

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

1994

Components of social facilitation, home field advantage, and home field disadvantage and their effects on sport performance

Scott Meissner

The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

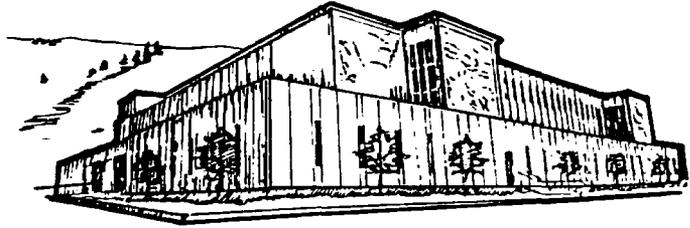
Let us know how access to this document benefits you.

Recommended Citation

Meissner, Scott, "Components of social facilitation, home field advantage, and home field disadvantage and their effects on sport performance" (1994). *Graduate Student Theses, Dissertations, & Professional Papers*. 1876.

<https://scholarworks.umt.edu/etd/1876>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.



Maureen and Mike MANSFIELD LIBRARY

The University of
Montana

Permission is granted by the author to reproduce this material in its entirety, provided that this material is used for scholarly purposes and is properly cited in published works and reports.

**** Please check "Yes" or "No" and provide signature****

Yes, I grant permission

No, I do not grant permission

Author's Signature David S. Meissner

Date: 1-21-94

Any copying for commercial purposes or financial gain may be undertaken
explicit consent.

COMPONENTS OF SOCIAL FACILITATION, HOME FIELD
ADVANTAGE, AND HOME FIELD DISADVANTAGE AND
THEIR EFFECTS ON SPORT PERFORMANCE

by

Scott Meissner

Bachelor of Science, Western Montana College, 1988

Presented in partial fulfillment of the requirements
for the degree of
Master of Science
University of Montana
1993



Approved by Chairman Board of Examiners



Dean, Graduate School

1-24-94

Date

UMI Number: EP35163

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP35163

Published by ProQuest LLC (2012). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Table of Contents

1. Introduction.....	1
2. Social Facilitation Theory.....	2
A. History of Social Facilitation.....	2
B. Zajonc's Model of Social Facilitation.....	3
1. Learning and Performance.....	3
2. Arousal and Performance.....	3
3. Mere Presence and Drive Theory.....	4
4. Zajonc' Bipolar Model.....	5
C. Criticisms of Zajonc's Model and Sport Specific.....	6
Adjustments	
1. Bipolar Model versus Continuum Model.....	6
2. Drive Theory versus Inverted "U" Theory.....	8
D. Performer Awareness versus Mere Presence.....	10
1. Evaluation Apprehension.....	10
2. Psychological Presence.....	10
3. Performer Awareness and Sport.....	11
3. Tenets of Home Field Advantage.....	12
A. Home Field Advantage Evidence.....	12
B. Classifications of Home Field Audiences.....	12
1. Intimate Audiences.....	12
2. Compact Audiences.....	13
3. Sophisticated Audiences.....	14
4. Hostile Audiences.....	15
C. Manageable Components of Home Field Advantage.....	16
1. Travel.....	16
D. Unmanageable Components of Home Field Advantage.....	18
1. Arena Structure.....	18
2. Unique Facilities.....	19
3. Team Quality.....	20
4. Game Officials.....	21
5. Offensive Superiority.....	21
E. Proactive Reduction of Home Field Advantage.....	22
4. Tenets of Home Field Disadvantage.....	23
A. Spectator Behavior.....	23
B. Increased Self Awareness.....	24
1. Reversal of Good Play.....	24
2. Fan's Expectations.....	26
C. Declining Home Team Performance.....	26
5. Conclusion.....	28

The passion to view an athletic event in the United States has grown to a near epidemic proportion (National Football League, National Hockey League, National Basketball Association, & Major League Baseball Public Relations, personal communication, October 15, 1993). Any group of people assembled to view an athletic performance is defined as an audience. An audience can be either (a) interactive (i.e. one which has verbal, visual, and emotional contact with the athletic participants); or (b) noninteractive (i.e. a group of passive onlookers who do not have verbal, visual, and emotional contact with the athletic participants) (Cox, 1990).

The influence of an audience on performance is a theme common to social facilitation, home field advantage, and home field disadvantage. The social facilitation paradigm provides a framework of how an audience specifically effects performance. Based on the social facilitation model, sport has identified numerous components that form an phenomenon in sport recognized as the home field advantage. Sport researchers have unfortunately also augmented home field advantage to the point of diminishing returns, creating an actual home field disadvantage.

The purpose of this paper is to emphasize the common theme of audience effects on performance, examine the social facilitation theory, as well as, the tenets of home field advantage and home field disadvantage.

Social Facilitation Theory

History of Social Facilitation

The social facilitation theory, defined as a limited range of audience effects on performance, was pioneered by Tripplet (1897), Allport (1924), and Dashiell (1935). Early experimental results provided evidence that the mere presence of others, often referred to as co-actors, increased arousal and thus improved performance. However, Gates and Allee (1930), as well as Pessin (1933), using experimental methods similar to that of Allport and Dashiell, reported performance to be clearly inferior when observed by an audience. Indeed, the social facilitation theory existed, but the results of early experimental studies appeared to be contradictory. The contradiction of results eventually led to research interest in social facilitation to dwindle. This abandonment was unfortunate, as basic questions about social facilitation's dynamics and causes remained unresolved.

Not until Zajonc (1965) attempted to dispel the conflicting results by emphasizing one subtle consistency did social facilitation rebound as a reputable theory. Zajonc concurred with earlier studies that the mere presence of an audience would effect performance, but avoided earlier researcher contradictions by distinguishing between learning and performance (Zajonc, 1965). In doing so, Zajonc not only resolved many of the problems inherent in earlier

studies, but also initiated a renewed interest in social facilitation research.

Zajonc's Model of Social Facilitation

Learning and Performance. Zajonc's model (1965) defined learning as the acquisition of new or complex responses. During learning, the performer will elicit a dominant response. A dominant response is a reaction to a stimuli that has the highest probability of occurrence (Geen & Gange, 1977). Because the new skill is just being learned or is complex, a dominant response in learning is the incorrect response. When performing the skill after it has been mastered, the dominant response is the correct response and has the highest probability of occurrence because the tasks are now simple and well-learned (Zajonc, 1965). For example, a beginning golfer is more likely to play poorly in front of a large tournament gallery, while a professional golfer is more likely to play better in tournament play than in practice rounds.

Arousal and Performance. Zajonc (1965) proposed that well-learned responses will be performed at a higher rate in the presence of an audience because of increased arousal on the part of the performer. Arousal is defined as the performer's physiological state of readiness (Cox, 1990). The increased arousal will prompt the skilled performer to utilize peripheral cues that may be necessary to solve complex tasks (Cox, 1990). Conversely, learning will be

impeded in the social situation because the dominant response caused by increased arousal is incorrect. In this case, the increased arousal interferes with the performer's ability to focus on central cues necessary to complete a simple or complex task and therefore performance is reduced (Cox 1990).

Mere Presence and Drive Theory. Zajonc's model assumed that the mere presence of either co-actors or an audience produced an increment in general arousal (Geen & Gange, 1977). The arousal in turn served as a drive that energized dominant responses at the expense of subordinate ones. This increase in physiological arousal has been equated by Zajonc with the Hull (1951) and Spence (1956) drive theory. The theory of drive predicted a positive linear relationship between arousal (drive) and performance (Cox, 1990).

According to drive theory, increased arousal emits the dominant response. The dominant response for beginners or athletes completing a complex task will be the incorrect response. For example a beginning golfer will often "slice" or "hook" the ball because of an incorrect swing. The correct response will only occur when completing simple tasks or when the athlete finally possesses a high degree of skill (Cox, 1990). A professional golfer will rarely "slice" or "hook" the ball due to an incorrect swing because the golf swing is a well-learned task.

Landers and McCullagh (1976) further supported this

theory. They reasoned that simple speed and power tasks were generally facilitated by the presence of an audience, while continuous, fine control accuracy tasks were facilitated, but only late in learning. Marten's (1969) palmar sweat prints and Lander's and McCullagh's (1976) activation levels consistently demonstrated that physiological arousal was greater for subjects who performed in the presence of an audience or co-actors than those who performed alone.

Zajonc's Bipolar Model. One further consideration Zajonc's model made was the distinction between passive onlookers and co-actors in a bipolar skill paradigm. One scheme considered the behavior of performers in the presence of passive onlookers (audience), and the second considered their behavior in the presence of others engaged in the same activity (co-actors). Both the audience and the co-actor models have provided evidence showing learning to be impaired by the presence of others, while the performance of learned responses have been enhanced (Zajonc, 1965).

Both team and individual sports utilize Zajonc's experimental paradigm simultaneously. During performance, athletes are viewed by both an interactive and noninteractive audience. The interactive audience has an opportunity to either encourage or discourage the athlete's performance by visual, verbal, and emotional contact. While the noninteractive audiences (i.e. television or radio audiences) are not physically present, but they do have a

psychological effect on the performer. However, individualized sports such as golf and tennis have reduced interactive audience effects because of the strict spectator etiquette (Reilly, 1992).

The co-action model consists of individuals simultaneously engaged in the same activity and in full view of each other. Archery, target shooting, golf, tennis, and biathlons are examples of individual co-action sporting events. Team sports, such as football, basketball, hockey, and baseball also conform to the co-action model. Individual team members perform not only before an audience, but also in full view of the opposition and teammates.

Criticisms of Zajonc's Model and Sport Specific Adjustments

Although Zajonc's model is generally well accepted, the model is not without weaknesses, limitations, and criticisms. Cottrell's (1968) "evaluation apprehension", Chapman's (1974) "psychological apprehension", Singer's (1975) "performance continuum", and Yerkes-Dodson inverted "U" theory (1908) all provide insightful variations to the social facilitation model presented by Zajonc.

Bipolar Model versus a Continuum Model. One main criticism of Zajonc's model has been that the skill ability was bipolar rather than dispersed across a continuum. Singer (1975) modified Zajonc's model by adding an intermediate skill level. He postulated that the dominant responses elicited at such a level were both correct and

incorrect (Singer, 1975). An intermediate performer lacked the skill to produce consistent correct responses, but has acquired enough skill to avoid the constant incorrect response. An intermediate golfer would "slice" or "hook" fewer balls than a beginner, but would lack the consistent shot making ability of an advanced golfer.

With the addition of Singer's intermediate level, Zajonc's original bipolar model evolved into a more practical performance continuum. This continuum, involving three phases, allowed a smoother transition between learning and performance.

Unfortunately, athletic teams are comprised of athletes who are not represented on Singer's three prong continuum. To accurately understand how an audience will effect a performance, the specific skill level of that performer must first be identified. Thus, it is proposed that a five prong continuum would more accurately identify the skill level of a performer.

The proposed five category continuum would include Singer's (1975) original three skill levels of beginner, intermediate, and performer. In addition, the five prong continuum would also include a beginning intermediate and advanced intermediate level. The beginning intermediate level is defined as a performer capable of eliciting more correct responses than a beginner, but fewer than an intermediate performer. The advanced intermediate level is

defined by a performer who possesses more skill than an intermediate, but is less skilled than an advanced performer.

A five prong continuum may be applicable to most sports. For sport specific application, the skill level titles could be changed to allow better correlation with the specific sport. The skill level definitions, however, would remain the same. For instance, a swimming continuum could designate beginning swimmers as tadpoles. Tadpoles would possess the basic swimming skills such as proper breathing and floating. A guppy's (i.e. beginning intermediate) skills would consist of the tadpole's skills in addition to underwater swimming and front crawl abilities. The intermediate swimmer, or gold fish would display the previously mentioned skills plus possess back stroke and diving capability. The trout, or advanced intermediate swimmer's skills would include the breast stroke and side stroke as well as the other rudimentary skills. Finally, the advanced swimmer, or dolphin would possess the mastery of the butterfly stroke and stunt diving capabilities as well as all the other fundamental skills.

Drive Theory versus Inverted "U" Theory. A second criticism of Zajonc's model is the use of the drive theory to explain the arousal and performance relationship. Cox (1990) believed the relationship between arousal and performance has been best represented by the inverted "U"

curve. Unlike the Hull and Spence drive theory, the inverted "U" simply states that the relationship between performance and arousal is quadratic as opposed to linear and takes the form of an inverted-U (Cox, 1990).

However, the inability to precisely measure arousal in humans leads to the Yerkes-Dodson law. The Yerkes-Dodson law states that complex tasks require less arousal than do simple tasks for optimal performance (Yerkes & Dodson, 1908). For example, if a golfer is attempting to sink a long putt to win a tournament in front of an audience that increases the golfer's arousal, the execution of the task would be impeded by the increased arousal. Conversely, performance of a simple task (i.e. weight lifting) would suffer if the audience failed to increase the performer's arousal level (Cox, 1990).

The Yerkes-Dodson law (1908) further concluded that the inverted "U" curve also allowed for a window of optimal arousal that produced successful performance. The level of arousal that was ideal for the task at hand was, however, highly individual. For example, highly skilled football players required a moderately high level of arousal for maximum performance. Conversely, less skilled football players demanded a relatively low level of arousal for maximum performance (Cox, 1990).

If Zajonc's model of social facilitation involved the inverted "U" curve, in finding the optimal level of arousal

for each athlete, the model may be more applicable for sport. Both the athletes and the coaches would better understand that the skill level of the performer and the complexity of the task, govern the level of arousal necessary for optimal performance.

Performer Awareness versus Mere Presence

Evaluation Apprehension. Cottrell, Sekerak, Wack, and Rittle (1968) challenged Zajonc's basic theory by suggesting that it was not mere presence of an audience as such, but evaluation apprehension of the performer which was responsible for increased arousal. Evaluation apprehension has been defined as an awareness by a performer that an audience is arousing, only if the audience is perceived to be evaluating performance (Cottrell et al., 1968). Although the presence of an audience enhanced the emission of dominant responses, the mere presence of uninterested persons in the same physical proximity as the performer did not enhance the emission of dominant responses (Cottrell et al., 1968). It was proposed that the drive effects upon individual performance do not occur unless the others present are either an interactive audience or co-actors (Cottrell et al., 1968).

Psychological Presence. Chapman (1974) developed the psychological presence concept, which seemed to combine Cottrell's "evaluation apprehension" and Zajonc's "mere presence" theories. Psychological presence is the degree to

which a performer is aware of the presence of an audience. Chapman's research showed that during mental retention tasks, an evaluative audience produced the greatest amount of arousal, followed by the blindfolded (noninteractive) audience and the alone condition.

Performer Awareness and Sport. Cottrell's evaluation apprehension and Chapman's psychological presence helped explain the difference in an individual's normal solitary performance when other people were present (Bond & Titus, 1983). Even though the previously mentioned social facilitation studies have been primarily collected in a laboratory setting and may lack the spontaneous emotion and excitement of an athletic event, both social facilitation and sport share a common component. An audience, a co-actor, or both are present when either social facilitation or sport performance occurs. Therefore, the individual's awareness that performance has been evaluated is common to both social facilitation and sport.

Tenets of Home Field Advantage

Home Field Advantage Evidence

During an athletic event, as with social facilitation studies, either the co-actor, the audience, or both have shown the capability of effecting performance. Based on the social facilitation's theory of audience effect on performance, sport researchers have investigated other phenomena, namely, home field advantage. Home field advantage has been defined as a theory demonstrating a facilitation of home team performance due to a multitude of factors including; fan support, visiting team travel, and game officials (Cox, 1990).

Classifications of Home Field Audiences

Because of the atmosphere created by a friendly audience, athletic teams playing at home win significantly more often than chance would dictate (LeUnes & Nation, 1989). The audience, at a sporting event is not merely present, rather the sport audience will be an energized mass of humanity that is attempting to influence the outcome of a sporting event. The specific motivation provided by the audience is dependent on the classification of spectators.

Intimate Audiences. One factor enhancing the emotional arousal of performers is loud crowd noise. The acclaim of an audience is magnified in proportion to the spectators proximity to the playing area (Edwards, 1979). Sheer compactness and intimacy of the audience allows basketball

and hockey to have the most pronounced home advantage (Schwartz & Barsky, 1977).

The design of an indoor facility, which increases the proximity of spectators, allows significantly more visual and vocal interaction with the athletes. The closer and more crowded the facility, the more communication is facilitated (Thirer & Rampey, 1979). This opportunity for spectators to communicate with athletes both verbally or visually directly influences the arousal levels of the performer, thus further solidifying the home advantage (Wankel, 1977).

At National Basketball Association (NBA) or National Hockey League (NHL) games, fans sit in the same row as the team or directly behind the team's bench. The intimacy with the performers gives fans an illusion of prestige or belonging and makes them feel as though they are participating in the athletic event (Lidz, 1992). Obviously NBA and NHL fans located in these seats have increased interaction with the athletes. These fans, through heckling, displaying of signs, or throwing objects, may negatively influence the visiting team's performance (Lidz, 1992; Scher, 1992).

Compact Audiences. Closely associated with audience intimacy is the density of the audience. The audience is seldom merely present, but rather provides cues and reinforcements which effect performance. If the level of

arousal increases in proportion with the number of onlookers, an arena that is filled to capacity or near capacity is more likely to provide the intense crowd noise associated with the home field advantage (Russell & Drewry, 1976).

Conversely, a sparsely populated stadium projecting feelings of emptiness and disinterest fails to provide the motivation and enthusiasm that will increase player arousal and perhaps facilitate performance. Stadiums filled to capacity are typically associated with winning teams. Thus, teams that win are rewarded with capacity crowds. These large home crowds provide a positive environment that enhances home team performance, but diminishes the visiting team's execution (Schwartz & Barsky, 1977).

Sophisticated Audiences. A third characteristic of a crowd is audience sophistication. Henchy and Glass (1968) suggested that the presence of another participant with sufficient knowledge to evaluate one's performance will produce greater emission of dominant responses than the presence of another who has seemingly insufficient knowledge to evaluate one's performance. If the dominant response resulted in a gain for the home team, the crowd's loud approval will be evidence that they know and understand the mechanics of the sport and can respond accordingly.

When a batter in baseball hits "behind the runner" to move the runner into scoring position, only a truly

knowledgeable baseball fan will appreciate the deliberate sacrificing of individual goals for the good of the team. Virtually all basketball audiences recognize the importance of free throw shooting, particularly in close games. Home team spectators show their knowledge of the game by allowing home team players to shoot free throws in near silence with very few distractions. The home audience also recognizes that their cheering and movement may sway visiting player's concentration and thus adversely influence performance.

Hostile Audiences. Much to the same degree that a positive partisan crowd can increase performance of the home team, verbal harassment and "razzing" of visiting performers impairs their completion of complex skills (Thirer & Rampey, 1979). Home spectator's negative jeering is primarily targeted toward visiting teams. The direct intent of the home crowd's hostile and abusive behavior is to rattle and distract the guest, thus impairing performance (Greer, 1983). Duke University's Cameron Indoor Arena and New Mexico State's "Snake Pit" are two of college basketball's best examples of a negative partisan crowd deterring performance of the visiting team. In fact, attempts to anger and distract visiting players are the norms in virtually all sport arenas (Greer, 1983).

The impairment of performance has been directly related to increased arousal on the part of the athlete. Because of the added anxiety of unfamiliar surroundings, visiting

athletes begin competition at a higher level of arousal. As a result, additional increments of arousal have been shown to be detrimental to performance of the visitors because of ceiling effects in the relationship of arousal to performance (Greer, 1983). Therefore, the home team being relatively more relaxed, may benefit from the increments of arousal provided by a noisy home crowd. The home team performers that receive additional increments of arousal elevate their arousal to the optimal degree and performance may be facilitated.

The variety of audiences such as compacted, hostile, intimate, and sophisticated are the foundation of the home advantage (Cox, 1990). Other components, however, have been identified as contributors to the home field advantage and include; (a) travel (Koppett, 1973, Courneya & Carron 1991), (b) physical structure of the arena (Greer, 1983), (c) unique facilities (Lowry, 1992), (d) team quality (Schwartz & Barsky, 1977), (e) game officials (Koppett, 1973, Rainey & Schweickert, 1991), and (f) offensive superiority (Schwartz & Barsky, 1977). None of the home field advantage factors alone seem to be sufficient to produce a significant home advantage. Rather, a combination or interaction of two or more factors may be responsible for the home advantage (Courneya & Carron, 1991).

Manageable Components of Home Field Advantage

Travel. Although the consequences of travel were not

found to be a primary contributor to home field advantage (Courneya & Carron, 1991), the standard handicaps of travel such as irregular meals, cramped planes and buses, and disruption of daily routine did contribute to the rigors suffered by the opposing team. Even the most comfortable travel days sapped some degree of energy and relaxation from the visiting team (Koppett, 1973). If travel is a true indicator of home advantage, the visitor disadvantage should be most pronounced in baseball, the sport spending the most time on the road. Visitor disadvantage should also be the greatest during the second half of a season when the effects of travel and fatigue begin to accumulate.

Hockey and basketball, however, are the two team sports that have the most pronounced home advantage (Thirer & Rampey, 1979). Visiting teams in these sports, with the exception of the play-offs, play one game per city. Traveling is done after the completion of a night game or early in the morning to allow for a pre-event practice. A basketball or hockey road trip is a revolving plane, hotel, arena, room service nightmare (Bradley, 1976). Athletes seldom have the opportunity to adjust to the visiting arena, much less the time zone.

Visiting baseball teams, on the other hand, usually play three, four, or five game series with the home team. The increased length of stay allows athletes to develop a "road routine". This "road routine" may not be as favorable

as the home routine, but the extended stay in each city allows the athlete to avoid the standard handicaps of travel. Despite an accumulation of travel fatigue over a longer baseball season, a comparison of home winning percentages of first halves versus second halves of seasons has shown the home field advantage in baseball to be the least pronounced as compared to basketball and hockey (Courneya & Carron, 1991).

The aptitude of road teams to successfully contend with the handicaps of travel may be due in part to having established a "road routine". A "road routine" should be as similar as possible to the home routine. These similarities should include; normal sleep patterns, food consumption, and pre-event relaxation whenever possible. Using an efficient travel itinerary with regards to arranging hotel, restaurant, and transportation schedules, will allow visiting teams to avoid distractions and concentrate on performance.

Because of the variability in travel philosophy, a generic "road routine" would be nearly impossible to prescribe. However, the key to a successful "road routine" is limiting the number of distractions and stressing the similarities of the home routine.

Unmanageable Components of Home Field Advantage

Arena Structure. Practitioners of sport give as much credit to arena structure as to any other factor that might

determine the outcome of a contest (Courneya, 1990). Though the degree of home field advantage differs from one sport to another, the largest home advantage is seen in indoor sports (i.e. hockey and basketball), while the outdoor sports, such as football and baseball have the least decisive home advantage (Schwartz & Barsky, 1977).

Greer (1983) reported that the home field advantage found in indoor sports was mainly attributable to the social support of the home audience. The positive remarks expressed by the home audience toward the home team is the type of interaction fundamental to a successful home advantage (Greer, 1983). A decreased home field advantage in outdoor sports can be partially attributed to lack of intimate social support and interaction between the audience and the performers. This separation is due to the position of the playing field in relationship to the audience (Thirer & Rampey, 1979).

Unique Facilities. In many ball parks, there exists a facility "personality" requiring visiting teams to contend with a variety of home field idiosyncrasies. The peculiarities of the playing area unique in structure provide a more decisive home advantage (Greer, 1983). Fenway Park's left field wall, the "Green Monster", is an excellent example of a stadium with a personality that accounts for a decisive home field advantage (Lowry, 1992).

Though newly built sport arenas may lack such

distinctive personalities, their construction still contributed to the home field advantage. Presently, stadiums are designed to provide quality seating for a large number of spectators (Lowry, 1992). The indoor or domed stadium design improved the spectator intimacy and density, thus increasing social support of the home audience (Greer, 1983). Domed stadiums also take sports traditionally played outside (e.g., baseball and football) and place them in an indoor environment, thus increasing audience presence and home field advantage.

Team Quality. Regardless of game location, design of stadium, or effects of travel, the quality of the home team has also been shown to influence home field advantage. Schwartz and Barsky (1977) reported an upper division home team maintained a pronounced advantage over both upper and lower division visitors. The success of the superior home team was therefore disproportionately high when it played an inferior visitor.

Conversely, lower division home teams did not have a distinct advantage over upper division visiting teams, although their performance did improve at home. Similar to upper division hosts, lower division home teams dominated teams of the same caliber when playing at home (Schwartz & Barsky, 1977). An inferior team visiting the territory of a winning team already has "two strikes" against it by virtue of respective team quality and locale of the game.

Game Officials. Audiences at sporting events are not passive, rather they are likely to emit comments ranging from encouragement to displeasure directed at both players and officials. The work of officials is inescapably subjective despite a conscious effort to be objective in their decision making (Koppett, 1973). Very few officials can resist the subliminal persuasion for the home team produced by the home crowd. An official's "little" decisions and non-decisions mount and add up, eventually resulting in home field advantage. Visiting teams often feel as though game officials are members of the home team, rather than unbiased objective jurors of the game (Vecsey, 1993).

Offensive superiority. In review of past sport performances, the home team has exhibited superiority in offensive performance as compared to their visiting counterparts (Schwartz & Barsky, 1977). The functional assertive behaviors, associated with offensive superiority, are precisely the kinds of activities most likely to elicit the approval of a friendly audience. There seems to be a greater level of offensive activity, efficiency, and team work on the home team's part.

Schwartz and Barsky (1977) reported home baseball teams scored more runs as a proportion of hits, walked more, and struck out less, signaling better home performance "in the clutch". Home hockey teams exhibited superiority in goals

scored, shots on goal, and assists. The pattern continued in basketball. The home team took more shots and scored more field goals and points than the visiting team. Home basketball teams also enjoy a distinct superiority in rebounds, which meant greater control of the ball and domination of the game (Schwartz & Barsky, 1977).

Proactive Reduction of Home Field Advantage

The unmanageable home field advantage components unfortunately cannot be directly manipulated by the visiting teams to minimize the home advantage. Visiting teams can, however, take a proactive approach to playing on the road. A proactive approach is defined as tactics implemented to create an awareness of the impending obstacles and suggest possible interventions to avoid their severity.

Because of the inconsistencies between sports, designing a standard proactive strategy may be impossible. In general, visiting teams should: (a) become acquainted with the home team's arena and the facility's peculiarities; (b) focus on the quality of their own team and design strategies that will maximize performance; (c) accept that game officials may be biased toward the home team and guard against comments or reactions that will be detrimental to the team; and (d) understand that the home team may be more assertive on offense and develop tactics that will amplify their own offensive and defensive performances.

Tenets of Home Field Disadvantage

The home field disadvantage, much like the home field advantage, is an occurrence that can help determine the outcome of an athletic event. A supportive home crowd, is one factor that exemplifies the home field advantage. There also appears to be a level of spectator involvement which can accomplish the opposite of their intended purpose of supporting the home team, resulting in home field disadvantage. Home field disadvantage is also a defined phenomenon demonstrating home team performance to deteriorate due to a multitude of factors including (a) spectator behavior, (b) home team's increased self awareness, and (c) "choking".

Spectator Behavior

In sport, during periods of normal spectator behavior, home team players committed fewer violations than visiting players (Thirer & Rampey, 1979). This may be attributable to the fact that the home team was in a more relaxed and poised state due to the familiarity with their environment. Following spectator antisocial behavior, however, violations by the home team increased significantly while there was no change for the visitors. This aggressive behavior by spectators served to incite reckless "dysfunctional aggression" by home players. The visiting team, who does not relate to the crowd as much as the home team due to the obvious partisanship, does not display "dysfunctional

aggressive" behaviors (Thirer & Rampey, 1979).

Increased Self Awareness

A supportive home audience ordinarily attempts to adversely effect a visitor's performance and facilitate home team performance. However, intensely supportive audiences, such as those cheering for the home side at decisive championship games, increase a performers self-awareness (Schlenker & Leary, 1982). Such increased awareness may interfere with the execution of skills which are normally performed at a high level of competence.

Baumeister and Steinhilber (1984), presented two models based on heightened self-attention caused by the prospect of imminent success. The first model suggests that attention to self distracts one from cues or information necessary for optimal performance. This may partially explain the drop in beginner's performance when an audience is present. The second model suggested that skills are well-learned or automatic-response sequences and that renewed attention to the components of these sequences may disrupt their smooth execution. The second model demonstrated how skilled performers can also be adversely effected by an audience.

Reversal of Good Play. Baumeister and Steinhilber (1984) also found home field advantage in both basketball and baseball to be apparent early in series, but a home field disadvantage in the deciding game. This is evidenced by the reversal of good play between home and visiting

performers. In baseball, the visitors made more errors in the first two games, but the home team made more errors in the seventh game. Visitor performance was also superior in basketball, where foul shooting by the host team was lower than that of guests in the final game of the series (Baumeister & Steinhilber, 1984). Wright, Jackson, Christie, McGuire, and Wright (1991) investigated the British Open scores and found golf to have similar home field disadvantage components as baseball and basketball.

Golf provides a rather interesting comparison to team sports in the sense of home field disadvantage. First, golf audiences are typically polite to visiting competitors. The variable of crowd razzing and abuse is noticeably absent. Secondly, because the "plays" in golf are mutually determined, the golf ball must be at rest before play. Therefore, a golfer cannot have any direct influence on another golfer's ball. This is in sharp contrast to basketball or baseball, where poor play by the home team may be due to a lapse in play by only one member of the team.

Despite these contrasting factors, golf produced identical home field disadvantage results. Wright et al. (1991) found British golfers scored lower in the first round, but higher in the final round compared to their foreign competitors. These results further supported the notion that home athletes who played in front of a supportive audience performed less successfully than

visiting players when the opportunity arose to capture a championship.

Fan's Expectations. Benjafield, Liddell, and Benjafield (1989) suggested that the NHL home field disadvantage in deciding games would only appear in series involving teams which have developed a reputation for being winners. Home audiences may not only wish their teams win, but under certain circumstances, also expect their teams to win. This is largely attributed to the fact that the home fans of recurrent championship teams have a heightened expectation for future success. The more intensely a home audience expects their team to win, then the more likely it is that home team will lose (Benjafield, et al., 1989). This expectation, which ultimately led to the destruction of self-awareness, correlated highly with the findings of Baumeister and Steinhilber (1984).

Declining Home Team Performance

The actual success of the visitors in deciding games may also be partially attributed to the home team "choking", rather than improved visitor performance. Choking can be defined as the inability to perform up to previously exhibited standards (Leith, 1988). This behavior may occur in a variety of forms including (a) an athlete who plays well in every game except the "big one" or (b) plays well throughout the game, but folds in a clutch situation.

Baumeister and Steinhilber (1984) reported choking to

occur only when the performer could acquire a favorable identity (i.e. winner or champion). Heaton and Segal (1989) suggested that impending success, as well as, fear of acquiring a negative identity contributed to choking under pressure. Heaton and Segal (1991) expanded their theory of choking by contending that performance failure is highly individual. Athletes low in self-consciousness appear to be more suggestible and aware of the audience response. Conversely, athletes possessing a heightened awareness of their true internal state (high self-consciousness) will be less likely to be suggestible and effected by audience response.

When success is within grasp, particularly success in front of the home crowd, the performance decrements by the home team may be attributed to the impending redefinition of self and behavior of the home audience. The visiting team will also have a tendency to become aware of self when facing imminent victory. However, this tendency is dampened by the presence of a hostile, rejecting audience, which subdues or removes immediate self awareness allowing the visitors to maximize performance.

Conclusion

Clearly, as long as sport remains an important component of society, spectators will continue to demonstrate their power to influence performance. Sport, in an effort to develop and maintain a winning tradition must address all aspects of performance including such theories as social facilitation, home field advantage, and home field disadvantage. These theories undeniably influence sport performance. The elements of this paper and its recommendations can serve as a contribution to reducing home field advantage and home field disadvantage.

References

- Allport, F.H. (1924). Social psychology. Houghton - Mifflin: Boston.
- Baumeister, R. F. & Steinhilber, A. (1984). Paradoxical effects of supportive audiences on performance under pressure: the home field disadvantage in sports championships. Journal of personality and social psychology, 47(1), 85-93.
- Bell, P. A. & Yee, L. A. (1988). Skill level and audience effects on performance of a karate drill. Journal of social psychology, 129(2), 191-200.
- Benjafield, J., Liddell, W. W., & Benjafield, I. (1989). Is there a home field disadvantage in professional sports championships? Social behavior and personality, 17(1), 45-50.
- Bradley, B. (1976). Life on the run. New York Times Book Co: New York.
- Bond, C. F. & Titus, L. J. (1983). Social facilitation: a meta-analysis of 241 studies. Psychological bulletin, 94(2), 265-292.
- Chapman, A. J. (1974) An electromyographic study of social facilitation: a test of the 'mere presence' hypothesis. British journal of psychology, 65(1), 123-128.
- Cottrell, N. B., Sekerak, G. J., Wack, D. L., & Rittle, R. H. (1968). Social facilitation of dominant responses by the presence of an audience and the mere presence

- of others. Journal of personality, 9(3), 245-250.
- Courneya, K. S. (1990). Importance of game location and scoring first in college baseball. Perceptual and motor skills, 71, 624-626.
- Courneya, K. S. & Carron, A. V. (1991). Effects of travel and length of home stand/road trip on home advantage. Journal of sport & exercise psychology, 13, 42-49.
- Cox, R. H. (1990). Sport psychology concepts and applications (2nd ed.). Wm. C. Brown Publishers: Dubuque, IA.
- Dashiell, J.E. (1935). Experimental studies of the influence of social situations on the behavior of individual human adults. C. Murchison (ed.), A handbook of social psychology. Clark University Press: Worcester, MA.
- Edwards, J. (1979). The home field advantage. In J.H. Goldstein (ed.), Sports, games, and play: social and psychological viewpoints. Hillsdale, NJ: Halstead Press.
- Geen, R. G. & Gange, J. J. (1977). Drive theory of social facilitation: twelve years of theory and research. Psychological bulletin, 84(6), 1267-1288.
- Greer, D. L. (1983). Spectator booing and the home advantage: a study of social influence in the basketball arena. Social psychology quarterly, 46(3), 252-261.
- Heaton, A. W., & Segal, H. (1989). The "championship choke" revisited: the role of fear of acquiring a negative

identity. Journal of applied social psychology, 19(12), 1019-1033.

Heaton, A. W., & Segal, H. (1991). Self-consciousness, self-presentation, and performance under pressure: who chokes, and when? Journal of applied social psychology, 21(3), 175-188.

Henchy, T. & Glass, D. C. (1968). Evaluation apprehension and the social facilitation of dominant and subordinate responses. Journal of personality and social psychology, 10(4), 446-454.

Hunt, P. J. & Hillery, J. M. (1973). Social facilitation in a coercion setting: an examination of the effects over learning trials. Journal of experimental social psychology, 9, 563-571.

Hull, C. L. (1951). Essentials of behavior. New Haven, CT: Yale University Press.

Koppett, L. (1973). The essence of the game is deception, thinking about basketball. Little, Brown and Company: Boston.

Landers, D. M. & McCullagh, P. D. (1976). Social facilitation of motor performance. Exercise and sport sciences reviews. 4, 125-162.

Leith, L. M. (1988). Choking in sports are we our own worst enemies. International journal of sport psychology, 19(1), 59-64.

LeUnes, A. D. & Nation, J. R. (1989). Sport psychology an

introduction. Nelson-Hall: Chicago.

- Lidz, F. (1992). Out of bounds, Sports Illustrated, 77(23), 76-84.
- Lowry, P. J. (1992). Green Cathedrals. Addison-Wesley Publishing Co., Inc.: Reading Massachusetts.
- Martens, R. (1969). Effect of an audience on learning and performance of a complex motor skill. Journal of personality and social psychology, 12, 252-260.
- Pessin, J. (1933). The comparative effects of social and mechanical simulation on memorizing. American journal of psychology, 45, 263-281.
- Pollard, R. (1986) Home advantage in soccer: A retrospective analysis. Journal of social sciences, 4, 237-248.
- Rainey, D. W. & Schweickert, G. (1991). Evaluations of umpire performance and perceptions of appropriate behavior toward umpires. International journal of sport psychology, 22(1), 66-77.
- Reilly, R. (1992). Miss manners would be teed off. Sports Illustrated, 76(11), 92.
- Russell, G. W. & Drewry, B. R. (1976). Crowd size and competitive aspects of aggression in ice hockey: an archival study. Human relations, 29(8), 723-735.
- Singer, R. N. (1975). Myths and truths in sports psychology. Harper & Row Publishers, Inc.
- Scher, J. (1992). Pass the pacifier. Sports Illustrated, 77(18), 76-84.

- Schwartz, B. & Barsky, S. F. (1977). The home advantage. Social forces, 55(3), 641-661.
- Schlenker, B. R. & Leary, M. R. (1982). Social anxiety and self-presentation: a conceptualization and model. Psychological bulletin, 92, 641-669.
- Spence, K. W. (1956). Behavior theory and conditioning. New Haven, CT: Yale University Press.
- Thirer, J. & Rampey, M. S. (1979). Effects of abusive spectators' behavior on performance of home and visiting intercollegiate basketball teams. Perceptual and motor skills, 48, 1047-1053.
- Vecsey, P. (1993). Home cooking leaves 'em content. USA Today, Wednesday, May 12, 1993, 7C.
- Wankel, L. M. (1977). Audience size and trait anxiety effects upon state anxiety and motor performance. Research quarterly, 48, 181-186.
- Wright, E. F., Jackson, W., Christie, S. D., McGuire, G. R., & Wright, R. D. (1991). The home-course disadvantage in golf championships: further evidence for the undermining effect of supportive audiences on performance under pressure. Journal of sport behavior, 14(1), 51-60.
- Yerkes, R. M. & Dodson, J.D. (1908). The relationship of strength of stimulus to rapidity of habit formation. Journal of comparative neurology and psychology, 18, 459-482.

Zajonc, R. B. (1965). Social facilitation. Science, 149,
169-274.