Edwards, M. B. (2011). *School sport policy analysis: Examining policy changes to increase the impact of after-school sports and facilities on physical activity*. Raleigh, NC: North Carolina State University: IPARC: Investigating Places for Active Recreation in Communities.

Kaplan, T. A., Digel, S. L., Scavo, V. A., & Arellana, S. B. (1995). Effect of obesity on injury risk in high school football players. *Clinical Journal of Sport Medicine, 5*(1), 43-47.

Kimm, S. Y. S., Glynn, N. W., McMahon, R. P., Vorhees, C. C., Striegel-Moore, R. H., & Daniels, S. R. (2006). Self-perceived barriers to activity participation among sedentary adolescent girls. *Medicine & Science in Sports & Exercise, 38*(3), 534-540.

Kjønniksen, L., Anderssen, N., & Wold, B. (2009). Organized youth sport as a predictor of physical activity in adulthood. *Scandinavian journal of medicine & science in sports*, *19*(5), 646-654.

Klemko, R. (2011, August 29). Leages, clubs deal with perception of rise in fan violence, *USA Today*. Retrieved from http://www.usatoday.com/sports/football/story/2011-08-29/Leagues-clubs-deal-with-perception-of-rise-in-fan-violence/50183180/1

Kulig, K., Brener, N., & McManus, T. (2003). Sexual activity and substance abuse among adolescents by cateory of physical activity plus team sports participation. *Archives of Pediatric and Adolescent Medicine, 157*, 905-912.

Lee, B. (2018, November 10). What is the best sport for you? Try this healthy sport index. *Forbes*. Retrieved from https://www.forbes.com/sites/brucelee/2018/11/10/what-is-the-best-sport-for-you-try-this-healthy-sport-index/#6444baa458a4

Lee, M.-A., & Ferraro, K. F. (2007). Neighborhood Residential Segregation and Physical Health among Hispanic Americans: Good, Bad, or Benign? *Journal of Health & Social Behavior, 48*(2), 131-148.

Long, T. E., & Hadden, J. K. (1985). A reconception of socialization. *Sociological Theory, 3*(1), 39-49.

Louv, R. (2005). *Last child in the woods: Saving our children from nature deficit disorder*. Chapel Hill, NC: Algonquin Books.

Macintyre, S., Ellaway, A., & Cummins, S. (2002). Place effects on health: how can we conceptualise, operationalise and measure them? *Social Science & Medicine, 55*(1), 125-139.

MacPhail, A., & Kirk, D. (2006). Young people's socialisation into sport: Experiencing the specialising phase. *Leisure Studies, 25*(1), 57-74.

McHale, J. P., Vinden, P. G., Bush, L., Richer, D., Shaw, D., & Smith, B. (2005). Patterns of personal and social adjustment among sport-involved and noninvolved urban middle-school children. *Sociology of Sport Journal, 22*(119-136).

McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly, 15*, 351-377.

Marques, A., Ekelund, U., & Sardinha, L. B. (2016). Associations between organized sports participation and objectively measured physical activity, sedentary time and weight status in youth. *Journal of Science and Medicine in Sport*, *19*(2), 154-157.

Mathews, E. M., & Wagner, D. R. (2008). Prevalence of overweight and obesity in collegiate American football players, by position. *Journal of American College Health*, *57*(1), 33-38.

Miller, K. E., Melnick, M. J., Barnes, G. M., Farrell, M. P., & Sabo, D. (2005). Untangling the links among athletic involvement, gender, race, and adolescent academic outcomes. *Sociology of Sport Journal, 22*(178-193).

Miracle, A. W., & Rees, C. R. (1994). *Lessons of the locker room: The myth of school sports*. Amherst, NY: Prometheus Books.
Morgan, K. (2018). These are the top 10 health conditions affecting Americans. Retrieved May 6, 2019 from https://www.usatoday.com/story/sponsor-story/blue-cross-blue-shield-association/2018/10/24/these-top-10-health-conditions-affecting-americans/1674894002/
Moore, M. J., & Werch, C. E. C. (2005). Sport and physical activity participation and substance use among adolescents. *Journal of Adolescent Health, 36*(6), 486-493.
Moschis, G. P. (1987). *Consumer socialization*. Lexington, MA: Heath and Company.
Murphy, N. A., & Carbone, P. S. (2008). Promoting the participation of children with disabilities in sports, recreation, and physical activities. *Pediatrics*, *121*(5), 1057-1061.
Nixon, H. L. (1993). Accepting the risks of pain and injury in sport: mediated cultural influences on playing hurt. *Sociology of Sport Journal, 10*(2), 183-196.
Palomäki, S., Hirvensalo, M., Smith, K., Raitakari, O., Männistö, S., Hutri-Kähönen, N., & Tammelin, T. (2018). Does organized sport participation during youth predict healthy habits in adulthood? A 28-year longitudinal study. *Scandinavian journal of medicine & science in sports*, *28*(8), 1908-1915.
Parsons, T. (1951). *The social system*. New York: Free Press.
Pate, R. R., Trost, S. G., Levin, S., & Dowda, M. (2000). Sports participation and health-related behaviors among US youth. *Archives of Pediatric Adolescent Medicine, 154*(9), 904-911.
Patrick, D. L., Bush, J. W., & Milton, M. C. (1973). Toward an operational definition of health. *Journal of Health and Social Behavior, 14*(1), 6-23.
Payne, W., Reynolds, M., Brown, S., & Fleming, A. (2003). Sports role models and their impact on participation in physical activity: A literature review. *Victoria: VicHealth*, *74*.
Pechmann, C., & Knight, S. J. (2002). An experimental investigation of the joint effects of advertising and peers on adolescents' beliefs and intentions about cigarette consumption. *Journal of Consumer Research, 29*(1), 5-19.
Perkins, D. F., Jacobs, J. E., Barber, B. L., & Eccles, J. S. (2004). Childhood and adolescent sports participation as predictors of participation in sports and physical fitness activities during young adulthood. *Youth & Society, 35*(4), 495-520.
Philipp, S. F. (1998). Race and gender differences in adolescent peer group approval of leisure activities. *Journal of Leisure Research, 30*(2), 214-232.
Phillips, J. A., & Young, D. R. (2009). Past-year sports participation, current physical activity and fitness in urban adolescent girls. *Journal of Physical Activity and Health, 6*(1), 105-111.
Plato. (1902). The Republic (J. Adam, Trans.). In J. Adam (Ed.). Cambridge, U.K.: The University Press.
Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
Putney, C. (2001). *Muscular Christianity: Manhood and sports in Protestant America 1880-1920*. Cambridge, MA: Harvard University Press.
Renne, K. S. (1974). Measurement of social health in a general population survey. *Social Sciences Research, 3*, 25-44.
Richmond, T. K., Hayward, R. A., Gahagan, S., Field, A. E., & Heisler, M. (2006). Can school income and racial/ethnic composition explain the racial/ethnic disparity in adolescent physical activity participation? *Pediatrics, 117*(6), 2158-2166.
Riess, S. A. (1991). *City Games: The Evolution of American Urban Society and the Rise of Sports*. Urbana, IL: University of Illinois Press.
Right to Play International. (2008). *Harnessing the power of sport for development and peace: Recommendations to governments*. Toronto, ON: Sport for Development and Peace International Working Group.
Roadburg, A. (1980). Factors precipitating fan violence: A comparison of professional soccer in Britain and North America. *The British Journal of Sociology, 31*(2), 265-276.
Robson, S. (2001). Sport and health. In K. Hylton, P. Bramham, D. Jackson & M. Nesti (Eds.), *Sports Development: Policy, Process and Practice* (pp. 126-147). New York: Routledge.
Rojek, C. (2005). *Leisure theory: Principles and practices*. Basingstoke [England]. New York: Palgrave Macmillan.

Ruddell, J. L., & Shinew, K. J. (2006). The socialization process for women with physical disabilities: The impact of agents and agencies in the introduction to an elite sport. *Journal of Leisure Research, 38*(3), 421-444.

Sage, G. H. (1998). *Power and ideology in American Sport* (2nd ed.). Champaign, IL: Human Kinetics.

Sallis, J. F., Prochaska, J. J., & Taylor, W. C. (2000). A review of the correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise, 32*(5), 963-975.

Sallis, J. F., Conway, T. L., Prochaska, J. J., McKenzie, T. L., Marshall, S. J., & Brown, M. (2001). The association of school environments with youth physical activity. *American Journal of Public Health, 91*(4), 618-620.

Scheerder, J., Vanreusel, B., Taks, M., & Renson, R. (2005). Social stratification patterns in adolescents' active sports participation behaviour: A time trend analysis 1969-1999. *European Physical Education Review, 11*(1), 5-27.

Schwenk, T. L., Gorenflo, D. W., Dopp, R. R., & Hipple, E. (2007). Depression and pain in retired professional football players. *Medicine & Science in Sports & Exercise, 39*(4), 599-605.

Shakib, S., & Dunbar, M. D. (2004). How high school athletes talk about maternal and paternal sporting experiences: Identifying modifiable social processes for gender equity physical activity interventions. *International Review for the Sociology of Sport, 39*(3), 275-299.

Smith, G. J. (1988). The noble sports fan. *Journal of Sport & Social Issues, 12*(1), 54-65.

Smoyer-Tomic, K. E., Hewko, J. N., & Hodgson, M. J. (2004). Spatial accessibility and equity of playgrounds in Edmonton, Canada. *Canadian Geographer-Geographe Canadien, 48*(3), 287-302.

Sparvero, E. S., & Warner, S. (2019). NFL Play 60: Managing the intersection of professional sport and obesity. *Sport Management Review*, *22*(1), 153-166.

Starr, P. (2008). *The social transformation of American medicine: The rise of a sovereign profession and the making of a vast industry*. New York: Basic Books.

Stieler, M., & Germelmann, C. C. (2016). Fan experience in spectator sports and the feeling of social connectedness. In K. Kim (Ed.), *Celebrating America's pastimes: Baseball, hot dogs, apple pie and marketing?* (pp. 911-918). Springer, Cham.

Stracciolini, A., Casciano, R., Levey Friedman, H., Meehan III, W. P., & Micheli, L. J. (2013). Pediatric sports injuries: An age comparison of children versus adolescents. *The American journal of sports medicine*, *41*(8), 1922-1929.

Summers, H (2018, August 28). Best footie forward: What is the 'squiggle' logo on EFL Football League shirts next to each player's name? *The Sun*. Retrieved May 10, 2019 from https://www.thesun.co.uk/sport/football/6925086/squiggle-logo-names-football-league-shirts-mind-charity/

Trussell, D. E. (2009). *Organized youth sport, parenthood ideologies and gender relations: Parents' and children's experience and the construction of "team family"*. Doctoral Dissertation. University of Waterloo. Waterloo, ON.

Wagmiller Jr, R. L., Kuang, L., Aber, J. L., Lennon, M. C., & Alberti, P. M. (2006). The Dynamics of Economic Disadvantage and Children's Life Chances. *American Sociological Review, 71*(5), 847-866.

Walters, S., Barr-Anderson, D. J., Wall, M., & Neumark-Sztainer, D. (2009). Does participation in organized sports predict future physical activity for adolescents from diverse economic backgrounds? *Journal of Adolescent Health, 44*(3), 268-274.

Washburne, R. F. (1978). Black underparticipation in wildland recreation: Alternative explanations. *Leisure Sciences, 1*, 175-189.

Weiss, M. R., & Petlichkoff, L. M. (1989). Children's motivation for participation in and withdrawal from sport: Identifying the missing links. *Pediatric Exercise Science, 1*(195-211).

Wilbert-Lampen, U., Leistner, D., Greven, S., Pohl, T., Sper, S., Völker, C. et al. (2008). Cardiovascular events during World Cup Soccer. *New England Journal of Medicine, 358*(5), 475-483.

World Health Organization. (1946). *Preamble to the Constitution of the World Health Organization*. Paper presented at the International Health Conference, New York.

World Health Organization. (2003). *Health and development through physical activity and sport*. Geneva, Switzerland: WHO Document Production Services.

World Health Organization. (2009). *Global health risks: Mortality and burden of disease attributable to selected major risks.* Geneva, Switzerland: World Health Organization.

World Health Organization. (2018a). Mental health: strengthening our response. Retrieved May 6, 2019 from https://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengthening-our-response

World Health Organization (2018b). The top 10 causes of death. Retrieved May 6, 2019 from https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death

Young, D. R., Felton, G. M., Grieser, M., Elder, J. P., Johnson, C., Lee, J. S. et al. (2007). Policies and opportunities for physical activity in middle school environments. *Journal of School Health, 77*(1), 41-47.

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