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EXAMINING FAIRNESS PERCEPTIONS OF FINANCIAL RESOURCE ALLOCATIONS IN U.S. OLYMPIC SPORT

By

Stephen W. Dittmore B.A., Drake University, 1991 M.A., Drake University, 1996

A Dissertation
Submitted to the Faculty of the
Graduate School of the University of Louisville
in Partial Fulfillment of the Requirements
for the Degree of

Doctor of Philosophy

Department of Leadership, Foundations, and Human Resource Education University of Louisville Louisville, Kentucky

May 2007

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A Dissertation Approved on

March 30, 2007

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ABSTRACT

EXAMINING FAIRNESS PERCEPTIONS OF FINANCIAL RESOURCE ALLOCATIONS IN U.S. OLYMPIC SPORT

Stephen W. Dittmore

March 30, 2007

The purpose of the study was to measure U.S. National Governing Body (NGB) administrators' perceptions of fairness of financial resource allocation within the U.S. Olympic Movement. The study was grounded in the organizational justice literature, specifically in distributive justice, which focuses on the perceived fairness of outcome decisions within organizations. This study follows that pattern, but adds to it by examining a new setting and controlling for the construct of procedural justice, which focuses on perceived fairness of policies and procedures employed within organizations.

The study examined the perceived fairness of seven Distribution Principles and also measured which Distribution Principle NGB administrators believed was the most fair and which was most likely to be used to make resource allocation decisions. Study participants most often identified *Need to be Competitively Successful* as the most fair distribution principle but believed *Equity Based on Medals Won* was the most likely to be used. These results expand the growing literature on resource allocation in athletics by exploring a new context, the U.S. Olympic Movement, and offer practical understanding as to how U.S. NGB administrators perceive resource distribution decisions.

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CHAPTER 1

INTRODUCTION

This dissertation examines Olympic National Governing Body (NGB) administrators' ratings of resource distribution principles. The primary question posed was: What do those involved with Olympic sports perceive as fair when financial resources are distributed within Olympic sport programs? The 39 NGBs in the United States compete against one another for scarce financial resources, and many NGBs rely on the United States Olympic Committee (USOC) to provide funding assistance. This study explores which resource allocation distribution principles NGB administrators perceive to be the most fair and is grounded in the literature on distributive justice.

Governance of Olympic sport in the United States is guided by the USOC and is codified in federal law through the Ted Stevens Olympic and Amateur Sports Act (ASA) which was originally made law in 1978. Currently, a contradiction seems to exist in the mission and practice of the USOC. The USOC's mission, as stated in its 2006 corporate bylaws, is "To support United States Olympic and Paralympic athletes in achieving sustained competitive excellence and preserve the Olympic ideals, and thereby inspire all Americans" (Bylaws of the United States Olympic Committee, n.d., p. 4). This mission appears to contrast with the goals and objectives identified in the ASA which stress many responsibilities including assisting "organizations and persons concerned with sports in the development of amateur athletic programs for amateur athletes" (Ted Stevens Olympic & Amateur Sports Act, 1998, § 220503[7]).

The present USOC mission emerged following the final report of the President's Commission on Olympic Sports (PCOS) in 1977. Although originally created by President Gerald R. Ford to resolve governance issues in the Olympic Movement in the United States following a poor showing by the U.S. Olympic team at the 1972 Munich Games (Cartwright Young, 1982), many of the PCOS's recommendations were adopted into law when the U.S. government passed the ASA in 1978. Several PCOS recommendations focused on the development of a Centralized Sports Organization (CSO) to oversee American Olympic involvement. The USOC was identified as that CSO.

Specific USOC responsibilities included: (a) certifying organizations as NGBs in individual sports, (b) addressing policy questions of major importance to the amateur sports community, and (c) formulating and maintaining an informed national policy of amateur sports (The Final Report, 1977, p. 21). The report spelled out specifics related to funding the new organization and allocating funds to member NGBs: "It is expected that strong emphasis will be placed by the CSO on development programs, especially on those aimed at increasing mass participation in sports" (The Final Report, 1977, p. 24).

Recent practice of the USOC has moved away from funding mass participation and toward rewarding medal production. This emphasis began in 1989 with the release of the Olympic Overview Report which stated, in part, "winning medals must always be the primary goal" of the USOC (Janofsky, 1989, p. C1). George Steinbrenner, a member of the USOC Board of Directors at the time of the report, chaired the commission which authored the report. He stated "This is an organization with one single purpose, with a

single devotion to the athletes and their national governing bodies" (Janofsky, 1989, p. C1).

The USOC shifted to what it called a "venture capital" model in 2004 requiring member NGBs to present specific plans detailing how they plan to use financial resources from the USOC to increase their chances of winning Olympic medals (Piore, 2004). The USOC took further steps to reduce the allocation of financial resources to NGBs in 2005 when it announced it would eliminate \$250,000 in guaranteed funding to each NGB beginning in 2006. The USOC announced, instead, it would provide double funding directly to athletes, rather than through the NGBs, which would still be eligible for financial resources based on performance and ability to meet goals and operate efficiently (Borzilleri, 2005a). Does the shift in policy by the USOC to one of greater focus on winning medals present a misalignment with its responsibilities as stated in the ASA? It is possible this shift is perceived as fair by NGBs and merely represents the realities of today's sporting climate in which professional athletes dominate Olympic competition.

A line of literature has examined similar contradictions in resource distribution in intercollegiate athletics. Administrators in that context have repeatedly said resource distribution based on equality or need were the most fair methods (Hums & Chelladurai, 1994b; Mahony, Hums, & Riemer, 2002; Patrick, Mahony, & Petrosko, in press), but historical analysis of athletic budgets shows a practice of distribution based on equity principles such as revenue production and spectator appeal (Mahony & Pastore, 1998). Existing research on the Olympic Movement, however, has not yet explored financial resource allocation.

The intercollegiate athletics studies, like the present dissertation, are grounded in the organizational justice literature, specifically in distributive justice, which focuses on the perceived fairness of outcome decisions within organizations. This study follows that pattern, but adds to it by examining a new setting and controlling for the construct of procedural justice, which focuses on perceived fairness of policies and procedures employed within organizations.

This study's importance lies in its ability to measure perceptions of fairness within the Olympic movement toward financial resource allocation. By making decisions which the majority of organizations believe to be fair, the USOC can create an environment in which all organizations strive to produce the best possible Olympic athletes, which could translate into more Olympic medals for the United States and heightened interest in Olympic sports.

Previous Research on Olympic National Governing Bodies

As mentioned, prior research on Olympic NGBs has not explored financial resource allocation. Further, much of the research on NGBs has focused on organizations outside of the United States. The literature can primarily be divided into one of three distinct strands: (a) organizational change, (b) strategic planning, and (c) organizational effectiveness.

Research of the impact of Sport Canada's mandated Quadrennial Planning

Program (QPP) on the organizational structure changes within Canada's National Sport

Organizations (NSOs) (Kikulis, Slack, & Hinings, 1995; Slack & Hinings, 1992; 1994)

underscored the power a National Olympic Committee (NOC) has over its member sport

organizations. NGBs, synonymous with NSOs, are involved in a highly resource

dependent relationship with their NOCs. An NOC can greatly impact the structure and program emphasis within an NGB through mandated procedures and resource distribution decisions. While all NGBs will be impacted by the actions of the NOC, there are still differences across NGBs. The rate at which an NGB responds to mandated organizational change is highly variable and can be tied to the inherent values held by individuals within the organization (Amis, Slack, & Hinings, 2002; Hinings, Thibault, Slack, & Kikulis, 1996).

Research on strategic planning of NGBs in Olympic sport has developed two main conclusions. First, the diverse nature and objectives of each organization make it difficult to neatly categorize the NGBs into specific typologies, despite the attempts of Berrett and Slack (2001), Thibault, Slack, and Hinings (1993; 1994), and Olberding (2003; 2004) to do so. Second, because of this diversity, each NGB is significantly affected by environmental factors. The work of Thibault et al. (1993; 1994) and Berrett and Slack (2001) focused on variables such as program attractiveness, media exposure, participation base, and competitive position. These variables contain some degree of inter-relatedness. For example, Thibault et al. (1993) identified one measure of program attractiveness to be size of client base, which would appear to be similar if not identical to Berrett and Slack's (2001) variable of participation base. Thus far, however, these variables have not been measured together in one study.

Studies assessing the organizational effectiveness of NGBs are problematic for a variety of reasons. Chelladurai, Szyszlo, and Haggerty (1987) pointed to the multiplicity of organizational goals, differential emphases placed on these goals by diverse constituents, the difficulty in measuring attainment of some of these goals, and the

conflict between pursuit of excellence and promotion of recreational support as evidence of the complex nature of NGBs. Theoretical models used to assess organizational effectiveness in NGBs have focused on the goals and systems models (Frisby, 1986) and the systems model only (Chelladurai et al., 1987). Researchers have used processes and decision making (Chelladurai & Haggerty, 1991), constituents (Papadmimitriou & Taylor, 2002), and organizational resources (Olberding, 2005) as ways to measure effectiveness. Each of these has merit, but none of these evaluation methods provides a clear understanding of how to measure organizational effectiveness in diverse organizations such as NGBs with multiple constituents.

Theoretical Grounding for the Present Study

Unlike previous studies of NGBs, this study is grounded in the organizational justice literature, which attempts to explain the role of fairness as a consideration in the workplace (Greenberg, 1987; 1990). Two main streams of research are present in the literature. Distributive justice examines an individual's perception of the fairness of an outcome or an end result. Procedural justice focuses on an individual's perception of the fairness of the policies or procedures used to make a decision, regardless of the outcome of that decision.

Adams (1963; 1965) and Deutsch (1975) provided theoretical grounding for this study in terms of patterns of distribution. Adams examined the fairness perceptions of distribution based on equity principles, while Deutsch studied perceived fairness of distributions based on equality principles and need. Equity is defined as allocation of resources in proportion to the contributions made by individuals in accordance with organizational goals (Tornblom & Jonsson, 1985; 1987). Equality is defined as equal

allocation of resources to all claimants (Tornblom & Jonsson, 1985; 1987). Need is defined as allocation of resources according the needs of the claimants (Tornblom & Jonsson, 1985; 1987).

The procedural justice portion of the study was grounded in the work of Blau (1964) and Thibault and Walker (1975). Blau's study of social exchange served as an antecedent for procedural justice research by examining how people form relationships, how power is dealt with in those relations, and what the expectation is for return, often unspecified, on contributions (Konovosky, 2000). Thibault and Walker (1975) studied how people reacted to simulated dispute-resolution procedures with respect to: (a) process control, the amount of control offered to disputants over the procedures used to settle grievances; and (b) decision control, the amount of control the disputants had over directly determining outcomes.

Researchers have linked the importance of fairness in the workplace to a variety of organizational behavior variables including job performance, job satisfaction, organizational commitment, organizational citizenship behaviors, and trust (Cohen-Charash & Spector, 2001). Two less common streams found in the literature are interactional justice, defined as the "perceived fairness of how decisions are enacted by authority figures" (Colquitt & Greenberg, 2003, p. 166), and retributive justice, defined as the study of negative outcomes (Tornblom & Jonsson, 1987). The present study examined distributive and procedural justice, focusing on how the two constructs are different and how they impact organizational behavior.

Research on distributive and procedural justice in athletics has built on this theoretical base (Hums & Chelladurai, 1994b; Mahony, Hums, & Riemer, 2002; 2005;

Mahony & Pastore, 1998; Mahony, Riemer, Breeding, & Hums, 2006; Patrick, Mahony, & Petrosko, in press; Tornblom & Jonsson, 1985; 1987). The literature has identified a number of subprinciples of distribution under each principle. Equality subprinciples in athletics include: (a) equality of treatment, (b) equality of opportunity, (c) equality of results, and (d) equal percentages. Equity subprinciples in athletics include: (a) productivity, (b) effort, (c) ability, (d) spectator appeal, and (e) revenue production. Need subprinciples in athletics include: (a) need to succeed, (b) need to survive, (c) need due to lack of resources, (d) need due to high costs, and (e) need to be competitively successful.

The literature on organizational justice in intercollegiate athletics presents competing paradigms. The distribution principles of equality and need have been perceived as the most fair by intercollegiate athletic administrators (Mahony et al., 2002; Patrick et al., in press) and college students (Mahony et al., 2006). Most distribution decisions, however, actually favor the equity principle (Mahony & Pastore, 1998). Need is frequently cited as the most fair by men and women (Hums & Chelladurai, 1994b; Mahony et al., 2002), yet the definition of need appears to be somewhat subjective (Mahony et al., 2005).

Prior research on organizational justice in athletics has suggested females would respond differently to certain distribution principles than males. Hums and Chelladurai (1994b) found males rated equity principles (contribution based on effort, ability, productivity, and spectator appeal) significantly higher than females in all six of their scenarios. In four scenarios, females rated equality of treatment significantly higher than males and in one scenario, females rated quality of results significantly higher than males. Males chose need first and equality of treatment second as the overall most fair

way of distribution. Females identified equality of treatment first and need second.

Support for these results was found in Mahony et al. (2006). Mahony et al. (2002) sampled mostly male respondents and found greater support for equity principles than in other studies, but need was still rated as the most fair.

Resource allocation in athletics has also been examined from a social exchange perspective in which one entity exchanges something of value, such as a resource, for something of value in return, such as a reward. Greenwell and Armstrong (2002) provided a framework for examining marketing resource allocation within intercollegiate athletic departments. Greenwell and Armstrong defined resources in athletics as either economic (financial considerations), physical (e.g. human resources, equipment, etc.), or intangible (time given by support staff). Rewards are considered more difficult to define and may be subjective based on the context. Revenue production, spectator appeal, legal compliance, and intrinsic rewards such as philanthropy are all considered rewards in an intercollegiate athletic setting.

Study Purpose

The purpose of the study was to measure NGB administrators' perceptions of fairness of financial resource allocation within the U.S. Olympic Movement. The study examines seven Distribution Principles: (a) *Equality of Treatment*, (b) *Equality of Results*, (c) *Equity Based on Medals Won*, (d) *Equity Based on Membership Size*, (e) *Need Due to Lack of Resources*, (f) *Need Due to High Operating Costs*, and (g) *Need to be Competitively Successful*. The study also measured which Distribution Principle NGB administrators believe is the most fair, and the one most likely to be used to make resource allocation decisions.

Implications of the Study

Several implications should emerge from the study. It is possible that the practice employed by the USOC reflects what the organization's stakeholders want, which is medal winning athletes. USOC sponsors undoubtedly prefer to align themselves with winning and elite athletes. Television ratings certainly improve when American athletes are successful at the Olympics. Private donations to the USOC might increase when the United States performs well on the international stage.

From a practical standpoint, therefore, understanding the perceptions of fairness within the Olympic movement toward financial resource allocation might help the USOC create an environment in which all organizations strive to produce the best possible Olympic athletes. This might translate into even more Olympic medals for the United States, heightened interest in Olympic sports overall, and additional resources for the Olympic movement in general.

Previous research has linked organizational justice perceptions with additional organizational behavior outcomes such as job satisfaction, organizational commitment, and trust (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). While not the focus of this study, the results of the present study provide the basis for future research examining those variables within the U.S. Olympic movement. McFarlin and Sweeney (1992) showed distributive justice was a more powerful predictor of job satisfaction than procedural justice, however other studies have shown procedural justice to be highly correlated with job satisfaction (Colquitt et al., 2001).

Organizational commitment, the degree to which employees identify with the company and make the company's goals their own (Allen & Meyer, 1990), has also been

shown to have a relationship with organizational justice perceptions. Tyler (1990) noted procedural justice has stronger relationships with support for institutions than distributive justice. This finding was confirmed in several subsequent studies (Folger & Konovosky, 1992, McFarlin & Sweeney, 1992; Sweeney & McFarlin, 1993).

Tyler (1989) pointed out that trust is particularly important if decision makers have discretion in allocating rewards and resources. Konovosky and Pugh (1994) found a stronger relationship between trust and procedural justice than between trust and distributive justice.

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Because no research on resource allocation in Olympic sport was found in the literature, this study contributes to the expanding literature on the distribution of resources within athletics by focusing on a context other than intercollegiate athletics. It is anticipated that fairness perceptions of resource allocation decisions in intercollegiate athletics will differ from Olympic sport because of the different structures and emphases

between the two contexts. The intercollegiate athletics context, for example, involves several different sports competing against one another within the same organization for shared resources such as marketing. In the Olympic setting, each NGB is a separate organization focused on one sport. Many NGBs are capable of generating significant resources on their own and do not need to share with other sports, unlike in intercollegiate athletics where football may generate enough financial resources to fund other sports.

Finally, this study will examine the contradiction which exists between the stated USOC responsibilities as articulated in the Ted Stevens Olympic and Amateur Sports Act and its practice of rewarding medal-winning performances. It is possible the USOC is operating in a framework similar to that of social exchange in which a resource is traded for a reward such as an Olympic medal. While that may not have been the initial objective for the USOC when it was formed, it may reflect a reality which exists in Olympic sport today.

Research Questions

The primary research question posed in the dissertation was: What do those involved with Olympic sports perceive as fair when financial resources are distributed within Olympic sport programs? To answer that question, several specific research questions follow below:

R1: Do NGB presidents and executive directors have significantly different perceptions of fairness for the distribution of financial resources?

R2a: Do NGBs with larger memberships have significantly different perceptions of fairness for distribution options than NGBs with smaller memberships?

R2b: Do NGBs with larger budgets have significantly different perceptions of fairness for distribution options than NGBs with smaller budgets?

R3: Do NGBs which are successful in Olympic Games competition have significantly different perceptions of fairness for distribution options of financial resources as compared to non-successful NGBs?

R4a: Which distribution principle do NGB administrators believe is the most fair?

R4b: Which distribution principle do NGB administrators believe is most likely to be used?

Limitations and Delimitations of the Study

It is important to acknowledge certain limitations and delimitations of the present study. One limitation was the small population size in the study. Seventy-two participants received the survey instrument. This represented all executive directors and presidents of 37 NGBs in the United States at the time of the study. Two NGBs, Modern Pentathlon and Team Handball, are managed directly by USOC staff and they were not included in the study. Previous research on U.S. NGBs has used smaller sample sizes. Olberding (2003; 2004) reported a high response rate (84.6%) in his studies of the 39 NGBs. While the survey size is small, it does represent the entire population, and it simply must be accepted as a limitation of the current study.

As Patrick et al. (in press) noted, a limitation of surveys concerning resource allocation decisions is that they have problems with generalizability. Allocation decisions can be very specific on a case-by-case basis and depend on a variety of factors which can never be completely captured in a few scenarios. Moreover, these various factors will impact the perceptions of the scenarios used in the current study and the related fairness

perceptions in ways unintended by the researcher. For example, those with access to additional resources from other sources would not be so dependent on the USOC for funding and this may impact their assessment of some of the scenarios.

A final limitation of the study is the exploratory nature of the study. Resource allocation in NGBs has not been previously studied. It is possible differences exist in resource allocation between intercollegiate athletics, on which the present study is grounded, and Olympic sport. Additional subprinciples of distribution might emerge which would be more appropriate to the context of Olympic sport and be considered for future studies.

A prominent delimitation of the study is the population of 39 NGBs in the United States. Much of the previous research on NGBs in the literature has used the Canadian sport system as the context. Studies by Slack and Hinings (1992; 1994) and Kikulis, Slack, and Hinings (1995) used all 36 Canadian National Sport Organizations (NSOs) in their research on organizational change. It is unlikely the results in those studies could be generalized to U.S. NGBs because of the different sport structure in each country. The United States sport structure emphasizes pursuit of excellence while the Canadian sport structure emphasizes participation. Following are the mission statements for the USOC and Sport Canada which illustrate that point:

"To support United States Olympic and Paralympic athletes in achieving sustained competitive excellence and preserve the Olympic ideals, and thereby inspire all Americans" (Bylaws of the United States Olympic Committee, n.d., p. 4)

"To enhance opportunities for Canadians to participate and excel in sport" (Sport Canada Mission, n.d.).

Organizational justice in athletics has largely focused on the context of intercollegiate athletics (Hums & Chelladurai, 1994b; Mahony, et al., 2002; 2005; Mahony & Pastore, 1998; Mahony, et al., 2006; Patrick, et al., in press). These studies suggested a contradiction regarding the distribution of financial resources within athletics. Most distribution decisions favor the equity principle (Mahony & Pastore, 1998), however, intercollegiate athletic administrators believed the distribution principles of equality and need were actually the most fair (Mahony et al., 2002; Patrick et al., in press). This finding also suggests agreement among athletic decision makers, athletic directors and athletic board chairs (Mahony et al., 2002), as to the fairest method of distribution. Therefore, the following null hypothesis is formulated regarding the two positions:

H1: There will be no significant difference in fairness perceptions for distribution principles between NGB executive directors and NGB presidents.

Research on NGBs frequently employed size as a variable to analyze NGBs. Size was operationalized based on participation base and budget (Berrett & Slack, 2001) and based on organizational resources (Olberding, 2005). Since it is possible for an NGB to have very large membership, but a small budget (and vice versa), the following two null hypotheses are proposed regarding organizational size:

H2a: NGBs with large memberships will not have significantly different perceptions for distribution fairness as compared to NGBs with small memberships.

H2b: NGBs with large annual budgets will not have significantly different perceptions for distribution fairness as compared to NGBs with small annual budgets.

One line of research on NGBs has emphasized organizational effectiveness and the problems of developing a universal measure. Chelladurai et al. (1987) singled out the conflict between pursuit of excellence and promotion of recreational support as evidence of the complex nature of NGBs. The USOC has stated its resource allocation focus is on increasing Olympic medals, similar to Chelladurai et al.'s (1987) observation of pursuit of excellence. Therefore, the following null hypothesis is developed regarding organizational effectiveness:

H3: NGBs which are successful in Olympic Games competition, defined as winning medals, will not have significantly different fairness perceptions for distribution principles as compared to non-successful, defined as non-winning medals, NGBs.

The literature on organizational justice in intercollegiate athletics presents competing paradigms. The distribution principles of equality and need have been perceived as the most fair by intercollegiate athletic administrators (Mahony et al., 2002; Patrick et al., in press) and college students (Mahony et al., 2006). Most distribution decisions, however, actually favor the equity principle (Mahony & Pastore, 1998). The following research hypotheses are developed regarding perceptions of which principles would be considered most fair and most likely to be used:

H4a: NGB administrators, consistent with the responses of intercollegiate athletic administrators, will believe the distribution principles of Equality and Need are the most fair.

H4b: NGB administrators, consistent with the responses of intercollegiate athletic administrators, will believe the distribution principle of Equity is the most likely to be used.

Definition of Terms

<u>CSO</u>: Central Sports Organization. The United States Olympic Committee was identified by the President's Commission on Olympic Sports Final Report in 1977 to be the CSO in the United States.

<u>Distributive Justice</u>: The study of perceived fairness of outcome decisions (Greenberg, 1990).

Equality: Distribution principle defined as allocation of resources to all claimants (Tornblom & Jonsson, 1985; 1987).

Equality of treatment: Subprinciple of distribution under equality defined as everyone receives the same allocation (Hums & Chelladurai, 1994a).

Equality of opportunity: Subprinciple of distribution under equality defined as

everyone has the same possibility to receive an allocation (Hums & Chelladurai, 1994a).

Equality of results: Subprinciple of distribution under equality defined as everyone receives the same allocation over a period of time (Hums & Chelladurai, 1994a).

Equity: Distribution principle defined as allocation of resources in proportion to the contributions made by individuals or in accordance with organizational goals (Tornblom & Jonsson, 1985; 1987).

Equity based on productivity: Subprinciple of distribution under equity defined as Olympic medals won in the most recent Olympic Games (Athens or Torino).

Equity based on participation: Subprinciple of distribution under equity defined as membership size.

<u>Interactional Justice</u>: The study of "perceived fairness of how decisions are enacted by authority figures" (Colquitt & Greenberg, 2003, p. 166).

Need: Distribution principle conceptualized as allocation of resources according to the needs of the claimants (Tornblom & Jonsson, 1985; 1987).

Need due to lack of resources: Subprinciple of distribution under need defined as allocation to a claimant with historical under-funding (Mahony et al., 2005).

Need due to high operating costs: Subprinciple of distribution under need defined as allocation to a claimant with the highest costs (Mahony et al., 2005).

Need to be competitively successful: Subprinciple of distribution under need defined as allocation to a claimant when additional resources are needed to be competitively successful (Mahony et al., 2005).

<u>NGB</u>: National Governing Body. The organization responsible in the United States for developing athletes in a particular sport.

NOC: National Olympic Committee. The United States Olympic Committee is the NOC in the United States.

NSO: National Sports Organization. Similar to an NGB. Some nations, such as Canada, employ this terminology.

Organizational Justice: The study of the role of fairness as a consideration in the workplace (Greenberg, 1990). The importance of fairness in the workplace has been linked to job performance, job satisfaction, organizational commitment, organizational citizenship behaviors, and trust (Cohen-Charash & Spector, 2001).

<u>PCOS</u>: President's Commission on Olympic Sports. Created in 1975 by President Gerald R. Ford to examine structural issues in the U.S. Olympic movement.

<u>Procedural Justice</u>: The study of perceived fairness of policies used to make decisions (Greenberg, 1990).

<u>Retributive Justice</u>: The study of the "justice of negative outcomes, such as punishments, costs, losses, burdens, and deprivations" (Tornblom & Jonsson, 1987, p. 26).

<u>USOC</u>: United States Olympic Committee. Recognized by the International Olympic Committee as the National Olympic Committee for the United States.

<u>VIK</u>: Value-in-kind. A sponsorship arrangement which includes the provision of product or services in lieu of cash payments from a sponsoring company to an organization (Irwin, Sutton, & McCarthy, 2002).

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this study was to examine United States National Governing Body (NGB) executive directors and presidents' fairness perceptions of financial resource allocation from the U.S. Olympic Committee (USOC). This study used the organizational justice literature, specifically the constructs of distributive and procedural justice, as the measure of the perceived fairness of the system. Greenberg (1990) defined organizational justice as an individual's perception of fairness within an organization. That perception might be developed in different ways. He defined distributive justice as an individual's perception of the fairness of the end result and procedural justice as the perceived fairness of policies and procedures used to make decisions, regardless of the end result.

The literature on organizational justice contains additional constructs not specifically examined in this study. These include: retributive justice, defined as justice of negative allocations (Tornblom & Jonsson, 1987); and interactional justice, defined as perceived fairness of how decisions are enacted by authority figures (Colquitt & Greenberg, 2003).

The present study seeks to fill a void in the understanding of how NGBs conduct their business operations and emerged after an extensive review of literature addressing organizational justice, primarily in the context of intercollegiate athletics and national sport organizations. The review of literature which follows emphasizes: (a) an overview

of the structure of the Olympic Movement internationally and in the United States; (b) an overview of studies conducted within the context of Olympic National Governing Bodies; (c) an overview of the organizational justice literature emphasizing the theoretical and empirical differences between the two main research constructs—distributive and procedural justice, including identification of the main principles of distribution; (d) a review of organizational justice research in the sport setting, including the use of social exchange theory to examine resource allocation in athletics; and (e) a justification for the present study.

Overview of the Olympic Movement

The modern Olympic Movement started in 1894 when Baron Pierre de Coubertin founded the International Olympic Committee (IOC). According to Thoma and Chalip (2003), Coubertin focused on three educational objectives of sport: (a) the aesthetic appreciation of the body in sport, (b) a tool for the establishment of peace and crossnational understanding, and (c) the pursuit of excellence.

The IOC is headquartered in Lausanne, Switzerland, and is governed by the Olympic Charter which specifies how the Olympic Movement shall operate including proper use of language, governance and decision making powers, and criteria for membership. The IOC recognizes individual National Olympic Committees (NOCs) which are "responsible for development and promotion of the Olympic Movement in their respective countries" (Thoma & Chalip, 2003, p. 26). Hums and MacLean (2004) noted NOCs "control operations and policy relative to the Olympics for a particular country" (p. 266).

Within the United States, the U.S. Olympic Committee (USOC) is recognized as the official NOC. The United States government passed the Amateur Sports Act of 1978 (since renamed the Ted Stevens Olympic and Amateur Sports Act) designating responsibility for managing Olympic activities to the USOC. It was amended in 1998 to add Paralympic activities as well (Hums & MacLean, 2004).

A specific article of the Amateur Sports Act authorizes the USOC to "recognize eligible amateur sports organizations as national governing bodies for any sport that is included on the program of the Olympic Games or the Pan-American Games" (Ted Stevens Olympic & Amateur Sports Act, 1998). Subchapter II of the Amateur Sports Act defines specific duties of National Governing Bodies, including representing the United States in an appropriate international sports federation, establishing national goals, serving as a coordinating body for amateur athletic activity in the United States, and recommending individuals and teams to represent the United States in the Olympic Games, Paralympic Games, and the Pan-American Games (Ted Stevens Olympic & Amateur Sports Act, 1998).

Research on Olympic National Governing Bodies

Much of the research on the Olympic Movement has taken place outside of the United States and is not available in English. What literature is available focuses predominantly on Canada's National Sport Organizations. For unexplained reasons, researchers traditionally have not focused on the U.S. Olympic Committee (USOC), called "the wealthiest and most powerful" National Olympic Committee in the world by Barney, Wenn, and Martyn (2002, p. xiii). The body of literature which does exist on National Governing Bodies (NGBs), also known as National Sport Organizations (NSOs)

in some countries, can be divided into three distinct strands: (a) organizational change, (b) strategic planning, and (c) organizational effectiveness. A review of the literature to date in each of these strands follows.

Organizational Change in National Governing Bodies

One of the earliest studies of organizational change in National Governing Bodies and National Sport Organizations was by Slack and Hinings (1987), who presented a conceptual framework for analyzing Canadian NSOs. Their research focused on two factors which impacted organizational change taking place in Canada. Entering their study, the popular wisdom regarding change in Canadian NSOs was that they were moving toward a more professional and bureaucratic type of organization, but Slack and Hinings (1987) theorized other factors such as structure and context may be influencing the change.

The first influence they examined was the structure of amateur sport organizations under the elements of specialization, standardization, and centralization. The second factor explored was context, specifically the elements of environment, task and technology, organizational scale, resources, and organizational age. Slack and Hinings (1987) stressed this was a beginning point for the analysis of Canadian NSOs and did not attempt to classify organizations. Their rationale for identifying the structure of NSOs was to develop a taxonomy of NSOs in the future. The inclusion of organizational context allowed them to separate the effects of planning from the effects of other changes.

Slack and Hinings (1992) first tested this framework when they examined the Quadrennial Planning Program (QPP) introduced by Sport Canada in the mid-1980s. The

plan called for Sport Canada to provide funds to sports to help them prepare for the 1988 Olympic Games. The funds were contingent on NSOs producing a plan outlining organizational changes which would maximize the performance of its athletes at the Olympic Games. Specifically, these researchers examined organizational change issues encountered by the NSOs as they implemented a new planning system. The researchers analyzed the High Peformance Reports of all 36 NSOs as part of the data collection for the study.

Using the framework they developed in 1987 as a base, Slack and Hinings (1992) analyzed three elements of NSO organizational structure: (a) specialization, the extent to which tasks in an organization are divided into specific organizational segments; (b) standardization, the existence of formal policies and procedures governing the activities of the organization; and (c) centralization, the existence of a locus of authority for making organizational decisions. The researchers used these elements to understand the change process undertaken in the NSOs from three different theoretical perspectives: resource-dependence theory, institutional theory, and organizational culture and transformational leadership.

Slack and Hinings (1992) used resource-dependence theory to illustrate why NSOs were involved in a change process which transferred power away from traditional sources. They discussed institutional theory to show how the structural features of the NSOs changed over time to accommodate the QPP. Finally, the researchers analyzed the role of organizational culture and transformational leadership to answer questions about the dynamics of the change process.

Slack and Hinings (1992) concluded the resource-dependent nature of NSOs in Canada required them to engage in major organizational change. The direction of that change was toward a more professional and bureaucratic design and away from a volunteer-based structure. Because the volunteer structure was dominant in NSOs, certain values and beliefs about the organizational structure had become institutionalized in several organizations and some resisted the change. In certain NSOs, transformational leaders helped manage the change process.

Slack and Hinings (1994) continued their research on NSOs and organizational change by considering the process of isomorphic change. Isomorphism refers to "the constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions" (DiMaggio & Powell, 1983, p. 149). Two types of isomorphism exist: (a) competitive isomorphism, which refers to change in which optimal forms of organization are selected out of a population; and (b) institutional isomorphism, which refers to organizations which compete for political power and social standing.

Slack and Hinings (1994) followed the research by DiMaggio and Powell (1983) which emphasized the role of mimetic, normative, and coercive isomorphism in organizational forms within an institutional sector. Mimetic isomorphism examines the extent to which any organization models itself on leading organizations in the sector. Normative isomorphism examines whether labor markets of expertise are created which produce a professionalized labor force. Coercive isomorphism refers to how powerful organizations force other organizations to adopt particular organizational forms.

The researchers concluded that over time the 36 NSOs had moved toward a professional bureaucratic structure. This move followed Sport Canada imposing a political goal of success in international sport on these organizations and pressuring them to adopt the design seen as most appropriate for achieving the goal. This scenario is an example of coercive isomorphism. In addition, Slack and Hinings (1994) argued, the quadrennial planning process created a degree of mimetic isomorphism by having organizations model themselves on successful NSOs. As it related to normative isomorphism, the conclusion that the NSOs were moving toward higher degrees of professionalism underscored the role of normative changes in the NSOs.

Kikulis, Slack, and Hinings (1995) continued exploring institutional changes taking place in Canadian NSOs. They used three specific design archetypes which represented institutionally specific value-structure relationships to illustrate that patterns of change are determined by the extent to which organizational design elements shift over time. They focused on the following archetypes: (a) Kitchen Table, characterized by volunteer control whose primary purpose is to provide programs that satisfied the needs of the organization's membership, (b) Boardroom, represented by increased formalized policies and increasing specialized roles by volunteers; and (c) Executive Office, characterized by professional staff assisting volunteers, who were valued more for technical and administrative expertise than for commitment to the NSO.

Data were gathered from two primary sources. The first source was an analysis of NSO documents including meeting minutes, manuals, organizational charts and QPP papers. The second source was interviews with senior members of the NSOs. The data were analyzed along the lines of three structural dimensions identified by Slack and

Hinings (1987): (a) specialization, (b) standardization, and (c) centralization. Twelve specific aspects of these dimensions of organizational structure, specific to NSOs, developed and validated by Slack and Hinings (1987) and used in the analysis. Multi-item structural scales were developed for each dimension. Reliability coefficients for each scale ranged from a low of .49 to a high of .87. Only the coefficient alpha score for volunteer roles, a subscale of specialization, was below .64.

Results indicated NSOs reacted to pressures for organizational change in different ways. At the beginning of the quadrennial period 1984-1988, four of the 36 NSOs in the study were classified as Kitchen Table, 25 were considered Boardroom, and seven were classified as Executive Office. At the end of the same quadrennial period, none of the NSOs were considered Kitchen Table, 13 were classified as Boardroom, and 23 were considered as Executive Office. This shift in emphasis, Kikulis et al. (1995) concluded. was a direct outcome of Sport Canada's mandated planning system. Most of the NSOs were moving in a similar direction, toward a more professional and bureaucratic structure. The specific values which guided these changes varied among NSOs. Kikulis et al. (1995) stated, "The findings reported here suggest that organizational change involves much more than introducing and prescribing change. It requires breaking down old beliefs and values and building new communities" (p. 96). The researchers concluded the federal government-funded OPP played a major role in initiating change in the NSOs, but past organizational designs influenced and constrained choices organizational members made in response to the mandate.

The role of values in organizational change in Canadian National Sport

Organizations was studied by Hinings, Thibault, Slack, and Kikulis (1996) and Amis,

Slack, and Hinings (2002). Both studies employed the previously established concepts of institutional theory (Slack & Hinings, 1992; 1994) and archetypes (Kikulis et al., 1995) to examine how values determine organizational structure (Hinings et al., 1996) and organizational change (Amis et al., 2002).

Hinings et al. (1996) added the concept of organizational culture to institutional theory and archetypes in their analysis of values of organizational structure. They identified seven values which summarized the direction Canadian NSOs moved during the period of their study, the Olympic quadrennium between 1984 and 1988. These values were defined as: a) high performance emphasis, a commitment to developing elite athletes; b) government involvement, a commitment to the government as a partner in supplying resources; c) organizational rationalization, a commitment to specifying and codifying activities; d) professionalism, a commitment to full-time professional staff; e) planning, a commitment to long-term objectives; f) corporate involvement, a commitment to corporate sponsors of high performance sport; and g) quadrennial plans, a commitment to the outcomes of such plans.

Data on the structure of each NSO was collected from an analysis of documents such as meeting minutes, policy manuals, and organizational charts. Following this analysis, the researchers identified one individual in each NSO to interview. Scales were developed to measure specialization, standardization, and centralization, the three organizational dimensions identified by Slack and Hinings (1987), and the seven values previously mentioned. Coefficient alphas for each of the scales ranged from a low of .4839 on one measure of centralization, to a high of .8072 on the value of government involvement.

The researchers surveyed 501 NSO employees. ANOVAs were run between each variable and the archetypes of Kitchen Table, Boardroom, and Executive Office (Kikulis et al., 1995). The researchers concluded a link does exist between values and structure that produces organizational congruency and fit. Organizations not within a specific archetype do not exhibit value/structure congruency. They identified the Executive Office archetype as the one which contributed most to the differences found in values and structures. Because this was an emerging archetype (Kikulis et al., 1995), Hinings et al. (1996) suggested longitudinal studies to "establish the connections between institutional pressures to change in a particular direction, and the translation of those pressures into a coherent value/structure relationship" (p. 908).

Hinings et al. (1996) also found general support for a high level of commitment to the seven values, regardless of structural type. They argued this was a result of an institutional phenomenon, namely the agreement within the Canadian sport system that NSOs should "be concerned with elite athletes and that the appropriate organizational form for this was the Executive Office" (p. 909).

Using the same variables as Hinings et al. (1996), Amis et al. (2002) studied the dynamics of strategic change in Canadian NSOs between 1984 and 1996, answering the suggestion of Hinings et al. for a longitudinal review of NSO structures. Amis et al. found support for several propositions regarding values and organizational change.

First, the researchers concluded 85% of the organizations examined moved in the direction of the more professional and bureaucratic Executive Office archetype during the first period of time examined, 1984 to 1986. However, from 1988 on, Amis et al. (2002) observed some organizations reverting back to the informal designs that previously

dominated the structures of NSOs. They attributed this to external coercive pressures such as drug scandals and recession.

They found strong support for the proposition that organizations with greater values commitment would alter their organizational structures more quickly than those with a lower commitment and for the proposition that NSOs would exhibit ceremonial conformity. Amis et al. (2002) concluded more than half of the NSOs in the study that responded to coercive changes early on exhibited signs of ceremonial conformity, such as structural changes, but retained many of their traditional operating principles.

Research on the role of values in organizational structure (Hinings et al., 1996) and organizational change (Amis et al., 2002) within Canadian NSOs lends credence to the notion that few organizations achieve the same end point in a change process due to conflicts or personnel changes, among other variables. Amis et al. (2002) argued the nature of how an organization reacts to an imminent change is dependent on "how closely the values held by individuals within an organization coincide with the change being proposed" (p. 461).

Kikulis (2000) authored a conceptual piece applying institutional theory as a means to develop a foundation for understanding continuity and change in the governance and decision making of Canada's national sport organizations (NSOs). She identified three important institutionalization elements: (a) institutions emerge over time and thus have a history that must be considered by the researcher, (b) institutions control behavior through unquestioned compliance to rules and values they espouse, and (c) human agents play an active role in determining the level at which ideas and actions are institutionalized and deinstitutionalized. Kikulis examined five "alternative"

understandings" for continuity and change "based on the assumption that aspects of governance and decision making may display continuity and change, may be defined by actions or structures that have varying levels of institutionalization, or may be institutionalized" (p. 304).

The author stated: (a) the persistence of the volunteer board at the top of the hierarchy of authority is institutionalized and built into the cultural fabric of NSOs, (b) volunteer boards have been objectified in the sense that they are permanent and widespread characteristics of nonprofit voluntary sport organizations in general and of NSOs more specifically, and (c) change in governance and decision making in NSOs and other voluntary sport organizations is due to the "involvement and influence of paid executives" (p. 309-310). That involvement and influence was due to the deinstitutionalization of volunteer control.

Kikulis summarized her three theoretical arguments in the following manner: (a) the coexistence of diverse institutional ideas in organizations enables managers to focus on these ideas and accompanying practices when appropriate, (b) differences exist between sectors and practices institutionalized in the for-profit sector may not be appropriate in the voluntary sector, and (c) the extent to which different aspects of governance and decision making in NSOs are taken for granted, institutionalized and thus resistant to change, varies. Her research presented an alternative way to study change, or lack thereof, in NSOs. Like much of the research on Canadian sport organizations, the role of volunteers in a nonprofit organization such as an NSO is critical to understanding how decisions are made.

The research of the impact of Sport Canada's mandated QPP on the organizational structure changes within Canada's NSOs (Kikulis et al., 1995; Slack & Hinings, 1992; 1994) underscored the power a National Olympic Committee (NOC) has over its member sport organizations. NSOs are involved in a highly resource dependent relationship with their NOCs. An NOC can greatly impact the structure and program emphasis within an NGB through mandated procedures and resource distribution decisions. While all NGBs will be impacted by the actions of the NOC, there are still differences across NGBs. The rate at which an NGB or NSO responds to mandated organizational change is highly variable and can be tied to the inherent values held by individuals within the organization (Amis et al., 2002; Hinings et al., 1996). One shortcoming of the extensive research conducted on Canadian NGBs is the authors' failure to identify which NGBs are categorized into which typologies. It is difficult, therefore, to draw any meaningful comparisons from Canadian organizations to the present study which examines U.S. organizations.

Strategic Planning in National Governing Bodies

Thibault, Slack, and Hinings (1993; 1994) developed and verified a framework for analyzing strategic planning in Canadian NSOs. This framework was adapted to United States NGBs by Olberding (2003; 2004) a decade later. In their conceptual piece, Thibault et al. (1993) applied portions of framework previously developed by MacMillan (1983) to Canadian NSOs. Previous research identified three dimensions of nonprofit organizations: (a) program attractiveness, (b) competitive position, and (c) alternative coverage.

Thibault et al. (1993) considered program attractiveness, defined as the degree to which a program is attractive for current and future resource allocation, and competitive position, defined as organizations in a stronger position to serve their clients than other related organizations, as the most important from the literature. Within program attractiveness, the researchers studied the ability of the NSO to attract financial resources from outside the organization (fundability), the number of clients the NSO serves with its programs and services (size of client base), the ability of the NSO to attract human resources (volunteer appeal), and the visibility of the NSO to groups capable of providing current or future support (support group appeal).

Within competitive position, Thibault et al. (1993) considered the expenses associated with equipment needed by participants to compete in the NSO (equipment costs) and expenses such as memberships necessary for athletes to have access to facilities, coaches, and competitions in the NSO (affiliation costs). A sport such as rowing with its expensive sculls and specialized training had high equipment and affiliation costs while a sport such as basketball with the limited equipment and facilities necessary for participation had low equipment and affiliation costs.

Thibault et al. (1993) juxtaposed the dimensions of program attractiveness and competitive position to reflect different organizational sectors. The researchers proposed four strategic types based on the NSO's position in a particular sector. The four types were the same analyzed by Olberding (2003): (a) enhancers, (b) innovators, (c) refiners, and (d) explorers. Thibault et al. (1993) offered definitions for each of the strategic types.

Enhancers were NSOs with high program attractiveness and strong competitive position. The researchers suggested these NSOs would be highly visible with large

membership bases and established programs. Innovators were NSOs with low program attractiveness and strong competitive position. The researchers suggested these NSOs have similar structural characteristics and low levels of formalization. Refiners were NSOs with high program attractiveness and weak competitive position. Characteristics of NSOs in this sector included well established sport programs with high levels of specialization and formalization. Explorers were NSOs with low program attractiveness and weak competitive position. The researchers commented these NSOs need to develop programs to attract people, reduce costs, or both, and have low levels of structure and nonexistent operating procedures.

Thibault, Slack, and Hinings (1994) tested the framework developed in Thibault et al. (1993) with a sample of 32 Canadian NSOs. Thibault et al. (1994) operationalized the six imperatives identified in Thibault et al. (1993). Based on their data analysis, the researchers classified each of the 32 NSOs in the sample in one of the four sectors. Seven NSOs were classified as enhancers. These NSOs received the highest funding from Sport Canada, which is the National Olympic Committee of Canada. In addition, these NSOs had relatively low costs and were included in the school physical education curriculum, affording them high exposure.

Sixteen NSOs, half of the sample, were classified as innovators. These NSOs did not have extensive histories in Canada and were not terribly popular with the public. Four organizations were classified as refiners. The researchers suggested all four of these could be called "spectator sports" with high public interest and successful professional structures. Finally, five NSOs fell into the category of explorers. Thibault et al. (1994) called this category "the most challenging domestic sport context" (p. 229). These sports

were characterized by high costs and low visibility, due in part to their absence from the school physical education program.

Thibault et al. (1994) concluded from their analysis that different domestic sport environments warrant different strategies, supporting the notion of contingency.

Contingency theory posits that no one ideal strategy works for all organizations, and that a goodness of fit needs to exist between the organizational environment and the strategy undertaken.

Berrett and Slack (2001) developed a framework to examine the strategic approaches employed by Canadian NSOs to obtain corporate sponsorships. To achieve this objective, the researchers conducted semi-structured interviews with the key individual responsible for marketing in 34 NSOs. NSO success in attracting corporate sponsorship was measured in two ways: (a) by the absolute dollar amount of revenue derived from sponsorships and (b) by the percentage of total NSO budget derived from corporate sponsorships.

Berrett and Slack (2001) identified two environmental factors which contributed to the ability of the NSO to generate external corporate funding: (a) media exposure and (b) participation base. NSOs were categorized into one of five typologies within the two factors. Twelve NSOs with low participation base and minimal media exposure were considered internal marketers. Eight NSOs with high participation base and minimal media exposure were considered participant focusers. Five NSOs with low participation base and moderate media exposure were classified as augmenters with high participation base and moderate media exposure. Finally, five NSOs were categorized as elaborators with high participation base and

extensive media exposure. The mean sponsorship revenue received by each NSO ranged from a low of \$50,833 for internal marketers to a high of \$3,500,000 for elaborators.

Berrett and Slack (2001) cautioned against regarding this typology as a static framework. They conceded certain NSOs were developing strategic alliances and plans which would move them from one typology to another. For example, one internal marketer NSO forged an alliance with a broadcast station it hoped would generate more media exposure, possibly shifting the NSO to the media focuser category. The researchers emphasized that different environmental constraints and opportunities faced by NSOs require different strategic approaches. Because of the diverse nature of each NSO, not all NSOs should consider the same strategy. As Berrett and Slack (2001, p. 39) observed, "There is no single 'blueprint' strategy that be productively adopted by all organizations."

Olberding (2003; 2004) developed a survey instrument to measure strategy types employed in sport organizations and tested the instrument on National Governing Bodies (NGBs) of Olympic sport in the United States. He based his work on the theoretical framework developed by Thibault, Slack, and Hinings (1993; 1994) which identified four typologies of National Sport Organizations, or NSOs: (a) enhancer, (b) refiner, (c) innovator, and (d) explorer. Thibault et al. (1993; 1994) postulated that by determining the sport organization's typology, it is possible to assess the strategic decisions the organization should pursue in order to improve performance.

Olberding's research measured two main components of strategic management:
(a) strategy content (Olberding, 2003) and (b) planning process (Olberding, 2004).

Olberding (2003) reported validity and reliability measures used on his instrument. A

principal components analysis of strategy content items revealed two dimensions – program attractiveness and competitive position – explained 65.1% of total variance. Using a multitrait-multimethod analysis, Olberding (2003) found strong support of convergent validity and discriminant validity. The correlation between the measure of program attractiveness in U.S. NGBs and Canadian NSOs (as reported in Thibault, et al., 1993) was .614, and the correlation between the measure of competitive position in U.S. NGBs and Canadian NSOs was .470.

Olberding (2003) also reported instrument reliability. Initial analysis of the sixitem scale measuring program attractiveness resulted in a Cronbach's alpha of .26, below the recommended correlation of .70 (Nunnally, 1978). Items were removed one-by-one and the alpha was reexamined and three items were dropped. The new alpha for the remaining three items was .61. Initial analysis of the three-item scale measuring competitive position resulted in a Cronbach's alpha of .28. One item was dropped for a two-item scale with a new alpha of .66.

Olberding's (2003; 2004) studies reported a response rate of 84.6% (33 of 39 NGBs surveyed participated). Using the theoretical framework developed by Thibault et al. (1993; 1994), Olberding (2003) classified the 33 NGBs into one of the four typologies: enhancers, refiners, innovators, and explorers. Ten of the 33 NGBs were classified as enhancers, exhibiting a high level of program attractiveness and strong competitive position. Nine NGBs were classified as refiners, exhibiting high levels of program attractiveness but weak competitive positions. Eight NGBs fell into the typology of innovator, characterized by low levels of program attractiveness but strong competitive

positions. Finally, six NGBs were classified as explorers, defined as having low levels of program attractiveness and weak competitive positions.

In his study of planning process formality, Olberding (2004) based his research on studies of planning in private-sector firms by Pearce, Robbins, and Robinson (1987) and Wood and LaForge (1979; 1981). Similar to his first study, Olberding (2004) classified NGBs into typologies: highly formalized planners, formal planners, and informal planners. Seven NGBs were considered highly formalized planners, exhibiting a "longer planning horizon, a greater degree of planning openness, and stronger organization-wide direction and coordination" (Olberding, 2004, p. 103). NGBs in this classification reported detailed action plans to support each major strategy in their planning process. Eighteen NGBs were considered formal planners, exhibiting planning horizons longer than one year, a climate of support for planning, but lesser degree of openness in planning than the highly formalized planners. Finally, eight NGBs were considered informal planners. Characteristics of these NGBs included a long-range planning horizon, but a lesser degree of planning openness than the other two groups and an absence of formal written planning documentation.

The major contributions of Olberding's (2003; 2004) studies included the development and verification of survey items which collected data on program attractiveness and competitive position in sport organizations, the exploratory nature of using U.S. Olympic NGBs as a sample (2003), and the development and verification of survey items to measure planning formality in the same population (2004).

Several limitations in Olberding's (2003) study included relatively low reliability scores (.61 for program attractiveness and .66 for competitive position) and low sample

size (N = 33). While his sample did represent 85% of the population, Olberding (2003) advised increasing sample size in future research to enhance reliability and validity. Similar limitations existed in Olberding's (2004) most recent study including small sample size and inability to compare results to other research as no other studies have examined planning process. Olberding (2004) advised additional studies of strategy content and planning process in sport organizations such as national governing bodies in nations other than the United States and professional sport governing bodies as ways to remedy the limitations.

Summary of Strategic Planning in National Governing Bodies

Research on strategic planning of National Governing Bodies in Olympic sport has developed two main conclusions. First, the diverse nature and objectives of each organization make it difficult to neatly categorize the NGBs into specific typologies, despite the attempts of Berrett and Slack (2001), Thibault, Slack, and Hinings (1993;1994), and Olberding (2003; 2004) to do so. Second, because of this diversity, each NGB is significantly affected by environmental factors. The work of Thibault et al. (1993; 1994) and Berrett and Slack (2001) focused on variables such as program attractiveness, media exposure, participation base, and competitive position. These variables contain some degree of inter-relatedness. For example, Thibault et al. (1993) identified one measure of program attractiveness to be size of client base, which would appear to be similar if not identical to Berrett and Slack's (2001) variable of participation base. Thus far, however, these variables have not been measured together in one study. *Organizational Effectiveness in National Governing Bodies*

A concern for researchers has been how to measure the effectiveness of the outcomes of different and diverse NGBs. There is no consensus in the literature regarding the best way to measure this variable, as multiple dimensions and perspectives exist for organizational effectiveness (Chelladurai, 1987; Chelladurai & Haggerty, 1991; Chelladurai, Szyszlo, & Haggerty, 1987; Frisby, 1986).

Early research in this area focused on the systems-oriented view of organizational effectiveness (e.g. Chelladurai et al., 1987; Frisby, 1986). Chelladurai (1985) noted the systems approach to organizational effectiveness is difficult to define precisely. The systems model "quantifies one element (inputs) and uses it as a surrogate or substitute measure for another element (outputs) which is not as easily quantifiable" (Chelladurai, 1985, p. 176).

Frisby (1986) analyzed the relationship between the goal and systems models of organizational effectiveness in Canadian NSOs. Chelladurai (1985) defined the goals model as the ability of an organization to identify clearly measurable goals. Frisby used the operating budgets of each NSO and the increase in financial support the NSO received from 1970 to 1982 as measures of the NSO's ability to acquire scarce financial resources under the systems model. She used the NSO's ability to achieve desired organizational objectives, operationalized as the 1982 world ranking, 1982 effectiveness ranking, and change in world ranking, as the effectiveness measures under the goal model.

Results from her study indicated positive but weak correlations existed between the two models. One significant relationship existed between one measure of the systems model (total operating budget) and one measure from the goal model (1982 effectiveness

ranking), r = .379, p < .05. Despite this significance, Frisby (1986) cautioned against concluding causality. She suggested future research explore whether financial resources are required before performance excellence occurs, or whether performance excellence translates into increased financial resources through government sources as well as outside sponsorships.

Chelladurai, Szyszlo, and Haggerty (1987) developed a scale designed to measure organizational effectiveness in Canadian NSOs using the systems model. Their sample included 150 professional and volunteer administrators. In the systems model, organizations transform inputs into throughputs and subsequently into outputs.

Chelladurai et al. (1987) differentiated two types of NSO organizations: mass sport organizations, defined as organizations pursuing promotion of recreational sport, and elite sport organizations, defined as organizations pursuing elite competition. Survey participants agreed on four dimensions of effectiveness which were the two throughput processes (one in each type of organization, mass and elite), input of human resources, and output of elite programs.

The findings of Chelladurai et al. (1987) were important for two reasons. First, the results indicated that regardless of emphasis of the NSO, the process of turning inputs into outputs (i.e., throughputs) is a critical driver of organizational effectiveness. Second, despite not being identified as one of the top four dimensions of organizational effectiveness, the inputs of monetary resources remained an important factor in Canadian NSOs. At the time of the survey, NSOs typically received between 60-80% of funds from the Canadian government. Therefore, "it is understandable that NSO administrators would minimize the value of other funding sources" (Chelladurai et al., 1987, p. 118).

One conclusion to emerge from the research of Chelladurai et al. (1987) and Frisby (1986) is that effectiveness models must complement one another to obtain a comprehensive picture of an organization's effectiveness. Because of this conclusion, an approach to measuring effectiveness which involves multiple stakeholders emerged in the assessment of NGBs and NSOs. Chelladurai (1985) stated that a multiple constituency model for measuring organizational effectiveness was preferable because it encompassed three widely accepted models of measurement: the goals model, the systems model, and the process model. He noted the multiple-constituency approach "emphasizes the operative goals held by different groups. The degree to which the organization has achieved the goals of the various constituencies is a measure of its effectiveness" (Chelladurai, 1985, p. 182).

This approach became the basis of studies by Vail (1985), Chelladurai et al. (1987), Chelladurai and Haggerty (1991), Papadimitriou and Taylor (2002) and Olberding (2005). Vail utilized the multiple constituency approach in her analysis of Canadian NSOs. The sample for her study was 140 individuals from 33 NSOs. Five constituent groups were identified for inclusion in the study: (a) executive directors, (b) volunteer presidents, (c) national coaches, (d) Sport Canada consultants, and (e) representatives from corporate sponsors. Six variables of organizational effectiveness were chosen, all dealing with administration of the NSO: (a) adaptability, (b) communication, (c) finance, (d) growth, (e) human resources, and (f) organizational planning.

A major finding of Vail's (1985) study was the significant difference in the perceived importance placed on finance between internal and external constituents. Vail

found finance to be more important to executive directors, presidents, and coaches than to the Sport Canada consultants. She concluded that "it would appear that presidents and executive directors consider the ability of the [NSOs] to acquire and manage funds, from a number of sources including government, to be essential to the effectiveness" of the NSO (Vail, 1985, p. 67). She theorized that NSOs were becoming more autonomous and placing greater pressure on themselves to plan and control their finances and identify additional funding sources. Those external funding sources were simultaneously demanding that NSOs be more accountable for their financial expenditures.

Vail's (1985) study also found a statistically significant difference in the perceived importance of the growth variable. All five groups indicated growth was the lowest ranked indicator of organizational effectiveness. This finding indicated greater emphasis was being placed on organizational activities such as planning. No additional significant differences were found among groups.

This study provided key findings for researchers examining organizational effectiveness of NSOs. The difference in perceived importance of finance between internal and external constituents is important to understanding the internal pressures placed upon NSO executive directors and presidents and how they perceive effectiveness. Because all groups felt adaptability, communication, human resources, and organizational planning were important indicators of effectiveness, and growth was universally unimportant, Vail (1985) commented that different constituent groups can agree upon selected measures of organizational effectiveness.

Chelladurai and Haggerty (1991) explored differences between volunteer and professional administrators' perceptions of the effectiveness of the processes, decision

making, and personnel relations within the context of Canadian NSOs. The researchers divided the population into subgroups based on work status (professional/volunteer) and Olympic status (Olympic/non-Olympic). They ran a series of analysis of variance tests to determine potential significant differences between groups.

The researchers found professional administrators evaluated their NSO's personnel and organizational aspects less favorably than did volunteer administrators. Chelladurai and Haggerty (1991) concluded the nature and degree of involvement by the two groups may be responsible for this difference. Since volunteer administrators are responsible for approving and instituting organizational processes within their NSOs, it is likely they would view them favorably.

Chelladurai and Haggerty (1991) also found a difference between Sport Canada's ratings of organizational effectiveness (high performance, domestic sport development, and a combination of both) and the perceptions of administrators. They theorized this difference could be caused by control. Administrators do not have direct control over results in international competition (one effectiveness measure employed by Sport Canada) or external factors such as popularity created by tradition, existence of professional leagues, and media coverage. Chelladurai and Haggerty (1991) concluded "the two sets of effectiveness measures need not converge" (p. 133). This conclusion validated the use of multiple constituency models as a means of measuring organizational effectiveness in NSOs.

Papadimitriou and Taylor (2002) also used a multiple constituency approach to measure organizational effectiveness of Hellenic national sport organizations. The sample for their study was 423 individuals from 20 different NSOs in Greece. The first objective

was to identify relevant constituencies of NSOs. From interviews with the general manager of each NSO, 11 different constituent groups emerged. These groups included board members, paid administrative staff, national coaches, officials, scientific staff, high performance athletes, the General Secretariat of Sports, the Greek Olympic Committee, the National Centre for Sports Research, International Federations, and private sponsors. The following six groups were included in their study: (a) board members, (b) national coaches, (c) scientific staff, (d) elite athletes, (e) international officials, and (f) paid administrative staff.

Five effectiveness factors emerged from the research: (a) caliber of board and external liaisons, (b) interest in athletes, (c) internal procedures, (d) long-term planning, and (e) sports science support. This result was only partially consistent with the studies conducted by Chelladurai and Haggerty (1991) and Vail (1985). Papadimitriou and Taylor (2002) found the role of the board and the satisfaction of national team athletes' as critical measures of organizational effectiveness. Previous research on Canadian NSOs focused on the contributions of structural and process-oriented outcomes such as planning and programming to overall organizational effectiveness.

Papadimitriou and Taylor's (2002) research confirmed the existence of multiple and diverse constituent groups to NSOs. They suggested NSOs identify the most important constituencies and determine their relationship with organizational outcomes. The influence of the most important constituencies may affect the measures employed to assess effectiveness. This influence is particularly important as many NSOs have become increasingly dependent on multiple constituencies for resource allocation.

A more recent and underdeveloped approach to measuring effectiveness which falls outside the traditional models discussed above was employed by Olberding (2005). Using an economic approach known as data envelopment analysis (DEA), Olberding examined the efficiency of U.S. NGBs in converting organizational resources into success. DEA had been employed as a means of evaluating sport in several settings, most of them professional team sport. Based on performances at Olympic Games from 1996-2002, Olberding rank ordered the efficiency of 33 of 39 U.S. NGBs. Input variables in the analysis included budget, employees, membership, and committees. The output variable was a cumulative ratio of total points awarded for Olympic rankings to the number of competitions in each sport, standardized by total competitive units for the NGB.

Olberding's (2005) research produced inconclusive results. Much of his input data was gathered in 1998 and 1999 while Olympic rankings included competitions held as much as three years later. In addition, not all NGBs have realistic chances of medaling at an Olympic Games. Finally, his research concluded swimming and track and field were among the least efficient NGBs even though the United States performs well in both of these sports at Olympic competitions.

Summary of Organizational Effectiveness in National Governing Bodies

Studies assessing the organizational effectiveness of National Governing Bodies are problematic for a variety of reasons. Chelladurai et al. (1987) pointed to the multiplicity of organizational goals, differential emphases placed on these goals by diverse constituents, the difficulty in measuring attainment of some of these goals, and

the conflict between pursuit of excellence and promotion of recreational support as evidence of the complex nature of NGBs.

Theoretical models used to assess organizational effectiveness in NGBs have focused on the goals and systems models (Frisby, 1986) and the systems model only (Chelladurai et al., 1987). Researchers have used processes and decision making (Chelladurai & Haggerty, 1991), constituents (Papadmimitriou & Taylor, 2002), and organizational resources (Olberding, 2005) as ways to measure effectiveness. Each of these methods has merit, but none of these evaluation methods provides a clear understanding of how to measure organizational effectiveness in diverse organization such as NGBs with multiple constituents.

Overview of Organizational Justice

Social scientists have frequently attempted to summarize the research underlying organizational justice and its impact on the effective function of organizations and employee satisfaction (Cohen-Charash & Spector, 2001; Colquitt & Greenberg, 2003; Colquitt, Greenberg & Zapata-Phelan, 2005; Greenberg, 1987; 1990). Greenberg (1990) defined *organizational justice* as literature which attempts to describe and explain the role of fairness as a consideration in the workplace. The importance of fairness in the workplace has been linked to job performance, job satisfaction, organizational commitment, organizational citizenship behaviors, and trust (Cohen-Charash & Spector, 2001).

Greenberg (1990) linked Adams' (1963; 1965) theory of inequity with Leventhal's (1976; 1980) justice judgment model in the formation of *distributive justice*. Greenberg (1990) defined distributive justice as focused on the perceived fairness of

outcome decisions. These theories formed the basis of what Greenberg (1987) called *reactive content theories*. Theories in this classification focused on how people reacted to perceived unfair distributions of resources and rewards.

The concept of *procedural justice* emerged as researchers focused more on how decisions were made in addition to what the decisions were. Greenberg (1990) defined procedural justice as "the perceived fairness of the policies and procedures used to make decisions" (p. 402). Greenberg (1987) classified this type of organizational justice as *reactive process theories*. Procedural justice has its roots in Thibault and Walker's (1975) study of how people reacted to simulated dispute-resolution procedures with respect to:

(a) process control, the amount of control offered to disputants over the procedures used to settle grievances, and (b) decision control, the amount of control the disputants had over directly determining outcomes. Considerable debate exists among scholars as to which is more important in fairness assessments, outcomes or procedures, and what relationship exists between the two constructs (Alexander & Ruderman, 1987; Ambrose & Arnaud, 2005; Moorman, 1991).

In his taxonomy of organizational justice theories, Greenberg (1987) also considered *proactive content theories*, which emphasized how workers attempted to create fair outcome distributions, often by allocating rewards proportional to contributions made, and *proactive process theories*, which focused on how workers determine what procedures they will use to achieve justice. In addition, some researchers have emphasized the importance of interactional justice and retributive justice. Colquitt and Greenberg (2003) defined *interactional justice* as the "perceived fairness of how decisions are enacted by authority figures" (p. 166). Tornblom and Jonsson (1987)

defined *retributive justice* as "the justice of negative outcome allocations, such as punishment, costs, losses, burdens, and deprivations" (p. 26).

The following sections review literature specific to the following aspects of organizational justice: (a) a review of distributive justice, (b) a review of procedural justice, (c) a review of distinctions between distributive and procedural justice in organizations, and (d) a review of the effects of distributive and procedural justice on organizational behavior.

Distributive Justice

Researchers have identified Adams' (1963; 1965) theory of inequity as the basis for forming distributive justice theory (Greenberg, 1987; 1990). Adams (1963) argued that:

The fairness of an exchange between employee and employer is not usually perceived by the former purely and simply as an economic matter. There is an element of relative justice involved that supervenes economics and underlies perceptions of equity or inequity (p. 422).

He posited that individuals compare the ratio of their own work inputs (contributions) to their own work outputs (rewards) with the ratio of inputs and outputs of other workers within an organization. If ratios are unequal, the worker who put in less input but received high output would feel guilty, while a worker who put in more and received less would feel angry. This disparity creates "tension" (1963, p. 427) in the worker and would cause the worker to reduce the tension by adjusting his or her own inputs or outputs according to the inputs or outputs of other workers. For example, a worker may alter his or her job performance, a behavioral reaction, or his or her perceptions of outputs, a psychological reaction. If the ratios were equal, Adams' (1963) theory suggested workers would be satisfied.

Adams' (1963; 1965) theory provided grounding for contribution-based (equity) distribution principles. His work emphasized the perceived fairness of outcomes, suggested possible reactions to perceived injustice and used a study of pay inequities in the workplace as means to empirically support his theory.

Deutsch (1975) expanded Adams' work by suggesting additional distribution principles grounded in need and equality. Deutsch reasoned that an individual's:

share of economic goods should be determined by his relative skill in using such goods for the common weal and that he should share in the consumer goods with others according to need (from each according to his ability, to each according to his need) (p. 144).

He further suggested the principle of equality was the most desirable in fostering personal relations: "Equal status relations represent the optimum distribution of status for the mutual support of self-esteem" (Deutsch, 1975, p. 146).

Tornblom and Jonsson (1985) conducted a study to examine the relationship among three subrules of the equality and equity (contribution) principles. The contribution principle may be formulated in terms of how well outcomes match inputs of (a) effort expended, (b) ability, innate or achieved, or (c) productivity. The equality principle may be conceived of in terms of equality of (a) treatment, in which everyone receives the same regardless of outcomes; (b) opportunity, in which everyone has the same possibility to receive; or (c) results, in which everyone winds up with the same in the long run, even though they may be unequally treated in the short run.

The researchers surveyed Swedish female nursing students (N = 175) who volunteered to participate. The students responded to scenarios in which a third party allocated positive or negative outcomes to one or several recipients in a team or a non-team relationship within the context of sport. Participants were asked to rate the fairness

of each positive or negative outcome allocation. A soccer team was chosen to represent a cooperative relationship, while a non-team relationship was operationalized as runners competing against one another. Eight conditions (distribution/team/one recipient, distribution/team/several recipients, distribution/non-team/one recipient, distribution/non-team/several recipients, retribution/team/one recipient, retribution/team/several recipients, retribution/non-team/several recipients, retribution/non-team/one recipient, retribution/non-team/several recipients) existed, and participants were randomly assigned to one of the conditions. A modified 2 (actor relationship: team vs. non-team) x 2 (recipient unit: one vs. several recipients) x 2 (mode of allocation: distribution vs. retribution) x 6 (subrules of contribution and equality) ANOVA was utilized to obtain results.

Mean justice ratings indicated equality of treatment was considered just in all eight conditions, while the other two equality rules were always seen as unjust with the exception of equality of results in the retribution/team/several recipients condition. All of the contribution rules were rated as unjust across all conditions with the exception of contribution of productivity in the distribution/non-team/one recipient and distribution/non-team/several recipients condition.

The researchers drew three overall conclusions: (a) equal allocation was, in the majority of the conditions, considered more just than allocation according to contributions, especially in scenarios depicting retribution, (b) allocation according to contributions was seen as less unjust in distribution than in retribution, and (c) participants made distinctions among subrules of equality to a greater extent than among contribution subrules.

Procedural Justice

While distributive justice focuses on the perceived fairness of outcomes, procedural justice emphasizes the process or procedures used to achieve a decision, regardless of whether the outcome is favorable or not. Konovosky (2000) conceptualized the emergence of procedural justice from four theoretical frameworks. Like Greenberg (1990), she began with Thibault and Walker's (1975) study of control in dispute-resolution procedures. Thibault and Walker found the distribution of control among disputants and a third-party decision maker to be the key procedural characteristic shaping people's views about the fairness of procedures. They also suggested people prefer procedures maximizing personal outcomes and that procedural control is perceived as the best means for ensuring the best personal outcome (Konovosky, 2000).

Konovosky (2000) further theorized that Blau's (1964) study of social exchange served as an antecedent for procedural justice research. Social exchange theories deal with how people form relationships, how power is dealt with in those relations, and what the expectation is for return, often unspecified, on contributions (Konovosky, 2000). The first two models identified by Konovsky were instrumental models, positing that interest in fair procedures results from a belief that fair procedures lead to favorable outcomes.

The third theory to contribute to procedural justice is the group value model authored by Tyler (1989). This model stipulated that people value long-term relationships with groups because group membership is a means for obtaining social status and self-esteem (Konovosky, 2000). Social status and self worth are evaluated along the lines of three relational considerations: neutrality, trust, and standing (Tyler, 1989). This model contrasts with the first two as Tyler's model described factors which influence procedural justice judgments. The work of Leventhal (1980) is closely related to Tyler's model

(Konovosky, 2000). Leventhal emphasized strategies used to evaluate the fairness of outcome-distribution procedures. These six strategies, commonly referred to as Leventhal's rules, were: (a) selection of decision makers, (b) ground rules for evaluating potential rewards, (c) methods of gathering information, (d) procedures for defining the decision process and for appeals, (e) safeguards against the abuse of power, and (f) availability of change mechanisms. Greenberg (1990) observed that the bulk of research on procedural justice emphasized Thibault and Walker's (1975) constructs, but that Leventhal's (1980) approach was equally important to explaining fairness in organizational contexts.

The final model identified by Konovosky (2000) as an antecedent to procedural justice was fairness heuristic theory. This model focused on how distributive justice and procedural justice function together to determine fairness perceptions. Fairness heuristic theory proposed that workers are largely uncomfortable with authority relations because of possible exploitation. As a result, when workers cede control to an authority, the workers frequently question whether the authority can be trusted (Konovosky, 2000). *Distinctions Between Distributive Justice and Procedural Justice*

Researchers have sought to understand how distributive justice and procedural justice may be different and distinct constructs and how they interact in organizational behavior. Walker, Lind, and Thibault (1979) were the first to empirically test what, if any, relationship existed between the two constructs. Research since their study has attempted to empirically validate the existence of two constructs (e.g., Greenberg, 1986; Hartman, Yrle, & Galle, 1999), or showcase how the constructs interact and may be just one construct (e.g., Tyler, 1994; Van den Bos, Vermunt, & Wilke, 1997).

Walker et al. (1979) studied undergraduate students' reactions to legal trials.

Students at one university focused mainly on perceptions of the legal process, while students at the second university focused on how their interests were affected by the end result. Three hypotheses emerged: (a) perceptions of procedural justice influence perceptions of distributive justice, that is, if proper procedures are followed during a trial, perceptions of the outcome will be more favorable; (b) perceptions of distributive justice may influence perceptions of procedural justice, that is, those involved in legal disputes may judge the fairness of the trial procedures based on the outcome; and (c) there is no relation between procedural and distributive justice in legal trials.

Results were first analyzed using a principal components factor analysis with varimax rotation. Two factors emerged, one summarizing the overall favorableness of the participants' reactions to the procedure and the other summarizing the overall favorableness of the participants' reactions to the outcome. These two indices were subjected to an ANOVA to measure differences between the two indices.

The researchers indicated the results of their studies confirmed the following two hypotheses which identified distinct constructs: "perceptions of procedural justice enhance perceptions of distributive justice only on the part of participants in the decision making process; absent the personal participation that characterizes that role there is no relation between perceptions of the two types of justice" (p. 1415).

Greenberg (1986) found similar results in his study which used a factor analysis to isolate common determinants of perceived fairness of performance evaluations. The following factors emerged as procedural factors: (a) soliciting input prior to evaluation and using it, (b) two-way communication during interviews, (c) ability to challenge

evaluations, (d) rater's familiarity with ratee's work, and (e) consistent application of standards. Only two factors emerged as distributive factors: (a) receipt of rating based on performance achieved and (b) recommendation for salary or performance based on ratings. Greenberg asserted his findings suggested that "distributive factors were rated as being as important as procedural factors as determinants of fairness" (p. 342). He recommended that both procedural and distributive factors need to be considered in any conceptualization of justice in organizational settings.

Tyler (1994) conducted a study to address whether distributive and procedural justice represent the operation of a single justice motive, the concern over the resources obtained in group interactions. His study explored two models of justice: the resource-based model, where "people's dependence on an organization for resources shapes the role of resource motives in defining distributive justice" (p. 851), and the relational model, which "links concerns about justice to concerns about the social bonds that exist between people and groups, group institutions, and group authorities." (p. 851) This study tested the hypothesis that relational concerns are distinct from resource concerns.

Specifically, the author focused on Thibault and Walker's (1975) resource-based model of procedural justice which linked evaluations of justice to evaluations of two types of control: process control and decision control. Process control is the extent of a participant's control over the presentation of evidence, while decision control is the extent of people's control over the actual decision. Tyler (1989) identified three relational concerns: neutrality (honesty and lack of bias), trust (beliefs about intentions of a third party), and standing (status recognition). These five variables served as independent

variables in the study with procedural justice, distributive justice, and affect serving as dependent variables.

For the first study, the sample included 652 participants, each interviewed after an experience with legal authorities. Participants were asked about four aspects of their experience which reflected resource concerns, their control over the process of evidence presentation (process control), and the three aspects of their experience which reflected relational issues (neutrality, trust, and standing). Statistical analysis examined which model best described the influence of experience on judgments of distributive and procedural justice. The model which best fit the data was the relation-dominated model. Distributive justice judgments were responsive to both the resource and relation models, but procedural justice judgments were only responsive to relational concerns.

Respondents in the second study were asked the same questions as in the first study. As in the first study, the analysis tested different psychological models. Results for the best fit model were exactly the same as in the first study. From these results, the researcher concluded there are two distinct psychologies of justice. "The resource motive shaped judgments of distributive justice, whereas the relational model shaped judgments of both distributive and procedural justice" (p. 857).

Van den Bos, Vermunt, and Wilke (1997) conducted two experiments to test recent developments toward an integration of the procedural and distributive justice domains. Much of the study was grounded in fairness heuristic theory. In this theory, people form fairness judgments on the basis of the fairness of the procedure and then later incorporate outcome information into their fairness judgments.

Participants in the first experiment read and responded to stimulus information manipulated by scenarios about both a procedure and an outcome. The procedure was either accurate or inaccurate. The outcome was either favorable or unfavorable. The third independent variable was the order in which participants were informed about the procedure and the outcome. Participants' procedural and distributive fairness judgments were the dependent variables. Participants in the second experiment were randomly assigned to a condition of a 2 (accurate vs. inaccurate procedure information) X 2 (favorable vs. unfavorable outcome) X 2 (procedure before outcome vs. outcome before procedure).

Taken together, the findings of the two experiments showed that the order in which information about procedures and outcomes is received plays a crucial role in what people consider to be fair. This outcome was found in Experiment 1 when people judged the fairness of a hypothetical procedure and outcome and in Experiment 2 when people experienced the fairness of a procedure and an outcome directly. Findings of Experiment 2, where participants received procedure information before outcome information, showed that procedural justice affected participants' satisfaction and intention to protest. Thus, the researchers concluded, evidence was found for a fair process effect, defined as the positive influence of procedural justice on subsequent evaluations and behavioral reactions. In conditions where participants were informed about an outcome before being informed about the procedure, findings indicated distributive justice affected how satisfied the participants were. The researchers considered this a fair outcome effect, defined as the positive influence of distributive justice on subsequent evaluations and behavior.

As noted, many studies have focused on the distinctions between distributive justice and procedural justice in organizations. Researchers have frequently operationalized distributive justice and procedural justice as independent variables and measured their impact on various organizational behavior variables. In their meta-analysis of justice in organizations, Cohen-Charash and Spector (2001) noted the importance of fairness in the workplace has been linked to job performance, job satisfaction, organizational commitment, organizational citizenship behaviors, and trust.

Folger and Konovosky (1989) found feedback, a component of procedural justice, was significantly correlated with organizational commitment and trust in supervisor. Recourse, another component of procedural justice, was also significantly correlated with trust in supervisor. Their distributive justice index and feedback were significantly related to satisfaction with raises. A usefulness analysis showed the components of procedural justice to be uniquely associated with all the criterion variables, whereas controlling for procedural justice shows distributive justice to be uniquely associated only with pay satisfaction.

Alexander and Ruderman (1987) investigated the relationship between fairness and organizational outcomes by surveying government employees. Indices of procedural and distributive fairness were derived from factor analyses. Based on the literature, the researchers hypothesized that in a complex bureaucratic organization (a) fairness judgments would influence organizational life and (b) procedural and distributive fairness would have distinctive effects on organizational outcomes. In addition, it was anticipated that procedural fairness would have greater impact than distributive fairness. The

researchers observed that job satisfaction, evaluation of supervisor, conflict/harmony, and trust in management were more strongly related to procedural fairness than distributive fairness although turnover intention was more strongly associated with distributive than procedural concerns.

Moorman (1991) conducted a study which examined the relationship between perceptions of fairness (measured in the form of distributive justice and procedural justice) and organizational citizenship behaviors. The researcher employed causal modeling to assess causal paths from justice perceptions to five dimensions of organizational citizenship: altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. He found support for three hypotheses pertaining to the relationship between organizational justice and organizational citizenship behaviors and one hypothesis examining the relationship between perceptions of procedural justice and perceptions of distributive justice.

Moorman (1991) noted, "When perceptions of fairness were measured separately from job satisfaction, job satisfaction was not related to citizenship" (p. 851). Consistent with equity theory, support was found for a causal relationship between perceptions of organizational justice and organizational citizenship behavior. The researcher concluded, "Employees who perceive unfairness may reduce the frequency or magnitude of their citizenship, whereas employees who believe they are fairly treated will see continued citizenship as a reasonable contribution to the system" (p. 851).

Moorman (1991) also examined the differential effects of procedural and distributive justice. Results confirmed the literature which has established the two forms of justice as distinct constructs. Distributive justice predicted attitudes related directly to

the outcome in question, whereas procedural justice was related to evaluations of organizational systems institutions and authorities.

Gilliland (1994) examined procedural and distributive justice in pre- and postemployment selection situations along with the impact of procedural and distributive justice manipulations on recommendation intentions, self-efficacy with regard to job performance, and actual performance. His results showed: (a) a positive relationship between hiring expectations and perceived distributive fairness in the selected condition and a negative relationship in the rejected condition; (b) job relatedness influenced perceived distributive fairness for rejected but not hired applicants; and (c) perceived procedural fairness was greater among selected individuals than among rejected individuals, as was perceived distributive fairness.

Overall, Gilliland (1994) concluded that "selected individuals saw greater fairness in the selection process and decision than rejected individuals" (p. 697), especially when individuals had high expectations of being hired. The study's findings reinforced the literature's claim that although a strong correlation exists between procedural and distributive fairness, some discrimination between the measures is present.

Gilliland and Beckstein (1996) proposed a model of procedural and distributive justice as a way of explaining authors' reactions to editorial decisions and the editorial review process. The researchers based their model on theory proposed by Leventhal (1980) and results presented by Moorman (1991) which helped to form the hypothesis that "perceptions of distributive justice are thought to form subsequent to procedural justice and be strongly influenced by the editorial decision" (p. 671).

The researchers observed relationships among three aspects of the editorial process on which reviewers and editors have direct control (timeliness of reviews, length of review comments, and length of decision letter) and distributive justice. Gilliland and Beckstein (1996) concluded that getting reviews in on time, distributing decision letters promptly, and providing details in the review enhances perceptions of fairness associated with the editorial review process. Results suggested an interaction between the editorial decision and perceptions of procedural justice in predicting distributive justice.

Explanation was positively related to distributive justice when the editorial decision was negative (rejection) and unrelated to distributive justice when the decision was positive (revise and resubmit).

Sweeney and McFarlin (1997) studied the importance women and men place on distributive and procedural justice and several organizational behavior variables. The researchers analyzed data from the "Attitudes of Federal Employees" study, originally conducted by the Federal Office of Personnel Management in 1980. The researchers plotted the interaction between gender and procedural justice and found that procedural justice has less of an impact on men's intentions to stay than for women. The reverse appeared true for the interaction between gender and distributive justice. The difference in perceived distributive justice among women did not affect their stay intentions as strongly as for men.

The researchers did not find a significant interaction between procedural justice and gender for job satisfaction though the trend showed procedural justice had a greater impact on women's job satisfaction than on men's. The relationship between distributive justice and gender for job satisfaction was stronger among men than among women. This

pattern of interaction effects for gender and the two types of justice mirrored that of the intention to stay measure.

The main effects of both procedural and distributive justice were significant predictors of supervisor evaluations – the higher the perceptions, the more positive the evaluations. No support was found for the interaction between both justice types and gender. The researchers found a significant interaction between gender and procedural justice as it was a more important predictor of commitment for women than for men.

Again, the researchers found the opposite interaction for distributive justice and gender: distributive justice was a stronger predictor of commitment for men than for women. The researchers concluded procedural justice played a bigger part in how women evaluate their experience in organizations than it did for men. Satisfaction for men, however, seemed more closely tied to their perceptions of whether outcomes were fairly distributed.

Lee and Farh (1999) replicated Sweeney and McFarlin's (1997) study of gender differences in the assessment of distributive and procedural justice. Sweeney and McFarlin's (1997) study used data originally collected by the Federal Office of Personnel Management in 1980 to gather attitudinal data, rather than pay issues immediately confronting employees, and used distributive and procedural justice measures ad hoc rather than developed from theory. Lee and Farh used measures developed by Folger and Konovsky (1989) that Greenberg (1990) considered the most promising measure.

Correlation analysis was used to determine relationships among variables. Gender was uncorrelated with pay raise or bonus increase in both data sets, indicating males and females received similar increases in both companies. Pay raise and bonus increases were

positively correlated with procedural and distributive justice, and pay satisfaction in both data sets, indicating people who received higher increases tended to perceive the increase processes and outcomes to be more fair and were more satisfied with pay. Finally, trust in supervisor was positively correlated with procedural and distributive justice.

Moderating effects of gender on the justice-outcome relationships were tested separately by hierarchical regression. In both data sets, gender did not moderate the relationship between distributive or procedural justice and pay satisfaction. Furthermore, gender did not moderate the relationship between distributive or procedural justice in data set II (data set I did not include commitment data). In sample I, gender was found to moderate the relationship between distributive justice and trust in supervisor but was stronger for females than for males. In sample II, the interaction of distributive justice and gender was in the predicted direction, although it was not significant.

Results of the study failed to support the researchers' hypotheses. The results in both studies implied women trust their supervisors when they considered the received outcomes to be fair. If women value pay and promotion as much as men, it is likely that they focus their attention on distributive justice over procedural issues.

Welbourne (1998) examined the effects of procedural and distributive justice on satisfaction with gainsharing, which involves a group-based outcome, in two different companies. She noted researchers have concluded that procedural justice was more important when an outcome was group-based, and distributive justice was more critical when the outcome was individual-based.

A correlation matrix indicated procedural and distributive justices were significantly correlated in both companies (.45 and .50). However, the results showed

procedural fairness was the more powerful predictor only in the company with low bonuses. Distributive justice explained more variance when predicting gainsharing satisfaction in the company with high payouts. Therefore, she concluded, (a) procedural justice was not more important than distributive justice in both firms, (b) distributive justice was more important than procedural justice when payouts were high, and (c) procedural justice was more important than distributive justice when payouts were low. These findings suggested the group versus individual nature of an outcome is not always adequate for understanding which type of justice may be dominant.

Hartman, Yrle, and Galle (1999) conducted a survey to measure the presence of both procedural and distributive justice in the context of positive outcomes. The researchers noted distributive justice appeared to have more influence on satisfaction with outcomes, while procedural justice appeared more related to attitudes about the relevant organization, suggesting they are distinct constructs.

The researchers observed that procedural and distributive justice emerged as distinct dimensions when participants were questioned about their reaction to a raise situation. They concluded that, as agreement with organizational objectives and the presence of information increased, perceptions of procedural justice also increased, even in the absence of full participation. No differences were found between men and women and how they rated distributive and procedural justice and their levels of satisfaction.

Andrews and Kacmar (2001) examined the discriminant validity of perceptions of organizational politics, organizational support and procedural and distributive justice.

Research has shown a relationship among the three concepts. It is evident that to some extent politics, justice, and support share the common underlying theme of fairness. The

researchers in the present study questioned whether these three constructs were sufficiently different from one another to warrant the use of separate measures.

Correlations among the four outcome variables (politics, procedural justice, distributive justice, and support) were high, suggesting they shared to some extent one mutual underlying construct. Support had higher correlations with both forms of justice than did politics. The strongest correlation was found between support and politics while the weakest correlation was found between the two forms of justice.

A 4-factor model was the best fitting model, indicating that while the four outcome variables come from the domain of fairness, each measures a unique aspect of the domain. In addition, politics and support were found to be highly and negatively correlated. Politics was found to differ from both forms of justice, but more from procedural than distributive. The researchers explained this finding by concluding that unfair distributions of rewards are viewed as political activities, making distributive justice more similar to politics than procedural justice. Support was not found to differ for the two forms of justice.

Summary of Organizational Justice

Organizational justice literature attempts to explain the role of fairness as a consideration in the workplace (Greenberg, 1987; 1990). Two main streams of research are present in the literature. Distributive justice examines an individual's perception of the fairness of an outcome or an end result. Procedural justice focuses on an individual's perception of the fairness of the policies or procedures used to make a decision, regardless of the outcome of that decision. Researchers have linked the importance of fairness in the workplace to a variety of organizational behavior variables including job

performance, job satisfaction, organizational commitment, organizational citizenship behaviors, and trust (Cohen-Charash & Spector, 2001).

Two less common streams found in the literature are interactional justice, defined as the study of perceived fairness of decisions made by authority figures (Colquitt & Greenberg, 2003), and retributive justice, defined as the study of negative outcomes (Tornblom & Jonsson, 1987). The present study examined distributive and procedural justice, focusing on how the two constructs are different and how they impact organizational behavior. Further clarification is provided on how organizational justice has been studied in the sport setting, with emphasis on distribution principles utilized in an athletic setting as the majority of literature to date has employed a distributive justice framework.

Organizational Justice in Sport

Research on the role organizational justice plays in sport organizations has focused almost exclusively on the role of distributive justice in intercollegiate athletics, but one study examined perceptions of justice in the context of national sports teams. A review of the literature in this area follows with emphasis on: (a) organizational justice in national sports teams, (b) organizational justice in intercollegiate athletics, and (c) prominent distribution principles used in sport. The review closes with a summary of recent research employing social exchange theory to examine resource allocation in sport organizations.

Organizational Justice in National Sports Teams

Stevenson (1989) used procedural and distributive justice measures to examine athletes' perceptions of the fairness of selections for national sports teams. He conducted

in-depth interviews with all first-year members of three national teams selected from both Canada and Great Britain (N = 29), for a total of six teams. His decision to use rookies was deliberate on the basis of their relative youth and recent ascension to the national team. In addition, the researcher interviewed head coaches of each national team.

An initial examination of the data revealed that no single selection procedure was used uniformly by all national teams. The researcher identified three typologies of selection: (a) the "board of selectors" selection procedure which operates within the organizational structure of the sport governing body; (b) the "national coach" selection procedure in which the national coach, although appointed by the governing body, has complete autonomy in selecting athletes and establishing criteria used for selection; and (c) the "mixed" type of selection procedure in which a board of selectors and a national coach are both involved in the selection process. Three teams utilized the "mixed" procedure, two teams employed the "national coach" procedure and one used the "board of selectors" procedure.

According to the researcher, to a significant extent, the three selection procedures were associated with different perceptions of the fairness of both procedures and outcomes. In general, the "board of selectors" procedure was more closely associated with unfairness than the other two procedures. The interview results allowed the researcher to suggest a differentiation of the selection procedures based on the athlete' perceptions of: (a) images of the selectors; (b) criteria believed to be used in the selection process; (c) bias, favoritism, and the influence of lobby groups in the selection process; and (d) the fairness of the selection outcomes. Images of the "board of selectors" were mostly negative while images associated with the "national coach" and "mixed" were

much more positive. Participants perceived selection decisions made by the "board of selectors" were based on extremely subjective criteria and were often seen as irrelevant to the sport. The criteria believed to be used in the "national coach" and "mixed" types were seen as rational, relevant, objective, and fair. Each of the three selection types was found to have different degrees of bias and favoritism. The "national coach" procedure had little reported bias, but some evidence of favoritism. The athletes' perceptions of the fairness of selection outcomes seemed closely related to their perceptions of the fairness of the selection procedures. A significant consequence of perceptions of unfairness and injustice in the "board of selectors" procedure was the feeling of frustration and bitterness many athletes expressed. In contrast, perceptions of selection outcomes under the "national coach" procedure were quite positive, with perceptions of the "mixed" procedure outcomes falling somewhere in between.

The researcher concluded it was clear that as selection procedures were perceived to be just or unjust, so were selection outcomes. The implications for sport governing bodies were obvious: If selection decisions are to be accepted with confidence, a sense of confidence must be instilled in the selection procedures themselves. Unfair selection procedures and outcomes produce bitter and disillusioned athletes. National team success, he concluded, can rarely be built on such a foundation.

Organizational Justice in Intercollegiate Athletics

The most common sport context for studies of organizational justice is intercollegiate athletics. Researchers have examined different populations within intercollegiate athletics such as athletic directors/administrators (Hums & Chelladurai, 1994b; Mahony, Hums, & Riemer, 2002; Mahony, Hums, & Riemer, 2005; Patrick,

Mahony, & Petrosko, in press), athletic board chairs (Mahony et al., 2002; Mahony et al., 2005), coaches (Hums & Chelladurai, 1994b; Jordan, Gillentine, & Hunt, 2004), student-athletes (Jordan et al., 2004; Mahony, Riemer, Breeding, & Hums, 2006), and students (Mahony et al., 2006).

Hums and Chelladurai (1994a) were the first to conduct organizational justice research in the intercollegiate athletics context. They developed a conceptual framework for applying distributive justice models to intercollegiate athletics along with a survey instrument to examine the attitudes of male and female coaches and administrators in intercollegiate athletics. The purpose of their "confirmatory study" was to identify possible principles of distribution applicable to the context of intercollegiate athletics and to assess the perspectives of selected groups of intercollegiate athletic administrators on the justness of the identified principles.

The population for the confirmatory study was athletic administrators and coaches from each of the NCAA's three divisions. Because the researchers wanted to examine differences which may occur by gender and administrative position (coach or administrator), it was necessary to conduct a stratified random sample for the pilot study. The researchers identified 10 men and 10 women from each NCAA division and each position for a total pilot study sample of 120. The return rate on the pilot study was 37% with each subgroup equally represented. Participants in the pilot study completed an instrument with 24 scenarios. The original instrument was submitted to a panel of experts for content validity contained 48 scenarios. The final instrument distributed to the participants in the confirmatory study contained 12 scenarios. Thus, three different versions of the same instrument were used.

The authors indicated coaches were chosen to be a part of the stratified random sample for both the pilot study and confirmatory study. Not all coaches responded the same way, creating a potential research problem. One might assume the cross country coach will have a different perspective than the football coach, but the study did not control for this variable. The study did control for differences in gender, but not differences in sport within the same gender.

The researchers addressed content validity in their survey instrument by submitting a list of 48 distributive scenarios to a panel of experts consisting of six athletic administrators, six coaches and six sport management professors. Each expert was asked to review the scenarios for clarity and relevance and make suggestions for additional scenarios. Following the feedback of the panel of experts, the researchers included 24 of the original 48 scenarios in a pilot study.

Instrument reliability was established two ways: internal correlations and test-retest. Intercorrelations among four scenarios in each of eight resource allocation cells were computed. The authors reported a correlation matrix to measure internal consistency from the pilot study. In addition, the authors reported a correlation matrix for the confirmatory study in which the correlations ranged from .28 to .87 with a mean of .66 (significant at p < .05). The authors concluded, "These results attest to the internal consistency of the instrument" (p. 196).

Test-retest reliability was measured only in the confirmatory study and not the pilot study. The researchers randomly selected 100 participants (N = 328) in the confirmatory study to receive a shortened version of the instrument. This shorter version consisted of one scenario from each of the eight resource allocation cells. Fifty-six

participants returned the shorter version. Their ratings were correlated with the corresponding ratings from the initial test. All of the correlations were significant (p < .05) and ranged from .31 to .86 with a mean of .64.

The purpose of Hums and Chelladurai's (1994b) second study was to (a) identify and list the possible principles of distribution applicable to the context of intercollegiate athletics, and (b) assess the perspectives of selected constituents of intercollegiate athletics on the justness of the identified principles. The study was concerned with perceived justness of the principles, not the actual principles used in decision making.

The population of the study consisted of NCAA Divisions I, II and III head coaches of all sports and athletic administrators. Because the researchers wanted to examine differences which may occur by gender and administrative position (coach or administrator), they employed a stratified random sampling procedure. The researchers identified 50 men and 50 women from each NCAA division and each position for a total study sample of 600 (300 administrators and 300 coaches). The final return rate on the instrument was 55%. Of the respondents, 46.3% were males and 53.7% were females. There were 30.8% respondents from Division I, 35.7% respondents from Division II and 33.5% from Division III.

The instrument consisted of two scenarios to depict each of the instances of distribution and retribution of (a) money, (b) facilities, and (c) support services, creating a total of 12 scenarios. Following each scenario, the eight principles of distributive justice were listed. The participants were asked to (a) rate the justness of eight allocation principles in each distributive situation, and (b) choose the one principle they would select to implement in that situation.

The researchers conducted MANOVAs to assess the effects of gender, division and position on the eight principles in each of the six distributive situations. Results showed that only gender had a significant effect in all instances. Chi square analyses were carried out to test the significance of the association between choice of a distribution principle and group membership (gender, position, and division). Results showed that males and females differed in their choices of allocation principles in (a) distribution of facilities, (b) retribution of facilities, and (c) distribution of support services only. Groups defined by position differed in their choices of allocation principles in (a) distribution of money and (b) retribution of money only. Choices among the allocation principles were not associated with the groups defined by divisional affiliations in any of the six distributive situations.

Overall, females tended to rate the set of equality principles as more just (fair) than did males, while males tended to the rate the contribution principles as more just (fair) than did females. All subgroups rated the principles of equality of treatment and need as the two most just principles. Equality of results was considered the third most just principle. Equality of opportunity and the contribution principles based on productivity, spectator appeal, effort and ability were rated as relatively unjust. This result is consistent with the findings of Tornblom and Jonsson (1985; 1987). Contrary to the researchers' expectation, administrators did not hold views different from those of the coaches. That the participants made clear distinctions among the three subrules of equality while grouping the contribution principles into one category is consistent with the findings of Tornblom and Jonsson (1985). The major finding of this study was the administrators and coaches of both genders from all three NCAA divisions were nearly unanimous in

viewing the distributive justice principles of equality of treatment, need, and equality of results as most just.

Mahony and Pastore (1998) attempted to extend Hums and Chelladurai's (1994b) survey of college athletic personnel to determine which distributive justice principles were actually being used. Their study examined NCAA revenue and expense reports from 1973-1993 to determine whether there was evidence suggesting equality and need were the main principles affecting distributions. In addition, the authors hoped to present an objective examination of the data in these reports to more fully understand a variety of trends related to women's sports, men's revenue sports, and men's nonrevenue sports. The researchers examined four categories: (a) revenue, (b) sports offered, (c) participation opportunities, and (d) expenses.

While the researchers found increases in the percentage of overall sports revenue produced by women's sports, it was still less revenue than male sports at all levels. Sports traditionally regarded as revenue generators (football and men's basketball) were found to lose money at 33% of Division I-A schools. However, institutions at the Division I-A level continue to receive over 90% of their sports team revenue from these two programs. At this level, distributions based on revenue production or spectator appeal would clearly favor football and men's basketball.

The researchers found an 86.07% increase in the number of women's sports offered by NCAA schools since 1973, while the number of men's sports had declined 10.43%. This trend appears to support the findings of Hums and Chelladurai (1994b) that current leaders within college athletics prefer distributions on the basis of equality of treatment. However, legal implications passed during the period may suggest the move

toward equality had more to do with court cases than a desire to achieve gender equity. Equality occurred only after significant legal pressure was exerted to use this distribution principle, which appears to refute Hums and Chelladurai's (1994b) findings that athletic administrators believe sport opportunities should be offered on the basis of equality of treatment or need.

Related to participation opportunities, Mahony and Pastore noted that while the number of women competing at NCAA schools increased 112.04% in the study period, the percentage of opportunities given to female athletes was still only 34.55%. This discrepancy is also inconsistent with distributions based on equality. One explanation for the low percentage is presence of football. In fact, the researchers found at Division III schools without football (17% of all NCAA schools), female participation opportunities (51.27%) outnumbered opportunities for males.

Finally, in assessing expenses, the researchers found the percentage of the typical athletic department budget spent on women's sports and football increased substantially since 1973. In fact, when football and men's basketball are removed, women's sports received 54.99% of the remaining budget. This result would suggest a strategy of taking money from men's nonrevenue sports to give to women's sports while maintaining large budgets for men's revenue sports. Again, this appears inconsistent with the findings of Hums and Chelladurai (1994b).

The results of this study enabled the researchers to draw several conclusions.

First, legislation and court decisions related to college sports appear to have impacted the distribution of resources and opportunities. Second, despite the finding of Hums and Chelladurai (1994b) that need was considered to be one of the three distributive justice

principles perceived as fair by college athletic personnel, it did not appear to be used very often. Third, athletic departments are finding additional ways to spend money on some sports teams and are eliminating other sports rather than using additional money to save sports needing the money (need) or providing more money to underfunded women's sports teams (equality). Fourth, football continues to be a major roadblock in efforts to achieve proportionality in opportunities and resources.

Following these discrepancies in the literature, Mahony, Hums, and Riemer (2002) conducted a study to reexamine the principles from Hums and Chelladurai's (1994b) study, making changes in the sample examined, asking new questions, and adding more distribution options. This study sought to answer a number of research questions including: (a) What distribution principles do athletic directors and athletic board chairs consider most fair? (b) How do athletic directors and athletic board chairs believe their institution would actually distribute or take away resources? (c) Are there differences in perceptions of fairness between athletic directors and athletic board chairs within the same division? and (d) Are there differences between administrators at Division I and Division III institutions regarding their perceptions of fairness?

The sample in the study (N = 660) was athletic directors and athletic board chairs at Division I-A and Division III universities offering football. This purposive sample was chosen because the researchers believed football was an important factor in resource distribution, and the researchers believed they were most likely to have different perspectives on their athletic programs. The sample was mailed a survey followed by a second mailing two months after the initial mailing, with a total of 261 responses (40%). Of those responding, 121 were athletic board chairs and 140 indicated they were athletic

directors. Response rates by groups ranged from a low of 35% for Division III athletic board chairs to a high of 47% for Division I athletic directors.

The scale developed by Hums and Chelladurai (1994a) was used as a model in this study, however, a number of substantive changes were made. First, revenue production was added as a sub-principle under equity. Second, the principle of equal percentages was added. This variable refers to a commonly used distribution method known as incremental budgeting in which all budgets are increased or decreased by the same amount. Third, need was examined using multiple items rather than one. The additional need items were developed through discussions with experts in the area and arguments presented in the media.

Fourth, the study focused solely on the distribution and retribution of financial resources, while Hums and Chelladurai (1994b) also examined facility use and support services. Fifth, the researchers examined athletic directors and athletic board chairs, rather than administrators and coaches. Finally, the researchers asked athletic directors and board chairs to indicate the distribution methods their schools would choose.

The instrument included two basic sections. In the first section, participants were provided with a distribution scenario followed by 12 statements describing a different principle of how the money might be distributed. The second section was similar except the scenario involved retribution. The 12 principles evaluated by respondents were (a) revenue production, (b) effort, (c) spectator appeal, (d) winning percentage, (e) ability, (f) need to succeed, (g) need to survive by a women's team, (h) need to survive by a men's non-revenue team, (i) equality of treatment, (j) equality of results, (k) those with the

largest budget receive the most (cut the least), and (l) equality of opportunity (random selection).

The researchers analyzed the data using a series of six MANOVAs. In the case of principles related to equity and equality, results indicated a difference between groups on the sets of dependent variables. The equations for the principles of need were not significant, suggesting no difference among groups. Therefore, the need principles were not included in any of the remaining analysis.

Results showed need related distributions were consistently rated as the most fair among all four groups for both the distribution and retribution principles. Second, equality of treatment generally was not rated as highly as in Hums and Chelladurai (1994b). This finding may help explain why Mahony and Pastore (1998) found little evidence that equality was the principle used to make distributions at the Division I level. The preference of need over equality, the researchers observed, may be because equality is objective while need is somewhat subjective. Finally, all of the other principles were rated as unfair by the respondents.

With regard to likelihood of use at respondent's institution, the three need related principles were rated highest, suggesting not only do decision makers believe these subjective principles are fair, they are more likely to use them when making actual distribution decisions. No differences were found within divisions on the perceptions of fairness and the likelihood of use. Several differences existed between Division I and Division III respondents. In general, Division I respondents were more likely to rate equity based principles as fair when they were objective, but rejected them if they were

not measurable or more subjective. Division III respondents evaluated equality of treatment higher for each question.

Mahony, Hums, and Riemer (2005) followed that study with a study designed to develop a broader understanding of need as a resource-allocation principle in intercollegiate athletics. Distributive justice research identified three main principles which are perceived as fair methods of resource distribution: equity (or contribution), equality (of treatment) and need (Deutsch, 1975). Distributive justice research in intercollegiate athletics has found that most athletic stakeholders supported the use of equality of treatment and need (Hums & Chelladurai, 1994b; Mahony et al., 2002; Mahony et al., 2006). The goals of the current study were to answer four primary research questions about need in intercollegiate athletics: (a) Which sport teams do the decision makers believe have the most needs? (b) What factors do the decision makers believe make one team's needs greater than another's? (c) Are there difference in perceptions of need by position? and (d) Are there differences in perceptions of needs by division?

The population in this study (N = 660) was the same as their previous study: athletic directors and athletic board chairs at Division I-A and Division III universities offering football. The instrument included basic demographic questions (e.g., gender, position, institution type) followed by two questions relevant to the study: (a) Which of your athletic teams currently has the greatest financial needs (divided by men's teams, women's teams and overall)? and (b) Why do the teams named in Question 1 have the greatest financial need?

Responses to Question 1 were examined using descriptive statistics while responses to Question 2 were transcribed and distributed to each of the authors to be grouped independently into meaningful categories. Initial intercoder reliability was 92.85%. The researchers used chi square to test the significance of the relationship between needs and group membership.

Results in Division I showed football had the greatest financial need among men's teams (26.09%) and overall (27.59%). Women's basketball (19.57%) was identified as having the greatest financial need among women's sports. Results in Division III were similar with football having the greatest financial need among men's teams (46.67%) and overall (56.52%). Women's softball (20.00%) was identified as having the greatest financial need among women's teams. The reasons cited for financial need fell into three broad categories: (a) lack of resources; (b) high costs; and (c) competitive success.

Chi square analyses indicated no significant differences in reason identified for need based on position [χ^2 (2) = .989, p < .610], but a significant difference was found between reasons identified for need based on division membership [χ^2 (2) = 25.948, p < .001]. Examination of the frequencies by division membership indicated Division III administrators were more likely to identify the high costs of certain sports as a reason for financial need while Division I administrators were more likely to identify competitive success.

Mahony et al. (2005) contributed to the understanding of resource-distribution decisions in intercollegiate athletics by shedding light on how administrators define which sports have the greatest financial need and why. Because Mahony et al. (2002) found need was the most fair and most often used principle by this same group, the

findings of Mahony et al. (2005) provide insight into the processes used to distribute resources.

Mahony, Riemer, Breeding, and Hums (2006) conducted two studies, one with college athletes and one with college students, to examine their views of fairness in a hypothetical intercollegiate athletics setting and a hypothetical sport business setting. Previous research on distributive justice in intercollegiate athletics focused on the perspectives of coaches and administrators while this study surveyed students. The researchers had four primary questions: (a) how other stakeholders (i.e., college athletes and other students) viewed the fairness of various means for distributing resources, (b) whether there were differences in those views based on gender and/or athletic participation, (c) whether views of the fairness of distributing resources were unique to intercollegiate athletics or are they common in other sport business, and (d) whether distributions or reductions based on revenue production were considered more fair than other distribution principles.

The sample for the studies included college athletes and undergraduate students enrolled in sport management classes at a large southeastern university. The participants (n = 150) consisted of equal distribution (n =) within each of five groups: (a) male nonathletes, (b) male revenue sport (basketball and football) athletes; (c) male non-revenue sport athletes, (d) female non-athletes, and (e) female athletes. The Principles of Distributive Justice in Athletics (PDJA) instrument used in the study built on the scale developed by Hums and Chelladurai (1994a). It provided participants with six scenarios (distribution and retribution of money, facilities, and support services) and the sources of the resources or reasons for the reductions. The instrument added a ninth

distribution/retribution principle based on Hums and Chelladurai's (1994b) suggestion, 'revenue production.' Thus, the nine principles were as follows: (a) equality principles included equality of treatment, equality of results, and equality of opportunity; (b) equity principles included productivity, effort, ability, revenue production, and spectator appeal; and (c) need.

The researchers conducted a series of nine MANOVAs (three sets of three) to determine the effect group membership might have on responses regarding the fairness of the nine principles. For the second set of analyses, the researchers used a chi square test of independence to examine the association between group membership and the nine principles.

Results in both studies showed respondents rated equality of treatment and need as the most fair, and they were more often chosen as the fairest options across all scenarios. The only groups that differed on equality of treatment in the ratings of fairness and in choices of equality as the fairest method were female athletes and male revenue sport athletes. In general, men tended to prefer revenue production more than women. While revenue production was not the principle perceived to be the fairest or the preferred distribution in either setting, there was a stronger preference for this principle among some groups. The researchers concluded, therefore, their study supported the need to add revenue production as a sub-principle of equity to future research inside and outside of sport settings.

Patrick, Mahony, and Petrosko (in press) studied preference for distribution principles and the effect of gender and NCAA division on individuals' fairness perceptions of equality of treatment, contribution based on revenue production, need due

to lack of resources, need due to high operating expense, and need to be competitively successful across four scenarios. Three specific research questions were asked: (a) did the respondents indicate significant differences in their perception of the fairness of the five distribution principles, (b) were there differences based on gender in preferences for distribution options, and (c) were there differences based on NCAA division in preferences for distribution options.

The researchers identified individuals listed as either athletic directors (n = 1,060) or Senior Women's Administrators (n = 322) at NCAA institutions. All Senior Women's Administrators were surveyed and athletic directors were randomly selected from the list of 1,060; every third individual was selected for a final survey of 378 athletic directors. The response rate for the study was 32.29% as 226 surveys were returned. The final sample used for analysis consisted of 208 responses, as 18 surveys were discarded as unusable. Six cells were created based on gender and NCAA division. Despite the low response rate, the cell sizes proved adequate to perform ANOVAs based on Stevens (2002).

Two of the four scenarios were developed based on surveys used in prior research (Hums & Chelladurai, 1994a, 1994b; Mahony et al., 2002; Mahony et al., 2006). In addition, two additional scenarios were developed based on the suggestion of Mahony et al. (2002) that reasons for income distribution or reduction might have an influence on perceived fairness. Gender and NCAA division level were operationalized as independent variables based on previous studies (Hums & Chelladurai, 1994b; Mahony et al., 2002). Measurement procedures for the dependent variables, the five distribution principles,

were also based on prior studies (Hums & Chelladurai, 1994a; Mahony et al., 2002; Mahony et al., 2006).

Separate repeated measures ANOVAs were conducted for each scenario with simple effects analyses and pairwise comparisons carried out as follow-up tests for significant results. Results indicated statistically significant differences in the preference for the five distribution principles, as well as significant differences in the preference for these principles based on gender and NCAA division. In general, need due to lack of resources and equality were rated higher than the other options and revenue production was rated lower.

Consistencies and differences were found in the fairness ratings of the five distribution principles across the four scenarios. Perceived fairness of distribution based on need due to lack of resources was consistently high across all four scenarios regardless of the source of the resources. The only time perceived fairness of equality exceeded need to be competitively successful was when the distribution came from a large private donation. This finding suggested that if resources came from an unexpected source and not designated for a specific purpose, administrators were more likely to perceive distributions based on equality to be most fair. Revenue production was less likely than the other principles to be rated fair and was lower than all other principles when resources increased due to a private donation.

Two findings were deemed important to understanding resource distributions in intercollegiate athletics and supported suggestions made by Mahony et al. (2002). First, the results suggested many in intercollegiate athletics believe the more traditional definition of need from the literature, in which those who have less resources are seen as

having greater needs, is more fair (Deutsch, 1975). Second, the results suggested athletic department officials were more likely to believe it was fair to enhance the budgets for those with high operating budgets during good times, but may see the larger budgets as a place to cut during the bad times, and were, therefore, less likely to protect these budgets from cuts.

Research by Jordan, Gillentine, and Hunt (2004) applied four criteria for fairness in organizational justice identified by Cropanzano and Greenberg (1997) to a coachathlete relationship in a team sport setting. The four criteria examined were: (a) fairness of outcomes, the athlete may feel deserving of more playing time due to performance; (b) policies and procedures used to determine outcomes, policies are carried out regardless of outcomes; (c) interpersonal treatment, athletes treated positively are less likely to participate in behaviors detrimental to the team; and (d) decision justifications, explanations by the coach relating to outcomes and decisions are clearly communicated.

Jordan et al. (2004) suggested four strategies of fairness which, when applied in the team sport setting, would increase the likelihood of perceptions of fairness. The first strategy identified was voice, defined as allowing employees or team members to have a say in the decision-making process. The second strategy employed Leventhal's (1980) rules intended to improve perceptions of fairness relating to policies and procedures in the decision-making process. Showing consideration for all team members, defined as treating each member of the organization with respect and concern, was identified as the third strategy. The final strategy involved providing enough information to team members to safeguard against miscommunication.

Applying the fairness strategies to organizational decisions will enhance the perceived judgments in fairness and, hopefully, lead to positive attitudes and behaviors for the organization (Jordan et al., 2004). Specifically, Jordan et al. (2004) contended that positive outcomes such as satisfaction, commitment, effort, willingness to help, and team unity would stem from these positive fairness judgments.

Summary of Organizational Justice in Athletics

The literature on organizational justice in intercollegiate athletics presents competing paradigms. The distribution principles of equality and need have been perceived as the most fair by intercollegiate athletic administrators (Mahony et al., 2002; Patrick et al., in press) and college students (Mahony et al., 2006). Most distribution decisions, however, actually favor the equity principle (Mahony & Pastore, 1998). Need is frequently cited as the most fair by men and women (Hums & Chelladurai, 1994a; Mahony et al., 2002), yet the definition of need appears to be somewhat subjective (Mahony et al., 2005).

Prior research on organizational justice in athletics has suggested females would respondent differently to certain distribution principles than males. Hums and Chelladurai (1994b) found males rated equity principles (contribution based on effort, ability, productivity, and spectator appeal) significantly higher than females in all six of their scenarios. In four scenarios, females rated equality of treatment significantly higher than males and in one scenario, females rated quality of results significantly higher than males. Males chose need first and equality of treatment second as the overall most fair way of distribution. Females identified equality of treatment first and need second.

Support for these results was found in Mahony et al. (2006). Mahony et al. (2002)

sampled mostly male respondents and found greater support for equity principles than in other studies, but need was still rated as the most fair.

Distribution Principles in Athletics

Research examining organizational justice and athletics employed distributive justice principles to evaluate the perceived fairness in the distribution and retribution of resources. This research was grounded in the work of Adams (1963; 1965) and Deutsch (1975). Adams provided the grounding for equity, or contribution, based principles, Deutsch provided the grounding for distribution based on equality and need.

Adams (1963) argued an employee who perceives he or she is contributing more to an organization than the "other" employee will perceive his or her reward to be unfair if the reward given to the "other" employee is equal or greater than that of the employee. Deutsch (1975) suggested need-based principles are most common when the organizational goal is to foster growth and equality-based principles are most appropriate where maintaining positive social relations is important.

Tornblom and Jonsson (1985; 1987) initially related the distribution principles to sport. They operationalized equality as equal allocation of resources to all claimants.

Contribution, or equity, was defined as allocation of resources in proportion to the contributions made by individuals or in accordance with organizational goals. Need was conceptualized as allocation of resources according to the needs of the claimants.

Based on this work, Hums and Chelladurai (1994a) identified subprinciples specific to intercollegiate athletics. They used Tornblom and Jonsson's (1985; 1987) conceptualization of three equality subprinciples: treatment, in which everyone receives

the same; opportunity, in which everyone has the same possibility to receive; and results, in which everyone receives the same over a period of time.

Hums and Chelladurai operationalized the equity principle with four subprincples: productivity, effort, ability, and spectator appeal. All but spectator appeal were based on Tornblom and Jonsson (1985; 1987). Hums and Chelladurai argued the entertainment value or spectator appeal of intercollegiate athletics is often an operative goal of intercollegiate athletics. They did not identify subprinciples of need.

Based on the work of Mahony and Pastore (1998), Mahony, Hums, and Riemer (2002) revised the scale developed by Hums and Chelladurai (1994) to include one additional subprinciple for equality (equal percentages added, or incremental budgeting) and one additional subprinciple for equity (revenue production). Mahony et al. (2002) examined need using two subprinciples: need to succeed and need to survive.

Mahony, Hums, and Riemer (2005) contributed additional subprinciples of need: need due to lack of resources, need due to high costs, and need to be competitively successful. These new subprinciples were tested empirically by Patrick, Mahony, and Petrosko (in press). Table 1 summarizes distribution principles used in athletics.

Table 1

Distribution Principles and Subprinciples Used in Athletics

| | Subprinciple | Initial Study to Use |
|----------|-------------------------|----------------------------|
| Equality | Equality of treatment | Hums & Chelladurai (1994a) |
| | Equality of opportunity | Hums & Chelladurai (1994a) |
| | Equality of results | Hums & Chelladurai (1994a) |

| | Equal percentages | Mahony, Hums, & Riemer (2002) |
|--------|-------------------------------------|-------------------------------|
| Equity | Productivity | Hums & Chelladurai (1994a) |
| | Effort | Hums & Chelladurai (1994a) |
| | Ability | Hums & Chelladurai (1994a) |
| | Spectator appeal | Hums & Chelladurai (1994a) |
| | Revenue Production | Mahony et al. (2002) |
| Need | Need to succeed | Mahony et al. (2002) |
| | Need to survive | Mahony et al. (2002) |
| | Need due to lack of resources | Mahony, Hums, & Riemer (2005) |
| | Need due to high costs | Mahony et al. (2005) |
| | Need to be competitively successful | Mahony et al. (2005) |

Social Exchange Theory and Resource Allocation in Sport

A recently developed line of research used to examine resource allocation in sport organizations involved the employment of social exchange theory and was grounded in the principles of distributive justice. Greenwell and Armstrong (2002) authored a framework using social exchange theory to examine marketing resource allocation within intercollegiate athletic departments. Greenwell and Armstrong (2002) emphasized the difficult and complex decisions managers face in allocating resources within the sport setting for two primary reasons. First, sport programs often need to be accountable to multiple constituents including athletes, members, governing organizations, sponsors, and spectators. Second, the allocation of resources in a multi-sport athletic organization is further complicated by the diverse objectives of individual programs.

Greenwell and Armstrong (2002) noted exchange theory is grounded in the work of Blau (1964) and Homans (1961) and can be defined as one entity exchanging something of value, such as a resource, for something of value in return, such as a reward. For example, this reciprocal relationship can apply to the multi-sport athletic setting in which an athletic director allocates greater resources to women's basketball team with the expectation of the team winning the conference championship. Greenwell and Armstrong (2002) defined resources in athletics as either economic (financial considerations), physical (e.g. human resources, equipment, etc.), or intangible (time given by support staff). Rewards are considered more difficult to define and may be subjective based on the context. Revenue production, spectator appeal, legal compliance, and intrinsic rewards such as philanthropy are all considered rewards in an intercollegiate athletic setting.

Much of the research on distributive justice in sport supports these definitions of rewards, or outcomes (e.g. Hums & Chelladurai, 1994b; Mahony & Pastore, 1998).

Greenwell and Armstrong (2002), however, argued constructs beyond distributive justice may affect resource allocation decisions in multi-sport athletic organizations.

Specifically, the researchers postulated five norms of exchange may underlie allocation decisions: (a) rationality, allocations made to programs which have greatest possibility of accruing value (Homans, 1974); (b) deprivation-satiation, allocations depend upon the value of the reward which varies in relationship to whether the reward is plentiful or scarce (Homans, 1974); (c) aggression-approval, allocations based on receipt of expected rewards or punishments (Homans, 1974); (d) power, allocations in which less powerful

programs are willing to accept smaller resources (Greenwell & Armstrong, 2002); and e) distributive justice.

Greenwell, Mahony, and Andrew (in press) applied Greenwell and Armstrong's (2002) framework in a study of NCAA Division I marketing directors. Greenwell et al. wanted to determine how these administrators allocated marketing resources to their various sports programs. The researchers used three of the norms of exchange identified by Greenwell and Armstrong (2002) as their conceptual framework: rationality, distributive justice, and power.

The researchers surveyed the top marketing administrator at each NCAA Division I institution (N = 327). Three scales were constructed to measure each of the three norms. The extant literature was used to generate eight to nine items for each construct. Four college professors who had done previous research in the area reviewed the list in order to assess content validity. The analysis consisted of two parts. First, the means and standard deviations of resource allocation norms used by marketing administrators and antecedents to those norms were examined. Second, each resource allocation principle was analyzed as to how it influenced where marketing resources (economic and non-economic) were allocated (men's sports and women's sports). Multiple regression and MANOVA were utilized to analyze data.

A total of 144 responses were received for a response rate of 44%. The allocation norm marketing administrators identified as the most prevalent was rationality followed by distributive justice and power. To identify antecedents for norms, each of the resource allocation norms was regressed on perceived scarcity of resources and previous experiences. For both rationality and distributive justice, the result of the full regression

model was significant, while the result for power was not significant. Distributive justice and power significantly contributed to the prediction of whether men's teams or women's teams received economic resources.

Results of the study indicated rationality best represented how marketers allocated marketing resources followed by distributive justice and power. Scarcity of economic resources was significantly correlated with rationality, indicating when economic resources were scarce, marketers were likely to focus on accruing the highest value for the lowest cost and were more likely to disregard fairness as a norm. The study indicated marketers tended to base decisions on fairness only when they received positive results in the past from these sports. Two of the three allocation norms, distributive justice and power, predicted which sports received marketing resources. Rationality was not a significant predictor. This tendency indicated marketers looking for the highest returns will allocate resources wherever they can to maximize their returns. Future research employing the social exchange norms should study additional multi-sport settings beyond intercollegiate athletics and contexts beyond marketing resource allocation.

Summary of Social Exchange Theory and Resource Allocation in Sport

Greenwell and Armstrong (2002) authored a framework for examining marketing resource allocation within intercollegiate athletic departments. They noted exchange theory was grounded in the work of Blau (1964) and Homans (1961) and was defined as one entity exchanging something of value, such as a resource, for something of value in return, such as a reward. Greenwell and Armstrong (2002) defined resources in athletics as either economic (financial considerations), physical (e.g. human resources, equipment, etc.), or intangible (time given by support staff). Rewards are considered more difficult to

define and may be subjective based on the context. Revenue production, spectator appeal, legal compliance, and intrinsic rewards such as philanthropy are all considered rewards in an intercollegiate athletic setting.

Greenwell, Mahony, and Andrew (in press) tested that framework by using three norms of exchange: rationality, distributive justice, and power in a study of NCAA Division I marketing directors. Results indicated rationality best represented how marketers allocated resources followed by distributive justice and power. The study indicated marketers tended to base decisions on fairness only when they receive positive results in the past.

Justification for Present Study

This study was grounded on the existing organizational justice theories of distributive and procedural justice. Adams (1963; 1965) and Deutsch (1975) provided theoretical grounding for this study in terms of patterns of distribution. Adams believed distribution may be perceived as fair based on equity principles, while Deutsch studied perceived fairness of distributions based on equality principles or need. Research on distribution methods employed in athletics suggested athletic administrators perceive allocations based on need or equality as the most fair (Mahony et al., 2002; Patrick et al., in press). Most distribution decisions, however, actually favor the equity principle (Mahony & Pastore, 1998). Need is frequently cited as the most fair by men and women (Hums & Chelladurai, 1994a; Mahony et al., 2002), yet the definition of need appears to be somewhat subjective (Mahony et al., 2005).

Prior research on organizational justice in athletics has suggested females would respondent differently to certain distribution principles than males. Hums and Chelladurai

(1994b) found males rated equity principles significantly higher than females in all six of their scenarios. In four scenarios, females rated equality of treatment significantly higher than males and in one scenario, females rated quality of results significantly higher than males. Males chose need first and equality of treatment second as the overall most fair way of distribution. Females identified equality of treatment first and need second.

Support for these results was found in Mahony et al. (2006). Mahony et al. (2002) sampled mostly male respondents and found greater support for equity principles than in other studies, but need was still rated as the most fair.

No research on resource allocation in Olympic sport was found in the literature, suggesting an opportunity to contribute to the expanding literature on the distribution of resources within athletics by focusing on a different context. In addition, this study will examine the contradiction which exists between the stated mission of the USOC as articulated in the Ted Stevens Olympic and Amateur Sports Act and its practice of rewarding medal-winning performances.

Finally, this study will elucidate the fairness perceptions of NGB administrators toward distribution principles in resource allocation. Understanding what NGB administrators perceive to be fair and unfair about the present resource allocation system will allow the USOC to make improvements to the current system which could create greater satisfaction within the Olympic movement and possibly increased medal counts in Olympic competition.

CHAPTER 3

METHODOLOGY

The purpose of the study was to measure NGB administrators' perceptions of fairness of financial resource allocation within the U.S. Olympic Movement. The study examines seven Distribution Principles: (a) Equality of Treatment, (b) Equality of Results, (c) Equity Based on Medals Won, (d) Equity Based on Membership Size, (e) Need Due to Lack of Resources, (f) Need Due to High Operating Costs, and (g) Need to be Competitively Successful. The study also measured which Distribution Principle NGB administrators believe is the most fair and the one most likely to be used to make resource allocation decisions. This chapter explains the methods used in carrying out the examination based on those principles. The section includes the research design, a description of the participants, instruments used, summary of study field test, data collection procedures used, and data analysis. A summary of the methodology concludes the chapter.

Research Design

This study incorporated a survey design and the research variables were not manipulated. The purpose of survey design research is to generalize from a sample to a population so that conclusions can be drawn about characteristics, a titudes, or behaviors of the population (Babbie, 2001). In the case of this study, the entire population was included in the survey.

Survey design has several advantages and disadvantages. Advantages include the following: (a) survey design is helpful in describing the characteristics of a large population; (b) survey design enables data to be gathered from large samples; (c) survey design can be easily altered, and (d) standardized questionnaires ask exactly the same questions of all participants and infer the same intent to all participants giving a particular response, thus strengthening the quality of the results (Babbie, 2001).

This study utilized the internet in order to administer the survey instrument to a large number of participants over a broad geographical area. Internet surveys have several specific advantages and disadvantages when compared to their traditional paper counterparts. Some of these advantages, as identified by Reips (2000), applicable to the present study include: (a) access to a large number of demographically and culturally diverse participants; (b) access to very rare, specific participant populations; (c) avoidance of time constraints; (d) avoidance of logistical problems, such as scheduling difficulties; (f) voluntary participation; (g) cost savings of lab space, person hours, equipment, and administration; (h) greater openness of the research process; (i) ability to assess the number of nonparticipants; and (j) ease of access for participants (bringing the experiment to the participant instead of the opposite).

Dillman (2000) noted several limitations of web-based survey design. First, not everyone is connected to the internet, limiting the ability of this method to be used on all populations. Furthermore, even if connected to the internet, not all potential respondents are equally computer literate. Screen configurations may appear significantly different from one respondent to another depending on settings of individual computers. Finally,

since e-mail addresses are not standardized, sampling of e-mail addresses is difficult (i.e., sometimes there is more than one e-mail address per respondent).

Dillman (2000) suggested the following guidelines for designing effective web-based surveys: (a) utilize a multiple contact strategy much like that used for regular mail surveys; (b) personalize contacts through e-mail if possible; (c) keep the invitation brief; (d) begin with an interesting, but simple to answer, question; (e) introduce a Web survey with a welcome screen that is motivational, emphasizes the ease of response, and instructs about how to proceed to the survey; (f) present each question in a conventional format similar to that normally used on paper, self-administered surveys; (g) do not require respondents to provide an answer to each question before being allowed to answer subsequent questions; and (h) make it possible for each question, and corresponding potential responses to that question to be visible on the screen at one time.

In order to increase response rates for web-based surveys, Dillman (2000) recommends a pre-notification e-mail message should be sent two to three days prior to the survey administration date. In addition, follow-up reminders should be sent first via e-mail and then through progressively more expensive methods such as paper mail (Schaeffer & Dillman, 1998). Such multiple contacts have been shown to progressively increase response rates for e-mail surveys (Mehta & Sicadas, 1995; Smith, 1997).

Since this survey was implemented online, frame error, or the extent to which the desired participants are actually sampled, needed to be controlled (Andrew, 2004). The online survey was protected with an encoded password within the website link sent to each subject to prevent the possibility of survey submissions from people not in the

population. Finally, the survey was administered through a secure website, which restricted the potential for data tampering.

Participants

The population for the study was small (N = 39 National Governing Bodies), so the entire population was included in the study. Previous research on NGBs and NSOs have sampled the entire population (e.g., Olberding, 2003; 2004; Thibault, Slack, & Hinings, 1994), with response rates of greater than 80%. The USOC revoked recognition of two NGBs, Modern Pentathlon and Team Handball, and currently manages the affairs of those sports using USOC staff. As a result, those sports were not included in the study, leaving a final population of N = 37 NGBs.

Participants included executive directors and presidents from each NGB. Executive directors were chosen because they are the paid day-to-day professional sport managers at each NGB. Presidents generally function as voluntary figure heads for the NGB and are less in touch with the day-to-day operations of the NGB. They are frequently located away from the NGB, and, thus, may have different impressions as to how their organization operates than the executive directors. Contact information for each NGB's executive director and president was assembled from organizational websites. Phone calls to NGBs filled in any missing information. Two NGBs did not have presidents at the time of survey dissemination, creating a final survey population of N = 72 participants.

Instrumentation

A description of the instrument used in the survey follows below.

Distributive Justice Scenarios

Distributive justice scenarios were formed based on the research by Hums and Chelladurai (1994a; 1994b), Mahony, Hums, and Riemer (2002), Mahony, Riemer, Breeding, and Hums (2006), and Patrick, Mahony, and Petrosko (in press), in which the researchers utilized similar scenarios. Hums and Chelladurai (1994b) examined distribution of money, facilities, and support services. Subsequent studies have focused only on the distribution of money (Mahony et al., 2002, 2006; Patrick et al., in press). Participants in this study viewed three scenarios, all of which dealt with financial resource allocation.

Scenario 1 depicted the U.S. Olympic Committee receiving a large financial contribution from a private source. Scenario 2 depicted the U.S. Olympic Committee distributing large amounts of value-in-kind non-cash resources. Scenario 3 depicted the U.S. Olympic Committee providing a non-cash promotion to National Governing Bodies through television opportunities. Participants read a scenario and rated the perceived fairness of seven Distribution Principles based on a 7-point Likert-type scale with 1 signifying "very unfair" and 7 signifying "very fair." Finally, participants were asked to identify which single distribution method they considered the most fair and which method they felt was most likely to be used. This method of inquiry has been used successfully in other athletic studies (e.g. Hums & Chelladurai, 1994b; Patrick et al., 2006). Discussion of the seven Distribution Principles is included in the section titled "Operationalization of the Dependent Variables." The three distributive justice seconarios used in the study are found in Appendix A.

While all three scenarios were fictitious they accurately reflect realistic circumstances through feedback from the field test and first hand knowledge of the

researcher. The first scenario, a large private donation, reflects reality because nearly 17% of the USOC's \$117 million of revenue for the year ending on December 31, 2005 was considered contributions, which the USOC defined in its annual report as "donations from the general public" (United States Olympic Committee, p. 29).

The second scenario, unused travel value-in-kind, reflects reality as the donation of value-in-kind goods and services is common among sport sponsorships arrangements (Irwin, Sutton, & McCarthy, 2002). In the USOC's 2005 annual report, the organization stated, "Under certain agreements, the Committee receives payment in the form of goods and services (value-in-kind)... Value-in-kind is also recognized as revenue ratably over the performance period for the amount stated in the contract, less a fair value adjustment" (United States Olympic Committee, p. 28).

The third scenario depicted free promotion on a USOC prime-time television show. In June 2006, the USOC announced plans to create a 24-hour U.S. Olympic cable television channel before the 2008 Olympics (Barron, 2006).

Demographic Questionnaire

A demographic questionnaire was administered that queried participants regarding the following items: position (volunteer or paid staff), number of years in the position, gender, estimated NGB annual budget, and estimated NGB membership size. *Validity*

Content validity for the instrument was established through a panel of experts who reviewed the scenarios prior to the administration of the survey. The instrument was presented to two NGB upper-level managers who were not part of the study sample and four academics who have published research on distributive justice in sport. The panel's

comments were considered and suggested changes were incorporated into the final version of the instrument.

Operationalization of the Independent Variables

Based on the review of literature, the independent variables examined in this study were budget size, membership size, participant position, and competitive success, defined as a medal won at the most recent Olympic Games. All four variables were used previously in studies involving NGBs (Berrett & Slack, 2001; Chelladurai & Haggerty, 1991; Frisby, 1986; Olberding, 2005; Papadimitriou & Taylor, 2002; Vail, 1986).

Budget was nominally scaled and was defined as the approximate annual budget for the organization. Participants were asked to report the approximate number of individual members. This interval-scaled data was converted to a categorical variable with two levels determined by a median split of responses. Four million dollars and less for an annual budget was considered a Small Budget and greater than five million dollars was considered a Large Budget. Olberding (2005) used budget as an input variable in his analysis of U.S. NGB efficiency.

Membership was nominally scaled and was defined as the number of individual members in the organization. Participants were asked to report the approximate number of individual members. This interval-scaled data was converted to a categorical variable with two levels determined by a median split of responses. NGBs with less than 28,500 members were considered Small Membership and those with greater than 28,500 members were considered Large Membership. Berrett and Slack (2001) used low and high participation base in their study of corporate sponsorship strategies in NSOs.

Olberding (2005) used membership size as an input variable in his analysis of U.S. NGB efficiency.

Position was nominally scaled and defined as paid (executive director) or volunteer (president), which respondents marked on the instrument. Research on the effectiveness of NSOs in Canada (Chelladurai & Haggerty, 1991; Vail, 1986) and Greece (Papadimitriou & Taylor, 2002) has identified significant differences between executive directors and presidents on their perceived role in administering the organization's goals.

Competitive success was nominally scaled and defined as one or more medals won during the most recent Olympic Games or no medals won. Participants marked on the instrument whether their NGB won a medal at the most recent Olympic Games (Athens 2004 for Summer or Torino 2006 for Winter). Frisby (1986) was the first to use competitive success as a variable in studying NGBs. She used 1982 world ranking in her study of organizational effectiveness in Canadian NSOs. Olberding (2005) used Olympic Games rankings as the outcome variable in his study of U.S. NGB effectiveness.

Operationalization of the Dependent Variables

The dependent variables in this study were interval scaled and based on prior studies of organizational justice in athletics (Hums & Chelladurai, 1994a; Mahony et al., 2002, 2006; Patrick et al., in press). Dependent variables were the mean score on two Distribution Principles which measured equality, two Distribution Principles which measured equity, and three Distribution Principles which measured need.

The two methods which measured the principle of equality were: (a) *Equality of Treatment* and (b) *Equality of Results*. Equality of opportunity (Hums & Chelladurai, 1994b; Mahony et al., 2002) and equal percentages (Mahony et al., 2002) were used in

previous studies but were largely rejected and were not appropriate for this study. Most NGBs increase their budgets in Olympic years and, thus, do not have consistent annual budgets. Winter sports might stand a better chance of receiving resources one year before a Winter Olympics than some sports, negating the principle of equality of opportunity. Equal percentages work in a fashion similar to incremental-based budgeting and assume a measure of financial consistency from year to year. Therefore, those principles were not considered in this study.

The two methods which measured the principle of equity were: (a) Equity Based on Olympic Medal Won, a function of productivity; and (b) Equity Based on Membership Size, a function of spectator appeal. Equity based on revenue production was found to be statistically significant in many studies of distributive justice in athletics (Mahony et al., 2002.; Mahony & Pastore, 1998). However, each NGB is a separate organization which must be financially independent, unlike sports in an intercollegiate athletic department where revenue produced by high profile sports such as football can help fund non-high profile sports such as field hockey. Because of this characteristic, equity based on revenue production was not considered in this study even though it had been found to be statistically significant in other studies. Equity based on ability was not considered for the study as it was assumed that all Olympic athletes have reached the pinnacle of their ability in their respective sport.

The three methods which measured the principle of need were: (a) Need Due to

Lack of Resources, (b) Need Due to High Operating Costs, and (c) Need to be

Competitively Successful. Because wide disparity exists among NGBs in terms of existing

resources, operational expenses, and international success, the principles of need all seemed appropriate for the study.

Procedural Justice Scale

Welbourne, Balkin, and Gomez-Mejia's (1995) Procedural and Distributive

Fairness of Gainsharing scale was modified and utilized to assess the perceived fairness
of the process of financial resource allocation from the U.S. Olympic Committee to

NGBs. Only the seven items measuring procedural justice based on rules and
administration in Welbourne et al.'s scale were used. Items in this scale were scored on a
5-point Likert-type agreement scale with 1 signifying "strongly disagree" and 5
signifying "strongly agree." This scale was deemed appropriate for the study because of
its emphasis on rules and administrative procedures, which is effectively what the USOC
has altered in its resource allocation plan.

References to "gainsharing plans" were replaced with "financial resource allocation plan" in the scale. References to "the company" were replaced with "U.S. Olympic Committee" in the scale. References to "employees" were replaced with "National Governing Bodies" in the scale. Coefficient alpha for the items included ranged from .71 to .90 (Welbourne et al., 1995). The procedural justice items are found in Appendix A.

Procedural justice was incorporated as a covariate because it was determined necessary to properly frame responses from the participants. For instance, participants may respond from a particular perspective of reality concerning how fair the present procedural process is within the organizations; therefore, the artificial scenarios created to measure distributive justice in the present study could be influenced to some extent by the

reality of the perceived fairness of distribution procedures within the organization. Walker, Lind, and Thibault (1979) employed a similar methodology in their study of litigation outcomes. Walker et al. used artificial litigation scenarios to present a "trial" atmosphere in which participants rated the perceived fairness of verdicts (outcomes) and trial processes (procedures). They concluded "the relationship between procedural and distributive justice depends in part on the perspective of the person making the fairness judgment" (p. 1404). Further explanation for using procedural justice in this manner is discussed under the heading "*Covariates*" below.

Field Test

A field test was conducted to confirm the viability of the proposed methodological procedure. Five middle-level managers from a National Governing Body completed the instrument to ensure its readability. Participants were allowed to make anonymous comments on any part of the instrument. Feedback from the participants was relatively cosmetic and changes were incorporated into the final version of the instrument. None of the field test participants were included in the final sample. A copy of the field test letter and comment form distributed to participants can be found in Appendix B.

Data Collection Procedures

A modified version of the methods proposed by Dillman (2000) was employed in the administration of the survey instrument. Participants were sent a pre-notification email two days prior to the distribution of the actual survey. Any incorrect email addresses were corrected through phone calls to NGBs. Dillman championed the use of a

prenotification letter which alerts the subject to the upcoming survey and asks for their response.

Reminder emails were sent to individuals who had not completed the survey one week after the initial emailed survey. Thank you notices were sent to individuals who had already completed the survey. A final reminder email was sent two weeks after the initial survey mailing to individuals had not completed the survey.

The surveys were conducted in an online format in an attempt to maximize response rate through subject convenience, secure response confidentiality, and minimize necessary paper. The survey was administered through a third-party company entitled FormSite (http://www.formsite.com). Online surveys administered in this fashion allow the investigator to use existing or created templates, collect and store data in a database spreadsheet format, and expedite transfer of data into a statistical analysis program (Andrew, 2004).

Data Analysis

Descriptive statistics (i.e., means and standard deviations) were calculated for each demographic variable and multivariate analysis of covariance (MANCOVA) was the primary statistical technique used to analyze the data.

MANCOVA

MANCOVA is an extension of analysis of variance (ANOVA) to studies with more than one dependent variable (Vogt, 2005). The researcher uses the covariate to reduce the variability in the dependent variable, by removing from the dependent variable the variance predicted from the covariate. A covariate should be a variable that has a

significant positive correlation with the dependent variable (Stevens, 2002). Covariates may also be selected for theoretical reasons if used in past research (Stevens, 2002).

In cases where significant results were observed, post hoc procedures in the form of pairwise comparisons were carried out as a strategy for statistically comparing cell means. When hypothesis testing is conducted multiple times within the same study, the risk for Type I statistical error occurring increases (Huck, 2000). The Bonferroni technique adjusts the alpha value to a more rigorous level in a study, reducing the likelihood of Type I error. Concurrently, the use of the Bonferroni technique increases the likelihood of Type II error, not identifying a result as significant when it really is (Huck, 2000). In the present study, the Bonferroni adjusted alpha level was set at .0125 as .05 was divided by four, the number of scenarios. Each of the scenarios was independent of each other.

Covariates

Because gender has been found to be statistically significant in many studies involving organizational justice (Hums & Chelladurai, 1994b; Mahony et al., 2002, 2006; Patrick et al., in press; Sweeney & McFarlin, 1997), it was treated as a covariate in the analysis. The present study was concerned with perceptions of fairness of financial resource allocation from the USOC to member NGBs. Since most NGBs are responsible for developing programs for both genders, allocation from the USOC to an NGB should be gender blind. Further research might explore resource allocation within an NGB using gender as an independent variable.

Finally, because the USOC recently altered its process for distributing resources, it was believed that change may influence participant responses. The procedural justice

literature suggests the process or procedures used to achieve a decision, regardless of whether the outcome is favorable or not, can impact an individual's perceptions of fairness (Greenberg, 1987a; 1990). Previous studies have found it difficult to completely separate distributive and procedural justice. For example, Walker, Lind, and Thibault (1979) concluded "the relationship between procedural and distributive justice depends in part on the perspective of the person making the fairness judgment" (p. 1404). Therefore, it was determined that collecting procedural justice data and using it as a control variable was the best way to eliminate this potential influential variable.

Several NGB administrators initially spoke out in opposition to the new process in 2005, including the executive director of USA Swimming, one of the largest NGBs in terms of membership and budget, who stated, "The NGBs wanted the USOC to know they felt the best way to support athletes was to support the system that supports the athletes and that system is the NGBs" (Borzilleri, 2005b).

Assumptions for MANCOVA

Three assumptions need to be met to use MANCOVA in statistical analysis (Stevens, 2002). The first assumption is that a linear relationship must be present between the dependent variable and the covariate. The second assumption is called the homogeneity of regression slopes, meaning that the slopes of the regression lines for each level of the independent variable are equal. The final assumption states the covariate must be measured without error.

Covariance is grounded in the same assumptions as ANOVA which are: independence, defined as each score coming from a separate person; normality, defined as a bell-shaped distribution of residuals; and homogeneity of variances, defined as

substantially equal variances in the dependent variable for the same value of the independent variable in the population being sampled. Any violation of one of these assumptions, whether in ANOVA or MANCOVA is considered serious (Stevens, 2002).

Research Questions and Hypotheses

Multivariate analysis of covariance analyses addressed the following research questions and hypotheses:

R1: Do NGB presidents and executive directors have significantly different perceptions of fairness for the distribution of financial resources?

H1: There will be no significant difference in fairness perceptions for distribution principles between NGB executive directors and NGB presidents.

R2a: Do NGBs with larger memberships have significantly different perceptions of fairness for distribution options than NGBs with smaller memberships?

H2a: NGBs with large memberships will not have significantly different perceptions for distribution fairness as compared to NGBs with small memberships.

R2b: Do NGBs with larger budgets have significantly different perceptions of fairness for distribution options than NGBs with smaller budgets?

H2b: NGBs with large annual budgets will not have significantly different perceptions for distribution fairness as compared to NGBs with small annual budgets.

R3: Do NGBs which are successful in Olympic Games competition have significantly different perceptions of fairness for distribution options of financial resources as compared to non-successful NGBs?

H3: NGBs which are successful in Olympic Games competition, defined as winning medals, will not have significantly different fairness perceptions for distribution principles as compared to non-successful, defined as non-winning medals, NGBs.

R4a: Which distribution principle do NGB administrators believe is the most fair?
 H4a: NGB administrators, consistent with the responses of intercollegiate athletic
 administrators, will believe the distribution principles of Equality and Need are the most fair.

R4b: Which distribution principle do NGB administrators believe is most likely to be used?

H4b: NGB administrators, consistent with the responses of intercollegiate athletic administrators, will believe the distribution principle of Equity is the most likely to be used.

Summary of Methodology

In summary, the research questions asked participants their perceptions of fairness of the Distribution Principles Equality of Treatment, Equality of Results, Equity Based on Olympic Medal Won, Equity Based on Membership Size, Need Due to Lack of Resources, Need Due to High Operating Costs, and Need to be Competitively Successful. The research problem involved four nominally scaled independent variables and seven interval-scaled dependent variables.

Participants included all executive directors and presidents of NGBs in the United States. Participants read three scenarios, rated the perceived fairness, on a 7-point Likert-type scale, of the seven Distribution Principles, and filled-out demographic information.

Responses were entered into SPSS. Multivariate analysis of covariance (MANCOVA)

was performed for each of the three scenarios with gender and procedural justice serving as covariates. Results follow in Chapter 4 with discussion of the results in Chapter 5.

CHAPTER 4

RESULTS

The purpose of the study was to measure the perceptions of fairness of financial resource allocation within the U.S. Olympic Movement by NGB administrators. The study examines seven distribution principles: (a) *Equality of Treatment*, (b) *Equality of Results*, (c) *Equity Based on Medals Won*, (d) *Equity Based on Membership Size*, (e) *Need Due to Lack of Resources*, (f) *Need Due to High Operating Costs*, and (g) *Need to be Competitively Successful*. The following chapter outlines the results obtained from the statistical procedures described in Chapter 3. Chapter 5 will analyze the results and discuss the implications of the study findings.

Response Rate

As discussed in Chapter 3, the present study surveyed all presidents and executive directors at U.S. National Governing Bodies (NGBs), a population of N = 72. Thirty-seven participants responded to the survey yielding a response rate of 51.4%. While the overall sample size is small at 37, it represents more than half of the population. Non-parametric analyses of the survey respondents to the population were employed to determine if the final sample was representative of the population.

Separate chi square analyses were performed on each of the four independent variables. Approximate 2005 NGB budget and membership sizes were obtained from an NGB executive director and were used to determine the actual population for Budget and

Membership. Results obtained from the International Olympic Committee's website were used to determine the actual population for Olympic Medal Won.

The first analysis showed a significant fit between the study participants and the non-respondents for Budget ($X^2 = 1.159$, df = 1, p > .001). The second analysis showed a significant fit between the study participants and the non-respondents for Membership ($X^2 = 0.118$, df = 1, p > .001). The third analysis showed a slight difference between the study participants and the non-respondents for Position ($X^2 = 6.924$, df = 1, p < .01). The fourth analysis showed a significant fit between the study participants and the non-respondents for Olympic Medal Won ($X^2 = 0.000$, df = 1, p = 1.000). Therefore, the final sample appears to be representative of the population.

Demographics

Survey respondents were grouped by voluntary responses to open-ended questions which identified their NGB's annual budget, their NGB's approximate membership, the administrators' position, and whether the NGB won a medal at the most recent Olympic Games. Median splits were used for budget and membership. Four NGB administrators estimated their annual budget to be \$4 million which was also the median response. All of those respondents were placed in the Small Budget cell. The median split for membership was 28,500. Three respondents did not indicate budget or membership sizes and their responses were excluded from analyses of those two variables.

Table 2

Number of Survey Respondents by Cell

| Variable | Group 1 | Group 2 |
|------------|------------------|----------------|
| Budget | Small $(n = 19)$ | Large (n = 15) |
| Membership | Small $(n = 17)$ | Large (n = 17) |

| Position | Paid $(n = 27)$ | Volunteer $(n = 10)$ |
|-------------------|-----------------|----------------------|
| Olympic Medal Won | Yes $(n = 28)$ | No $(n = 9)$ |

Results

MANCOVAs were performed for each of the independent variables of Budget, Membership, Position, and Olympic Medals Won in each of the three distribution scenarios, for a total of 12 MANCOVAs. Five of the 12 MANCOVAs were statistically significant at the .05 level, two in Scenario 1 (for Budget and Membership), two in Scenario 2 (for Budget and Membership), and one in Scenario 3 (for Olympic Medals Won). Table 3 summarizes mean scores by scenario, distribution principle and independent variable.

Table 3
Summary of Means by Scenario, Distribution Principle, Budget, Membership, Position, and Olympic Medals Won

| | | Scena | rio | | |
|--------------------|------|--------------------|------|--------------------|-------|
| 1-Private Donation | | 2-Value-in-Kind | ì | 3-Television Pro | ogram |
| Equality of Treatm | nent | Equality of Treats | nent | Equality of Treats | nent |
| Overall Mean: | 3.49 | Overall Mean: | 3.97 | Overall Mean: | 4.27 |
| Small Budget: | 3.53 | Small Budget: | 4.05 | Small Budget: | 4.37 |
| Large Budget: | 2.93 | Large Budget: | 3.67 | Large Budget: | 3.89 |
| Small Members: | 2.89 | Small Members: | 3.56 | Small Members: | 3.94 |
| Large Members: | 3.69 | Large Members: | 4.25 | Large Members: | 4.38 |
| Volunteer: | 3.20 | Volunteer: | 3.60 | Volunteer: | 4.20 |
| Paid Staff: | 3.60 | Paid Staff: | 4.11 | Paid Staff: | 4.30 |
| Medal Won: | 3.25 | Medal Won: | 3.54 | Medal Won: | 3.82 |
| No Medal Won: | 4.22 | No Medal Won: | 5.33 | No Medal Won: | 5.67 |
| Equality of Result | ts | Equality of Result | ts | Equality of Result | ts |
| Overall Mean: | 2.70 | Overall Mean: | 2.81 | Overall Mean: | 3.35 |
| Small Budget: | 3.00 | Small Budget: | 2.95 | Small Budget: | 3.53 |
| Large Budget: | 2.00 | Large Budget: | 2.47 | Large Budget: | 2.93 |
| Large Members: | 2.56 | Large Members: | 2.63 | Large Members: | 3.13 |
| Volunteer: | 2.90 | Volunteer: | 2.70 | Volunteer: | 2.80 |
| Paid Staff: | 2.63 | Paid Staff: | 2.85 | Paid Staff: | 3.56 |
| Medal Won: | 2.57 | Medal Won: | 2.61 | Medal Won: | 3.32 |

| No Medal Won: | 3.11 | No Medal Won: | 3.44 | No Medal Won: | 3.44 |
|---------------------------------|------------|-------------------------------|------------|---------------------------------|------------|
| Equity Based on N | 1edals Won | Equity Based on N | 1edals Won | Equity Based on M | ledals Won |
| Overall Mean: | 3.70 | Overall Mean: | 3.43 | Overall Mean: | 4.30 |
| Small Budget: | 3.32 | Small Budget: | 3.21 | Small Budget: | 4.11 |
| Large Budget: | 4.20 | Large Budget: | 3.67 | Large Budget: | 4.53 |
| Small Members: | 3.28 | Small Members: | 3.06 | Small Members: | 3.94 |
| Large Members: | 4.19 | Large Members: | 3.81 | Large Members: | 4.69 |
| Volunteer: | 3.90 | Volunteer: | 3.70 | Volunteer: | 4.50 |
| Paid Staff: | 3.63 | Paid Staff: | 3.33 | Paid Staff: | 4.22 |
| Medal Won: | 3.93 | Medal Won: | 3.57 | Medal Won: | 4.50 |
| No Medal Won: | 3.00 | No Medal Won: | 3.00 | No Medal Won: | 3.67 |
| Equity Based on | | Equity Based on | | Equity Based on | |
| Membership Size | | Membership Size | | Membership Size | |
| Overall Mean: | 2.32 | Overall Mean: | 2.24 | Overall Mean: | 3.25 |
| Small Budget: | 2.00 | Small Budget: | 1.79 | Small Budget: | 2.89 |
| - | | | | • | |
| Large Budget: | 2.67 | Large Budget: | 2.80 | Large Budget: | 3.73 |
| Small Members: | 2.00 | Small Members: | 1.94 | Small Members: | 2.71 |
| Large Members: | 2.63 | Large Members: | 2.56 | Large Members: | 3.88 |
| Volunteer: | 2.70 | Volunteer: | 2.40 | Volunteer: | 2.78 |
| Paid Staff: | 2.19 | Paid Staff: | 2.19 | Paid Staff: | 3.41 |
| Medal Won: | 2.43 | Medal Won: | 2.39 | Medal Won: | 3.67 |
| No Medal Won: | 2.00 | No Medal Won: | 1.78 | No Medal Won: | 2.00 |
| Need Due to Lack | | Need Due to Lack | | Need Due to Lack | |
| of Resources | | of Resources | | of Resources | |
| Overall Mean: | 3.81 | Overall Mean: | 3.95 | Overall Mean: | 3.86 |
| Small Budget: | 4.42 | Small Budget: | 4.37 | Small Budget: | 4.16 |
| Large Budget: | 3.00 | Large Budget: | 3.47 | Large Budget: | 3.40 |
| Small Members: | 4.33 | Small Members: | 4.61 | Small Members: | 4.39 |
| Large Members: | 3.19 | Large Members: | 3.25 | Large Members: | 3.19 |
| Volunteer: | 4.00 | Volunteer: | 4.00 | Volunteer: | 3.70 |
| Paid Staff: | 3.74 | Paid Staff: | 3.93 | Paid Staff: | 3.93 |
| Medal Won: | 3.75 | Medal Won: | 3.75 | Medal Won: | 3.86 |
| No Medal Won: | 4.00 | No Medal Won: | 4.56 | No Medal Won: | 3.89 |
| Need Due to High | | Need Due to High | | Need Due to High | |
| Operating Costs | | Operating Costs | | Operating Costs | |
| Overall Mean: | 2.97 | Overall Mean: | 3.49 | Overall Mean: | 2.78 |
| Small Budget: | 3.32 | Small Budget: | 4.05 | Small Budget: | 2.84 |
| Large Budget: | 2.60 | Large Budget: | 2.93 | Large Budget: | 2.67 |
| Small Members: | 3.28 | Small Members: | 3.94 | Small Members: | 3.11 |
| Large Members: | 2.69 | Large Members: | 3.13 | Large Members: | 2.38 |
| Volunteer: | 3.10 | Volunteer: | 3.60 | Volunteer: | 2.40 |
| Paid Staff: | 2.93 | Paid Staff: | 3.44 | Paid Staff: | 2.93 |
| Medal Won: | 3.00 | Medal Won: | 3.43 | Medal Won: | 2.75 |
| No Medal Won: | 2.89 | No Medal Won: | 3.67 | No Medal Won: | 2.89 |
| Need to be Compet Successful | titively | Need to be Compete Successful | titively | Need to be Compet Successful | itively |

| Overall Mean: | 5.27 | Overall Mean: | 5.03 | Overall Mean: | 4.65 |
|----------------|------|----------------|------|----------------|------|
| Small Budget: | 6.16 | Small Budget: | 5.95 | Small Budget: | 5.21 |
| Large Budget: | 4.20 | Large Budget: | 4.07 | Large Budget: | 3.87 |
| Small Members: | 5.89 | Small Members: | 5.72 | Small Members: | 5.39 |
| Large Members: | 4.63 | Large Members: | 4.44 | Large Members: | 3.75 |
| Volunteer: | 5.20 | Volunteer: | 5.10 | Volunteer: | 5.00 |
| Paid Staff: | 5.30 | Paid Staff: | 5.00 | Paid Staff: | 4.52 |
| Medal Won: | 5.04 | Medal Won: | 4.79 | Medal Won: | 4.54 |
| No Medal Won: | 6.00 | No Medal Won: | 5.78 | No Mcdal Won: | 5.00 |

Results for Scenario 1

Scenario 1 depicted a large private donation from an anonymous private source. The scenario read, "The U.S. Olympic Committee has received a multi-million dollar donation from a private source stipulating that the money be allocated to improving our Olympic teams. Please rate the fairness of the following distribution methods." Two of the four MANCOVAs run on Scenario 1 were significant: Budget and Membership.

Main Analysis for Scenario 1 – Budget

Box's test for equality of covariance matrices revealed no differences in variability between the groups, F(28, 2689) = 1.34, p = .107 for Budget. The overall MANCOVA for Budget was not statistically significant, Wilks' $\Lambda = .490$, exact F(7, 21) = 1.68, p = .020, at the Bonferroni adjusted level of .0125. However, it is possible that a Type II error may occur as the result is significant at the .05 level. Because the sample size represented greater than 50% of the population and non-parametric tests confirmed the sample was representative of the overall population, the result is being discussed and interpreted, but with some caution.

Tests on the individual dependent variables indicated significant differences for Need Due to Lack of Resources and Need to be Competitively Successful only. Table 4 summarizes the overall MANCOVA for Budget and each Distribution Principle in Scenario 1.

Table 4

Multivariate Analysis of Variance Table for Scenario 1 – Budget

| Source | MS | MSE | F | p | η^2 | $1-\beta$ |
|-------------------------------------|-----------|----------|-------|------|----------|-----------|
| I | Between S | Subjects | | | | |
| Equality of treatment | 1.68 | 4.90 | .34 | .563 | .013 | .087 |
| Equality of results | 8.42 | 2.67 | 3.15 | .087 | .105 | .402 |
| Equity of medals won | 4.45 | 3.63 | 1.22 | .278 | .043 | .187 |
| Equity of membership size | 2.51 | 1.66 | 1.51 | .230 | .053 | .220 |
| Need due to lack of resources | 16.46 | 3.15 | 5.24 | .030 | .162 | .597 |
| Need due to high operating costs | 3.83 | 2.69 | 1.42 | .244 | .050 | .210 |
| Need to be competitively successful | 38.39 | 1.53 | 25.06 | .000 | .481 | .998 |

Note. Each variable has df = 1. *Error df* = 27 *for all variables.*

Follow-Up Tests for Scenario 1 – Budget

Estimated marginal mean comparisons were used to analyze the between-subjects effects for Small Budget and Large Budget groups and each Distribution Principle. The use of estimated marginal mean scores adjusts for unequal cell sizes (Patrick, 2004). For the Distribution Principle *Need Due to Lack of Resources*, the mean fairness rating of the Small Budget group (M = 4.548) significantly exceeded the mean fairness rating of the Large Budget group (M = 3.049), F(1,27)=5.24, p = .030. For the Distribution Principle *Need to be Competitively Successful*, the main fairness rating of the Small Budget group (M = 6.356) significantly exceeded the mean fairness rating of the Large Budget group (M = 4.068), F(1,27)=25.06, p < .001. Partial eta square statistics were .162 for *Need Due to Lack of Resources* and .481 for *Need to be Competitively Successful*, indicating that Budget group had large effect sizes on those two dependent variables (Stevens, 2002).

Main Analysis for Scenario 1 – Membership

Box's test for equality of covariance matrices revealed no differences in variability between the groups, F(28, 2902) = 1.10, p = .324 for Membership. The overall MANCOVA for Membership was not statistically significant, Wilks' $\Lambda = .541$, exact F(7, 21) = 2.55, p = .046, at the Bonferroni adjusted level of .0125. However, it is possible that a Type II error may occur as the result is significant at the .05 level. Because the sample size represented greater than 50% of the population and non-parametric tests confirmed the sample was representative of the overall population, the result is being discussed and interpreted, but with some caution.

Tests on the individual dependent variables indicated significant differences for the Distribution Principle *Need Due to be Competitively Successful* only. Table 5 summarizes the overall MANCOVA for Membership and each Distribution Principle.

Table 5

Multivariate Analysis of Variance Table for Scenario 1 – Membership

| Source | MS | MSE | F | р | η^2 | $1-\beta$ |
|-------------------------------------|-----------|----------|------|------|----------|-----------|
| I | Between S | Subjects | | | | |
| Equality of treatment | 9.29 | 4.61 | 2.01 | .168 | .069 | .277 |
| Equality of results | 0.00 | 2.98 | 0.00 | .988 | .000 | .050 |
| Equity of medals won | 5.88 | 3.58 | 1.64 | .211 | .057 | .235 |
| Equity of membership size | 2.27 | 1.67 | 1.36 | .254 | .048 | .203 |
| Need due to lack of resources | 12.69 | 3.28 | 3.86 | .060 | .125 | .474 |
| Need due to high operating costs | 2.27 | 2.75 | 0.83 | .371 | .030 | .142 |
| Need to be competitively successful | 21.11 | 2.17 | 9.72 | .004 | .265 | .852 |

Note. Each variable has df = 1. Error df = 27 for all variables.

Follow-Up Tests for Scenario 1 – Membership

Estimated marginal mean comparisons were used to analyze the between-subjects effects for Small Membership and Large Membership groups and each Distribution Principle. The use of estimated marginal mean scores adjusts for unequal cell sizes (Patrick, 2004). For the Distribution Principle *Need to be Competitively Successful*, the main fairness rating of the Small Membership group (M = 6.173) significantly exceeded the mean fairness rating of the Large Membership group (M = 4.416), F(1,27) = 9.72, p = .004. Partial eta square statistic was .265 for *Need to be Competitively Successful*, indicating that Membership group had a large effect sizes on that Distribution Principle (Stevens, 2002).

Results for Scenario 2

Scenario 2 depicted unused travel VIK to be allocated to NGBs. The scenario read, "The U.S. Olympic Committee has a large amount of travel VIK to distribute to National Governing Bodies. Please rate the fairness of the following distribution methods." Two of the four MANCOVAs run on Scenario 2 were significant: Budget and Membership.

Main Analysis for Scenario 2 – Budget

Box's test for equality of covariance matrices revealed no differences in variability between the groups, F(28, 2689) = 1.46, p = .058 for Budget. The overall MANCOVA for Budget was statistically significant, Wilks' $\Lambda = .438$, exact F(7, 21) = 3.86, p = .008, at the Bonferroni adjusted level of .0125. Tests on the individual dependent variables indicated significant differences for *Equity of Membership Size* and *Need to be Competitively Successful* only. Table 6 summarizes the overall MANCOVA for Budget and each Distribution Principle in Scenario 2.

Table 6

Multivariate Analysis of Variance Table for Scenario 2 – Budget

| Source | MS | MSE | F | p | η^2 | $1-\beta$ |
|-------------------------------------|-----------|----------|-------|------|----------|-----------|
| F | Between S | Subjects | | | | |
| Equality of treatment | 1.00 | 5.10 | 0.20 | .661 | .007 | .071 |
| Equality of results | 1.88 | 2.49 | 0.76 | .392 | .027 | .134 |
| Equity of medals won | 1.05 | 3.59 | 0.30 | .594 | .011 | .082 |
| Equity of membership size | 8.82 | 1.42 | 6.20 | .019 | .187 | .670 |
| Need due to lack of resources | 6.35 | 3.42 | 1.86 | .184 | .064 | .260 |
| Need due to high operating costs | 9.46 | 2.88 | 3.29 | .081 | .109 | .416 |
| Need to be competitively successful | 32.59 | 1.90 | 17.12 | .000 | .388 | .979 |

Note. Each variable has df = 1. *Error df* = 27 *for all variables.*

Follow-Up Tests for Scenario 2 – Budget

Estimated marginal mean comparisons were used to analyze the between-subjects effects for Small Budget and Large Budget groups and each Distribution Principle. The use of estimated marginal mean scores adjusts for unequal cell sizes (Patrick, 2004). For the Distribution Principle Equity of Membership Size, the mean fairness rating of the Large Budget group (M = 2.924) significantly exceeded the mean fairness rating of the Small Budget group (M = 1.827), F(1,27)=6.20, p = .019. For the Distribution Principle Need to be Competitively Successful, the main fairness rating of the Small Budget group (M = 6.081) significantly exceeded the mean fairness rating of the Large Budget group (M = 3.973), F(1,27)=17.12, p = .000. Partial eta square statistics were .187 for Equity of Membership Size and .388 for Need to be Competitively Successful, indicating that Budget group had large effect sizes on those two dependent variables (Stevens, 2002). Main Analysis for Scenario 2 - Membership

Box's test for equality of covariance matrices revealed no differences in variability between the groups, F(28, 2902) = 1.13, p = .289 for Membership. The overall MANCOVA for Membership was not statistically significant, Wilks' $\Lambda = .500$, exact F(7, 21) = 3.01, p = .024, at the Bonferroni adjusted level of .0125. However, it is possible that a Type II error may occur as the result is significant at the .05 level. Because the sample size represented greater than 50% of the population and non-parametric tests confirmed the sample was representative of the overall population, the result is being discussed and interpreted, but with some caution.

Tests on the individual dependent variables indicated significant differences for the Distribution Principles *Need Due to Lack of Resources* and *Need Due to be*Competitively Successful only. Table 7 summarizes the overall MANCOVA for Membership and each Distribution Principle in Scenario 2.

Table 7

Multivariate Analysis of Variance Table for Scenario 2 – Membership

| Source | MS | MSE | F | р | η^2 | $1-\beta$ |
|-------------------------------------|-----------|----------|------|------|----------|-----------|
| F | Between S | Subjects | | | | |
| Equality of treatment | 5.91 | 4.91 | 1.20 | .282 | .043 | .185 |
| Equality of results | 0.43 | 2.54 | 0.17 | .683 | .006 | .068 |
| Equity of medals won | 5.22 | 3.44 | 1.52 | .229 | .053 | .221 |
| Equity of membership size | 3.00 | 1.64 | 1.83 | .187 | .064 | .257 |
| Need due to lack of resources | 17.65 | 3.00 | 5.88 | .022 | .179 | .647 |
| Need due to high operating costs | 4.89 | 3.05 | 1.61 | .216 | .056 | .231 |
| Need to be competitively successful | 18.08 | 2.44 | 7.41 | .011 | .215 | .746 |

Note. Each variable has df = 1. Error df = 27 for all variables.

Follow-Up Tests for Scenario 2 – Membership

Estimated marginal mean comparisons were used to analyze the between-subjects effects for Small Membership and Large Membership groups and each Distribution Principle in Scenario 2. The use of estimated marginal mean scores adjusts for unequal cell sizes (Patrick, 2004). For the Distribution Principle *Need Due to Lack of Resources*, the main fairness rating of the Small Membership group (M = 4.745) significantly exceeded the mean fairness rating of the Large Membership group (M = 3.138), F(1,27)=5.88, p = .022. For the Distribution Principle *Need to be Competitively Successful*, the main fairness rating of the Small Membership group (M = 5.916) significantly exceeded the mean fairness rating of the Large Membership group (M = 4.290), F(1,27)=7.41, P = .011. Partial eta square statistics were .170 for *Need Due to Lack of Resources* and .215 for *Need to be Competitively Successful*, indicating that Membership group had a large effect sizes on that Distribution Principle (Stevens, 2002).

Results for Scenario 3

Scenario 3 depicted free promotion of NGBs through a USOC-produced television show. The scenario read, "The U.S. Olympic Committee is producing a primetime television show highlighting Olympic sports. Please rate the fairness of the following methods for determining which National Governing Bodies are featured on the program and, thus, receive promotional time on television." One of the four MANCOVAs run on Scenario 3 was significant: Olympic Medal Won.

Main Analysis for Scenario 3 – Olympic Medal Won

The overall MANCOVA for Scenario 3 was not statistically significant for Olympic Medal Won in the Most Recent Olympic Games, Wilks' $\Lambda = .438$, exact F(7, 21) = 2.98, p = .023, at the Bonferroni adjusted level of .0125. However, it is possible

that a Type II error may occur as the result is significant at the .05 level. Because the sample size represented greater than 50% of the population and non-parametric tests confirmed the sample was representative of the overall population, the result is being discussed and interpreted, but with some caution.

However, Box's test for equality of covariance matrices was also significant, F(28, 842) = 1.81, p = .007, indicating a violation of the assumption of the equality of covariance matrices. Stevens (2002) suggests studying variance differences in groups when a Box test is significant:

If the Box test had been significant and the larger generalized variance was with the larger group size, then the multivariate statistics would be conservative. In that case, we would not be concerned, for we would have found significance at an even more stringent level had the assumption been satisfied (Stevens, 2002, p. 274).

Examination of the generalized variances in the Olympic Medal Won group revealed four cases of the larger generalized variance residing with the larger group size: *Equality of Treatment, Equity Based on Medals Won, Equity on Membership Size,* and *Need to be Competitively Successful.* The remaining three cases were disregarded from further analysis as the risk of Type I statistical error would increase and statistical power would decrease (Stevens, 2002).

Tests on the four individual dependent variables which satisfied Stevens' (2002) suggestions revealed significant differences for *Equality of Treatment* and *Equity of Membership Size* only. Table 8 summarizes the overall MANCOVA for Olympic Medal Won and each Distribution Principle in Scenario 3.

Table 8

Multivariate Analysis of Variance Table for Scenario 3 – Olympic Medal Won

| Source | MS | MSE | F | p | η^2 | 1 – β |
|-------------------------------------|-----------|----------|------|------|----------|-------|
| F | Between S | Subjects | | | | |
| Equality of treatment | 16.36 | 3.15 | 5.20 | .030 | .157 | .595 |
| Equity of medals won | 6.90 | 2.44 | 2.83 | .104 | .092 | .368 |
| Equity of membership size | 18.74 | 2.50 | 7.51 | .011 | .211 | .753 |
| Need to be competitively successful | 2.99 | 3.60 | 0.83 | .370 | .029 | .142 |

Note. Each variable has df = 1. Error df = 28 for all variables.

Follow-Up Tests for Scenario 3 – Olympic Medal Won

Estimated marginal mean comparisons were used to analyze the between-subjects effects for Small Membership and Large Membership groups and each Distribution Principle in Scenario 3. The use of estimated marginal mean scores adjusts for unequal cell sizes (Patrick, 2004). For the Distribution Principle Equality of Treatment, the main fairness rating of the No Olympic Medal Won group (M = 5.476) significantly exceeded the mean fairness rating of the Olympic Medal Won group (M = 3.814), F(1,28)=5.20, p = .030. For the Distribution Principle Equity of Membership Size, the main fairness rating of the Olympic Medal Won group (M = 3.688) significantly exceeded the mean fairness rating of the No Olympic Medal Won group (M = 1.909), F(1,28)=7.51, p = .011. Partial eta square statistics were .157 for Equality of Treatment and .211 for Equity of Membership Size, indicating that Olympic Medal Won group had large effect sizes on that Distribution Principle (Stevens, 2002).

Most Fair Principle and Most Likely to be Used Principle

Since survey participants could have rated two Distribution Principles the same in a given scenario, modal frequency comparisons were used to determine which of the seven Distribution Principles NGB administrators believed to be the most fair and which

principle would most likely to be used in each scenario. Following is a summary of mode comparisons for each scenario by independent variable.

Overall

In each of the three scenarios, the overall result was the same. NGB administrators believed *Need to be Competitively Successful* was the most fair Distribution Principle and *Equality of Treatment* was the second most cited. *Equity Based on Medals Won* was the most likely to be used Distribution Principle in each scenario, with *Need to be Competitively Successful* as the second most frequently cited. Table 9 compares the frequencies of Distribution Principle by scenario.

Table 9

Most Fair and Most Likely to be Used Distribution Principles by Scenario

| Scenario | Most Fair | Most Likely to be Used |
|---------------------------|---|--|
| 1-Private Donation (N=36) | Need to be Competitively Successful (n = 19) Equality of Treatment (n = 7) Equity Based on Medals Won (n = 6) Need Due to Lack of Resources (n = 3) Equality of Results (n = 1) | Equity Based on Medals Won (n = 21) Need to be Competitively Successful (n = 9) Equality of Treatment (n = 3) Equity Based on Membership (n = 1) Need Due to Lack of Resources (n = 1) Need Due to High Operating Costs (n = 1) |
| 2-Value-in-Kind (N=36) | Need to be Competitively Successful (n = 17) Equality of Treatment (n = 9) Equity Based on Medals Won (n = 5) Need Due to Lack of Resources (n = 5) | Equity Based on Medals Won (n = 17) Need to be Competitively Successful (n = 10) Equality of Treatment (n = 5) Need Due to Lack of Resources (n = 2) Equity Based on Membership (n = 1) Need Due to High Operating Costs (n = 1) |

3-Television Promotion (N=36) Need to be Competitively
Successful (n=13)
Equality of Treatment (n=11)
Equity Based on
Medals Won (n = 8)
Equality of Results (n = 2)
Equity Based on
Membership (n = 2)
Need Due to Lack of
Resources (n = 1)

Equity Based on
Mcdals Won (n=19)
Need to be Competitively
Successful (n=6)
Equality of Treatment (n = 5)
Equity Based on
Membership (n = 5)
Need Due to Lack of
Resources (n = 1)
Need Due to High
Operating Costs (n = 1)

Budget

In Scenario 1, administrators from NGBs with Small Budgets believed *Need to be Competitively Successful* was the most fair Distribution Principle (n = 11) but believed *Equity Based on Medals Won* would be the most likely to be used (n = 12). Administrators from NGBs with Large Budgets also believed *Need to be Competitively Successful* was the most fair Distribution Principle (n = 6) but believed *Equity Based on Medals Won* would be the most likely to be used (n = 7).

NGB administrators held similar beliefs in Scenario 2. Both Small Budget (n = 10) and Large Budget (n = 5) administrators believed *Need to be Competitively*Successful was the most fair Distribution Principle but believed Equity Based on Medals

Won would be the most likely to be used (Small Budget: n = 10; Large Budget: n = 6).

In Scenario 3, Small Budget NGB administrators again believed *Need to be*Competitively Successful was the most fair Distribution Principle (n = 8) but again believed Equity Based on Medals Won was the most likely to be used (n = 8). Large Budget NGB administrators believed Equity Based on Medals Won was the most fair Distribution Principle (n = 6) and the principle most likely to be used (n = 9).

Membership

In Scenario 1, administrators from NGBs with Small and Large Memberships believed *Need to be Competitively Successful* (Small Membership: n = 11; Large Membership: n = 6) was the most fair Distribution Principle but both groups believed *Equity Based on Medals Won* would be the most likely to be used (Small Membershp: n = 11; Large Membership: n = 8). Administrators from NGBs with Large Memberships also believed *Need to be Competitively Successful* was the most fair Distribution Principle (n = 7) but believed *Equity Based on Medals Won* would be the most likely to be used (n = 7).

NGB administrators held similar beliefs in Scenario 2. Both Small Membership (n = 9) and Large Membership (n = 6) administrators believed *Need to be Competitively*Successful was the most fair Distribution Principle but believed Equity Based on Medals

Won would be the most likely to be used (Small Membership: n = 8; Large Membership: n = 8).

In Scenario 3, Small Membership NGB administrators again believed *Need to be Competitively Successful* was the most fair Distribution Principle (n = 8) but again believed *Equity Based on Medals Won* was the most likely to be used (n = 8). Large Membership NGB administrators believed *Equity Based on Medals Won* was the most fair Distribution Principle (n = 7) and the principle most likely to be used (n = 9). *Position*

In Scenario 1, Paid NGB administrators believed *Need to be Competitively*Successful was the most fair Distribution Principle (n = 16) but believed Equity Based on Medals Won would be the most likely to be used (n = 12). Volunteer NGB administrators

believed Equity Based on Medals Won was the most fair (n = 4) and the most likely to be used (n = 9).

In Scenario 2, both Paid NGB administrators (n = 12) and Volunteer NGB administrators (n = 5) believed *Need to be Competitively Successful* was the most fair Distribution Principle but believed *Equity Based on Medals Won* would be the most likely to be used (Paid: n = 10; Volunteer: n = 7).

In Scenario 3, Paid NGB administrators again believed *Need to be Competitively Successful* was the most fair Distribution Principle (n = 10) but again believed *Equity Based on Medals Won* was the most likely to be used (n = 14). Volunteer NGB administrators believed *Equality of Treatment* was the most fair Distribution Principle (n = 4) but believed *Equity Based on Medals Won* was the most likely to be used (n = 5). *Olympic Medal Won*

In Scenario 1, all NGB administrators, regardless of whether the NGB won a medal at the most recent Olympic Games or not, believed *Need to be Competitively* Successful was the most fair Distribution Principle (Won: n = 12; Not Won: n = 7) but believed Equity Based on Medals Won would be the most likely to be used (Won: n = 16; Not Won: n = 5).

In Scenario 2, all NGB administrators, regardless of whether the NGB won a medal at the most recent Olympic Games or not, believed *Need to be Competitively*Successful was the most fair Distribution Principle (Won: n = 12; Not Won: n = 5) but differed in their opinions as to which was most likely to be used. Administrators from NGBs which had won medals believed Equity Based on Medals Won would be the most likely to be used (n = 13) while administrators from NGBs which did not win medals

were split between Need to be Competitively Successful (n = 4) and Equity Based on Medals Won (n = 4).

In Scenario 3, administrators from NGBs which had won medals at the most recent Olympic Games again believed *Need to be Competitively Successful* was the most fair Distribution Principle (n = 11) but again believed *Equity Based on Medals Won* was the most likely to be used (n = 13). Administrators from NGBs which had not won medals believed *Equality of Treatment* was be the most fair Distribution Principle (n = 5) but believed the most likely to be used would again be *Equity Based on Medals Won* (n = 5).

Data Analysis Summary

The study showed five of 12 MANCOVAs were statistically significant at the .05 level. Those results, however, should be interpreted with some caution as only one of the MANCOVAs was statistically significant at the Bonferroni adjusted level of .0125. The five MANCOVAs statistically significant at the .05 level were: (a) distribution of a private donation by NGB Budget Size; (b) distribution of a private donation by NGB Membership Size; (c) distribution of Value-in-Kind by NGB Budget Size; (d) distribution of Value-in-Kind by NGB Membership Size; and (e) promotion of sport on Television Program by Olympic Medal Won. In four of the MANCOVAs, *Need to be Competitively Successful* had the same significant difference. NGBs with Small Budgets and Small Membership sizes believed this distribution principle to be a significantly more fair method of distribution than NGBs with Large Budgets and Large Membership sizes, respectively, in the scenarios for Private Donation and Value-in-Kind only.

Need Due to Lack of Resources was significant in two of the MANCOVAs. In Scenario 1, Private Donation NGBs with Small Budgets believed this distribution principle to be a significantly more fair method of distribution than NGBs with Large Budgets. In Scenario 2, Value-in-Kind, NGBs with Small Membership sizes believed this distribution principle to be a significantly more fair distribution method than NGBs with Large Membership sizes.

Equity Based on Membership Size was also significant in two of the MANCOVAs. In Scenario 2, Value-in-Kind, NGBs with Large Budgets believed this distribution principle to be a significantly more fair method of distribution than NGBs with Small Budgets. In Scenario 3, Television Program, NGBs which won a medal at the most recent Olympic Games believed this distribution principle to be a significantly more fair method of distribution than NGBs which did not win a medal.

Equality of Treatment was significant only in Scenario 3, Television Program.

NGBs which did not win a medal at the most recent Olympic Games believed this distribution principle to be a significantly more fair method of distribution than NGBs which did win a medal. Table 10 summarizes significant group differences in each principle.

Table 10
Summary of Significant Distribution Principles by Scenario

| | | MANCOVA | | |
|--|---|--|---|--------------------------------------|
| Private Donation x Budget Size | Private Donation x Membership Size | Value-in-Kind x Budget Size | Value-in-Kind x Membership Size | Television Program x Medal Won |
| Need Due to Lack of Resources Small Budget | Need to be Competitively Successful | Equity Based on Membership Size Large Budget | Need Due to Lack of Resources Small Members | Equality of Treatment Medal Not Won |

| exceeded Large Budget | Small Members exceeded Large Members | exceeded Small Budget | exceeded Large Members | exceeded Medal Won |
|--|--|--|--|--|
| Need to be Competitively Successful Small Budget exceeded Large Budget | | Need to be Competitively Successful Small Budget exceeded Large Budget | Need to be Competitively Successful Small Members exceeded Large Members | Equity Based on Membership Size Medal Won exceeded Medal Not Won |

Within group membership, study participants identified *Need to be Competitively Successful* as the most fair distribution principle 19 out of a possible 37 times. NGBs with Large Budgets and Large Memberships cited *Equity Based on Medals Won* as the most fair distribution principle in Scenario 3, Television Program. Volunteer NGB administrators believed *Equity Based on Medals Won* was the most fair distribution principle in Scenario 1, Private Donation, and *Equality of Treatment* was the most fair distribution principle in Scenario 3, Television Program. NGBs which did not win a medal at the most recent Olympic Games also believed *Equality of Treatment* was the most fair distribution principle in Scenario 3, Television Program.

Equity Based on Medals Won was identified as the most likely to be used distribution principle 24 out of a possible 37 times. In Scenario 2, Value-in-Kind, NGBs which did not win a medal at the most recent Olympic Games, cited both Equity Based on Medals Won and Need to be Competitively Successful with the same frequency. Table 11 summarizes the distribution principles deemed most fair and most likely to be used across group membership.

Table 11

Summary of Most Fair and Most Likely to be Used Distribution Principles by Group

| Group | 1-Private Donation | 2-Value-in-Kind | 3-Television Program |
|-----------------------------|--|--|--|
| Small Budget ($N = 19$) | Most Fair - Need to be Competitively Successful (n = 11) | Most Fair - Need to be Competitively Successful (n = 10) | Most Fair - Need to be Competitively Successful (n = 8) |
| | Most Used - Equity Based on Medals Won (n = 12) | Most Used - Equity Based on Medals Won (n = 10) | Most Used - Equity Based on Medals Won (n = 8) |
| Large Budget ($N = 14$) | Most Fair - Need to be Competitively Successful (n = 6) | Most Fair - Need to be Competitively Successful (n = 5) | Most Fair - Equity Based on Medals Won (n = 6) |
| | Most Used - Equity Based on Medals Won (n = 7) | Most Used - Equity Based on Medals Won (n = 6) | Most Used - Equity Based on Medals Won (n = 9) |
| Small Membership $(N = 18)$ | Most Fair - Need to be Competitively Successful (n = 11) | Most Fair - Need to be Competitively Successful (n = 9) | Most Fair - Need to be Competitively Successful (n = 8) |
| | Most Used - Equity Based on Medals Won (n = 11) | Most Used - Equity Based on Medals Won (n = 8) | Most Used - Equity Based on Medals Won (n = 8) |
| Large Membership $(N = 15)$ | Most Fair - Need to be Competitively Successful (n = 6) | Most Fair - Need to be Competitively Successful (n = 6) | Most Fair - Equity Based on Medals Won (n = 7) |
| | Most Used - Equity Based on Medals Won (n = 8) | Most Used - Equity Based on Medals Won (n = 8) | Most Used - Equity Based on Medals Won (n = 9) |
| Paid $(N = 26)$ | Most Fair - Need to be Competitively Successful (n = 17) | Most Fair - Need to be Competitively Successful (n = 12) | Most Fair - Need to be Competitively Successful (n = 10) |
| | Most Used - Equity Based on Medals Won (n = 12) | Most Used - Equity Based on Medals Won (n = 10) | Most Used - Equity Based on Medals Won (n = 14) |
| Volunteer $(N = 10)$ | Most Fair - Equity Based on Medals Won (n = 4) | Most Fair - Need to be Competitively Successful (n = 5) | Most Fair - Equality of Treatment (n = 4) |
| | Most Used - Equity Based on Medals Won (n = 9) | Most Used - Equity Based on Medals Won (n = 7) | Most Used - Equity Based on Medals Won (n = 5) |
| Medal Won $(N = 28)$ | Most Fair - Need to be | Most Fair - Need to be | Most Fair - Need to be |

| | Competitively Successful (n = 12) | Competitively Successful (n = 12) | Competitively Successful (n = 11) |
|------------------------|---|--|---|
| | Most Used - Equity Based on Medals Won (n = 16) | Most Used - Equity Based on Medals Won (n = 13) | Most Used - Equity Based on Medals Won (n = 14) |
| No Medal Won $(N = 9)$ | Most Fair - Need to be Competitively Successful (n = 7) | Most Fair - Need to be Competitively Successful (n = 5) | Most Fair - Equality of Treatment (n = 5) |
| | Most Used - Equity Based on Medals Won (n = 5) | Most Used - Equity Based on Medals Won (n = 4) and Need to be Competitively Successful (n = 4) | Most Used - Equity Based on Medals Won (n = 5) |

CHAPTER 5

DISCUSSION

The purpose of this study was to measure National Governing Body (NGB) administrators' perceptions of fairness of financial resource allocation within the U.S. Olympic Movement. The study examined seven distribution principles as dependent variables: (a) Equality of Treatment, (b) Equality of Results, (c) Equity Based on Medals Won, (d) Equity Based on Membership Size, (e) Need Due to Lack of Resources, (f) Need Due to High Operating Costs, and (g) Need to be Competitively Successful. The study also measured which distribution principle NGB administrators believed was the most fair and which principle was most likely to be used to make resource allocation decisions.

Previous studies of the fairness perceptions of resource allocation in athletics has emphasized the use of scenarios (Hums & Chelladurai, 1994b; Mahony, Hums, & Riemer, 2002; Patrick, Mahony, & Petrosko, in press). This study used three scenarios common to the U.S. Olympic Movement: (a) distribution of an anonymous Private Donation, (b) distribution of extra sponsorship Value-in-Kind, and (c) inclusion in a U.S. Olympic Television Program (Examples of the three scenarios are included in Appendix A). Study participants included volunteer and paid administrators from U.S. NGBs (*N* = 37). Although the final number of respondents was small, it represented greater than 50% of the study population. The administrators were divided into groups using the study's independent variables: (a) Position (paid or volunteer), (b) Budget (small or large), (c)

Membership (small or large), and (d) Medal Won at most recent Olympic Games (yes or no). Results described in Chapter 4 highlighted the statistically significant results from the 12 MANCOVAs performed on the data. The following discussion focuses primarily on those significant results and their role in answering the study's research questions and hypotheses.

Main Scenario Results Summary

Five of the 12 main MANCOVAs analyses found statistically significant differences at the .05 level. Those results, however, should be interpreted with some caution as only one of the MANCOVAs was statistically significant at the Bonferroni adjusted level of .0125. Estimated marginal mean comparisons were used to analyze the between-subjects effects for each significant independent variable and each distribution principle. The five significant MANCOVAs were: (a) distribution of a Private Donation by NGB Budget Size; (b) distribution of a Private Donation by NGB Membership Size; (c) distribution of Value-in-Kind by NGB Budget Size; (d) distribution of Value-in-Kind by NGB Membership Size; and (e) promotion of sport on Television Program by Olympic Medal Won. A detailed summary of group differences in each scenario can be found in Table 10 in Chapter 4 (p. 128).

In four of the MANCOVAs, *Need to be Competitively Successful* had the same significant difference. Participants from NGBs with Small Budgets and Small Membership sizes believed this distribution principle to be a significantly more fair method of distribution than participants from NGBs with Large Budgets and Large Membership sizes in the scenarios for Private Donation and Value-in-Kind only. *Need Due to Lack of Resources* and *Equity Based on Membership Size* each had significant

differences in two of the MANCOVAs. The only other distribution subprinciple found to have a significant difference was *Equality of Treatment* in one scenario.

Most Fair and Most Likely to be Used Distribution Principle Results Summary

Within group membership, study participants identified *Need to be Competitively Successful* as the most fair distribution principle 19 out of a possible 37 times.

Respondents from NGBs with Large Budgets and Large Memberships cited *Equity Based on Medals Won* as the most fair distribution principle in Scenario 3, Television Program.

Volunteer NGB administrators believed *Equity Based on Medals Won* was the most fair distribution principle in Scenario 1, Private Donation, and *Equality of Treatment* was the most fair distribution principle in Scenario 3, Television Program. Respondents from NGBs which did not win a medal at the most recent Olympic Games also believed *Equality of Treatment* was the most fair distribution principle in Scenario 3, Television Program.

Equity Based on Medals Won was identified as the most likely to be used distribution principle 24 out of a possible 37 times. In Scenario 2, Value-in-Kind, respondents from NGBs which did not win a medal at the most recent Olympic Games cited both Equity Based on Medals Won and Need to be Competitively Successful with the same frequency. A detailed summary of the distribution principles deemed most fair and most likely to be used across group membership can be found in Table 11 in Chapter 4 (p. 129).

Research Questions and Hypotheses

The study results allow us to answer the six research questions posed in Chapter 1, however, the interpretation of the hypotheses should be conducted with some caution

as only one main MANCOVA was statistically significant at the Bonferroni adjusted level of .0125. Five main MANCOVAs were statistically significant at the .05 level and those results are discussed.

Research Question 1 asked: Do paid and volunteer NGB administrators have significantly different perceptions of fairness for the distribution of financial resources? To address this question, participants were identified either as paid or volunteer in the independent variable "position". Hypothesis 1 was the null hypothesis, stating there will be no significant difference in fairness perceptions for distribution principles between NGB executive directors and NGB presidents. Based on the results, Hypothesis 1 was not rejected as none of the three scenarios were significant for position.

Research Question 2a asked: Do NGBs with larger memberships have significantly different perceptions of fairness for distribution options than NGBs with smaller memberships? To address this question, NGBs were identified either as Small Members (less than 28,500 members) or Large Members (greater than 28,500 members). Two of the three scenarios were significant (Private Donation and Value-in-Kind) indicating Hypothesis 2a, the null hypothesis stating NGBs with large memberships will not have significantly different perceptions for distribution fairness as compared to NGBs with small memberships, was rejected. NGBs with larger memberships did have different perceptions of distribution fairness than NGBs with smaller memberships. Specifically, respondents from Small Member NGBs believed that *Need to be Competitively Successful* was a significantly more fair distribution principle than respondents from Large Member NGBs in the Private Donation and Value-in-Kind scenarios. Respondents from Small Member NGBs also believed *Need Due to Lack of Resources* was a

significantly more fair distribution principle than respondents from Large Member NGBs in the Value-in-Kind scenario.

Research Question 2b asked: Do NGBs with larger budgets have significantly different perceptions of fairness for distribution options than NGBs with smaller budgets? To address this question, participants were identified either as Small Budget (less than \$4 million) or Large Budget (greater than \$4 million). Two of the three scenarios were significant (Private Donation and Value-in-Kind), so Hypothesis 2b, the null hypothesis stating NGBs with large annual budgets did not have significantly different perceptions for distribution fairness as compared to NGBs with small annual budgets, is rejected. NGBs with larger budgets did have different perceptions of distribution fairness than NGBs with smaller budgets. Specifically, respondents from Small Budget NGBs believed that Need to be Competitively Successful was a significantly more fair distribution principle than respondents from Large Budget NGBs in the Private Donation and Valuein-Kind scenarios. Respondents from Small Budget NGBs also believed Need Due to Lack of Resources was a significantly more fair distribution principle than respondents from Large Budget NGBs in the Private Donation scenario. Respondents from Large Budget NGBs believed Equity Based on Membership Size was a significantly more fair distribution principle than Small Budget NGBs in the Value-in-Kind scenario.

Research Question 3 asked: Do NGBs which are successful in Olympic Games competition have significantly different perceptions of fairness for distribution options of financial resources as compared to non-successful NGBs? To address this question, participants were identified based on whether or not the NGB for which they worked won a medal at most recent Olympic Games (Medal Won) or not (No Medal Won).

Participants provided this data as a part of the instrument. A significant difference was observed in the third scenario, Television Program, so Hypothesis 3, the null hypothesis stating NGBs which are successful in Olympic Games competition, defined as winning medals, will not have significantly different fairness perceptions for distribution principles as compared to non-successful, defined as non-winning medals NGBs, was rejected. NGBs which were successful in the Olympic Games did have different perceptions of distribution fairness than NGBs which were not successful in the Olympic Games. Specifically, respondents from No Medal Won NGBs believed *Equality of Treatment* was a significantly more fair distribution principle while participants from Medal Won NGBs believed *Equity Based on Membership Size* was a significantly more fair distribution principle.

Research Question 4a asked: Which distribution principle do NGB administrators believe is the most fair? To address this question, participants were asked to identify which principle they believed would be the most fair for each of the three scenarios. Comparing results across each of the four independent variables yielded 24 possible responses (eight total possible group memberships by three scenarios). In each of the three scenarios, the overall result was the same. NGB administrators believed *Need to be Competitively Successful* was the second most frequently cited principle as most fair. In each scenario, the principle cited as the second most fair was *Equality of Treatment*. This finding supported Hypothesis 4a, which was the alternative hypothesis. NGB administrators, consistent with the responses of intercollegiate athletic administrators (Mahony et al., 2002), believed the distribution principles of *Equality* and *Need* were the most fair.

Research Question 4b asked: Which distribution principle do NGB administrators believe is the most likely to be used? To address this question, participants were asked to identify which principle they believed would be the most likely to be used for each of the three scenarios. Comparing results across each of the four independent variables yielded 24 possible responses (eight total possible group memberships by three scenarios). In each of the three scenarios, the overall result was the same. NGB administrators believed *Equity Based on Medals Won* was the Distribution Principle most likely to be used. In each scenario, *Need to Be Competitively Successful* was the second most frequently cited principle as most likely to be used. This finding supported Hypothesis 4b, which was the alternative hypothesis. NGB administrators, consistent with the responses of intercollegiate athletic administrators (Mahony et al., 2002), believed the distribution principle of *Equity* is the most likely to be used.

Main Findings and Implications

The present study yielded several main findings: (a) NGB administrators believed Need to be Competitively Successful is a more fair distribution principle than intercollegiate athletic administrators; (b) NGBs administrators with smaller budgets and smaller memberships tend to prefer Need-based distribution more than administrators from larger NGBs; (c) NGBs which were competitively successful at the Olympic Games had roughly the same perceptions as those which were not successful; (d) no significant differences in fairness perceptions existed between paid and volunteer NGB administrators; and (e) NGB administrators believe the USOC is likely to reward Olympic success, which may contradict a portion of Ted Stevens Olympic and Amateur Sports Act which governs the USOC.

Since the Olympic Games occur once every four years it is natural to assume NGBs would be pressured to succeed when given the opportunity. The old saying, "Wait until next year," is not applicable in the Olympic Movement like it is intercollegiate athletics. A university basketball team which finishes fourth in its conference one year, may improve to first, second, or third the next year. An NGB which fails to medal at an Olympic Games must wait four years to improve its international standing.

The overwhelming preference for the distribution subprinciple *Need to be Competitively Successful* as the fairest method of distributing financial resources likely underscores NGB administrators' recognition of this pressure. *Need to be Competitively Successful* had the highest overall mean scores in the Private Donation scenario (M = 5.27) and Value-in-Kind scenario (M = 5.03) by a wide margin. No other distribution principle had an overall mean greater than M = 3.97 (see Table 3, page 113).

The USOC emphasizes winning medals at the Olympic Games through its public mission statement and public projections and expectations of performance. For example, prior to the 2004 Olympic Games in Athens, Greece, the USOC stated it expected to win 100 medals (Grant, 2004). The media in the United States likely contribute to this pressure with constant discussion regarding the United States' performance in the overall medal standings at an Olympic Games. Since Private Donation and Value-in-Kind were the only scenarios to represent an actual allocation to an NGB's budget, it is obvious NGB administrators believe NGBs need additional financial assistance to maintain competitive success in their respective sports.

This pressure to be competitively successful may have the unintended consequence of producing low levels of organizational commitment among NGB executive directors. Organizational commitment, the degree to which employees identify with the company and make the company's goals their own (Allen & Meyer, 1990), has been shown to have a relationship with organizational justice perceptions. In the present study, nine of the 27 paid staff respondents indicated they had been with their NGB for three or fewer years. Given the quadrennial cycle of the Olympic Games, this finding suggests a turnover rate of 33% in between each Olympic Games. It would be difficult for an NGB to develop long term plans for competitive success with a new paid administrative leader following each Olympic Games.

A further implication of this finding may be the relationship to additional organizational behavior outcomes such as job satisfaction and trust. Previous research has linked organizational justice perceptions with additional organizational behavior outcomes job satisfaction and trust (Colquitt, Conlon, Wesson, Porter, & Ng, 2001) in general and in sport organizations specifically (Jordan, Turner, & DuBord, 2007). While not the focus of this study, the results of the present study provide the basis for future research examining those variables in the U.S. Olympic Movement. McFarlin and Sweeney (1992) showed distributive justice was a more powerful predictor of job satisfaction than procedural justice; however, other studies have shown procedural justice to be highly correlated with job satisfaction (Colquitt et al., 2001). Tyler (1989) pointed out that trust is particularly important if decision makers have discretion in allocating rewards and resources. Konovosky and Pugh (1994) found a stronger relationship between trust and procedural justice than between trust and distributive justice.

Therefore, it is also important that future research in sport also examine procedural justice in addition to distributive justice.

Smaller NGBs Prefer Need-Based Distribution

As mentioned above, *Need to be Competitively Successful* had the highest overall mean scores in the Private Donation scenario (M = 5.27) and Value-in-Kind scenario (M = 5.03) by a wide margin. This preference becomes more pronounced when comparing Small Budget and Large Budget mean differences and Small Membership and Large Membership mean differences on distribution subprinciple *Need to be Competitively Successful*. In the Private Donation scenario, administrators from Small Budget NGBs (M = 6.16) were significantly different than administrators from Large Budget NGBs (M = 4.20) and administrators from Small Membership NGBs (M = 5.95) were significantly greater than administrators from Large Membership NGBs (M = 4.63).

Similar results for *Need to be Competitively Successful* were observed in the Value-in-Kind scenario. Administrators from Small Budget NGBs (M = 5.95) were significantly different than administrators from Large Budget NGBs (M = 4.07) and administrators from Small Membership NGBs (M = 5.72) were significantly greater than administrators from Large Membership NGBs (M = 4.44).

As Mahony, Riemer, and Hums (2005) discussed, the definition of *Need* in intercollegiate athletics is highly subjective. Smaller NGBs may believe they are at a competitive disadvantage to larger NGBs in acquiring resources, therefore, they have greater *Need*. Larger NGBs with more members paying membership fees are logically more marketable to potential sponsors than smaller NGBs. It is interesting that *Need* was not a significant result in the group Medal Won. Based on this finding, it is possible to

conclude that smaller NGBs believe they have greater *Need* regardless of their competitive success in the Olympic Games.

Overall, however, there are likely good reasons why all groups would believe they have competitive success related needs. Those NGBs which were successful may believe their use of resources is justified, and they may believe they need additional resources to remain competitive. Those NGBs which were not previously successful may believe additional resources are necessary so they may begin to be successful.

No Major Differences Between Medal-Winning and Non-Medal-Winning NGBs

It would be logical to assume that administrators from NGBs which did not win medals at an Olympic Games would be envious of the attention afforded NGBs which did win medals at the Olympic Games, and, therefore, have different perceptions of what they feel is fair regarding resource allocation. However, the present study only found one instance of significance between Medal-Winning and Non-Medal-Winning NGBs in Scenario 3, Television Program. NGBs with No Medal Won preferred Equality of Treatment and NGBs with Medal Won preferred Equity Based on Membership Size.

The implication of this finding is two-fold. First, the preference by unsuccessful NGBs for *Equality of Treatment* indicates that those NGBs which did not win a medal fear being excluded from television in favor of those NGBs which did win a medal. It is not surprising that the USOC would feature competitive success in television programs is not surprising since it is likely that successful sports would deliver higher television ratings and more interest among advertisers. Therefore, those NGBs which did not win medals may be justified in their concern over exclusion.

Second, the preference by successful NGBs for *Equity Based on Membership Size* suggests that respondents from NGBs which won a medal believe NGBs with larger memberships win more medals and, thus, have wider television appeal. It would be easy to assume larger NGBs are more popular in the United States and, therefore, more successful in the Olympic Games. However, this generalization is not always supported by the data, so there may be other explanations as well.

Should the USOC proceed with its plans for an Olympic television network (Barron, 2006), attention should be paid to ensure a cross-representation of featured sports. The U.S. rightsholder for Olympic coverage, NBC, likely featured U.S. athletes winning medals and excluded non-medal-winning athletes in its coverage of the Olympic Games. NGBs which did not win medals at the most recent Olympic Games, therefore, stand to benefit more than their medal-winning counterparts from additional exposure and promotion.

No Differences Between Paid and Volunteer Administrators

The fourth main finding, no significant differences existed between paid and volunteer NGB administrators, is not surprising. Volunteer NGB presidents do not manage the day-to-day operations of the NGB and are often located away from the NGB headquarters. Their understanding of the financial situation of the NGB may reflect what they are told by the NGB's paid executive director. Mahony, Hums, and Riemer (2002) studied differences between paid athletic directors and voluntary athletic board chairs at NCAA Division I and III institutions and found no significant difference between those groups. The results of this study seem to parallel their findings.

An implication of this finding, that volunteer heads of organizational boards of directors may be largely figureheads for the organization, is consistent with the literature on the role of nonprofit sport organizational boards of directors. Inglis (1997) found the role of the board encompassed four main elements including: (a) setting the organizational mission; (b) planning activities such as financial policy and long-range objectives; (c) monitoring the activities of the organization's paid staff; and (d) fundraising and advocacy. Shilbury (2001) found evidence of paid staff having increased influence over matters previously exclusive to the board of directors, including developing financial policies. Neither Inglis (1997) nor Shilbury (2001) studied U.S. organizations; however, the finding of the present study would appear to confirm the generalizability of their findings to U.S. NGBs. That U.S. NGB paid and volunteer administrators were not significantly different in their perceptions of financial resource allocation suggests U.S. volunteer board presidents are more concerned with broad organizational activities and defer the day-to-day management of their organizations to the paid staff.

Possible Conflict with Ted Stevens Olympic and Amateur Sports Act

The study's final major finding was the possible contradiction between what the Ted Stevens Olympic and Amateur Sports Act outlines as responsibilities for the USOC and the USOC's current practice. Among the responsibilities granted to the USOC in the Act are to: (a) exercise exclusive jurisdiction over all matters pertaining to the participation in the Olympic Games and (b) promote and encourage physical fitness and public participation in amateur athletic activities (Ted Stevens Olympic and Amateur Sports Act, 1998). Nearly 25 years ago, Nafziger (1983) noted this contradiction in his

analysis of the Act. "The USOC and NGBs must understand that encouragement of top competitors is not necessarily synonymous with the encouragement of public participation, as mandated by the Act" (Nafziger, 1983, p. 81).

NGB administrators consistently believed the USOC would allocate resources based on the distribution subprinciple, *Equity Based on Medals Won*. That is, the USOC is operating in a framework similar to that of social exchange in which a resource is traded for a reward such as an Olympic medal. While that may not have been the initial objective for the USOC when the Act was passed in 1978, nor may the practice be perceived to be fair by NGBs which do not win medals, the reality is that it may be good business on the part of the USOC.

It is possible that the USOC is reflecting what the organization's stakeholders want, which is medal winning athletes. USOC sponsors undoubtedly prefer to align themselves with winning and elite athletes. Television ratings likely improve when athletes from the United States are successful at the Olympic Games. Private donations to the USOC might also increase when the United States performs well on the international stage.

This finding suggests the Act may be in need of reworking. At the time the Act was written, the U.S. Olympic Movement was in a state of disorganization with many organizations seeking to influence the selection of the U.S. Olympic team (Cartwright Young, 1982). One of the main responsibilities granted in the Act was the ability for the USOC to recognize a single NGB in each sport (Nafziger, 1983). In addition, the United States was coming off poor showings in the 1972 and 1976 Olympic Games in which it finished with fewer medals than the Soviet Union and East Germany. This injected the

added pressures of the Cold War and international politics into the USOC (Cartwright Young, 1982). Finally, professional athletes were prohibited from participating in the Olympic Games in the 1970s. Nearly 30 years later, the U.S. Olympic Movement is no longer in a state of a disorganization, the United States won more medals than any nation in the 2004 Olympic Games, the Cold War has ended, and the Olympic Games feature the world's best athletes, regardless of professional or amateur status.

Further, one of the original goals of the Act was for the USOC to encourage public participation in amateur athletic activities, but the current practice of the USOC appears to focus on, and reward, winning medals at the Olympic Games. This finding begs the question what organization or organizations are presently encouraging public participation in amateur athletic activities in the United States? And if it is not the USOC, should the Ted Stevens Olympic and Amateur Sports Act be rewritten to reflect the reality of today's domestic and international sporting environment?

Finally, if the USOC is not encouraging sport participation in the United States, what organization is responsible for this? Do individual NGBs still feel the need to simultaneously encourage public participation in sport and produce Olympic medalists? What is the relationship between the NGBs and the education-based sport delivery systems such as intercollegiate and interscholastic sport organizations?

New Findings

Given the exploratory nature of this research, all of the findings are new to the context of U.S. Olympic sport as previous studies on distributive justice had not focused on this context. A number of the findings in the present study mirrored previous research on resource allocation in athletics. The current study found no difference between paid

and volunteer NGB administrators, which is consistent with previous research on paid and volunteer intercollegiate athletic administrators (Mahony et al., 2002). The current study also found NGB administrators responded in a manner consistent with previous research on intercollegiate athletic administrators (Hums & Chelladurai, 1994b; Mahony et al., 2002; Patrick, et al., in press) by indicating distribution based on *Equality* and *Need* principles was the most fair.

A significant new finding was the preference by NGB administrators for the distribution subprinciple, *Need to be Competitively Successful*. In all three scenarios, the overall mean score for this distribution method was the highest, indicating NGB administrators believed this method was the most fair across the resource types and was chosen most often. This finding differed from the findings of Patrick et al. (in press), the only previous study to empirically test *Need to be Competitively Successful* in athletics. Patrick et al. (in press) consistently found *Need due to Lack of Resources* and *Equality of Treatment* to have higher overall mean scores in four scenarios than *Need to be Competitively Successful*.

This perception may reflect the U.S. Olympic Committee's stated mission "To support United States Olympic and Paralympic athletes in achieving sustained competitive excellence" (Bylaws of the United States Olympic Committee, n.d., p. 4). Identifying a mission of competitive excellence may be placing additional pressures on NGBs to win. It appears the USOC is very explicit about its goals while the NCAA may send mixed messages. Where the USOC can focus almost exclusively on competitive excellence, intercollegiate athletic departments should be concerned with far more outcomes, including increasing student-athlete graduation rates, providing experiences

for athletes that lead to personal growth, and operating in a manner consistent with Title IX.

Limitations

Three limitations to the study were discussed in Chapter 1 and are readdressed here. As Patrick (2004) noted, a prominent limitation in resource allocation studies involving a forced-response is that allocation decisions are frequently made on a case-by-case basis and depend on a number of factors, making their generalizability difficult.

A second limitation of the present study was the population size. Seventy-two participants received the survey instrument for the present study. This represented the entire population of NGB presidents and executive directors. Thirty-seven people responded to the instrument for a response rate of 51.4%, exceeding the mean response rate of 36.8% reported by Sheehan (2001) in her longitudinal study of email survey methodology. Previous research on U.S. National Governing Bodies (Olberding, 2003; 2004) had employed smaller sample sizes than the one achieved in the current study. The limitation created by the small population was its impact on the statistical analyses which could be carried out. Also, the mean differences needed to achieve statistical significance were larger than would be the case with a larger sample.

A third limitation was the exploratory nature of the study. Resource allocation in NGBs has not been previously studied. It is possible differences exist in resource allocation between intercollegiate athletics, on which the present study is grounded, and Olympic sport. Additional subprinciples of distribution which would be more appropriate to the context of Olympic sport may have influenced participant responses and should be considered for future studies.

A prominent delimitation of the study is the population of 39 NGBs in the United States and is not generalizable to other nations. For example, much of the previous research on NGBs in the literature has used the Canadian sport system as the context. Studies by Slack and Hinings (1992; 1994) and Kikulis, Slack, and Hinings (1995) used all 36 Canadian National Sport Organizations (NSOs) in their research on organizational change. It is unlikely the results in those studies could be generalized to U.S. NGBs because of the different sport structure in each country. Likewise, the current study results can not be generalized to the Canadian NSOs. The United States sport structure emphasizes pursuit of excellence while the Canadian sport structure, as well as structures in other nations, emphasizes participation. Following are the mission statements for the USOC and Sport Canada which illustrate that point:

"To support United States Olympic and Paralympic athletes in achieving sustained competitive excellence and preserve the Olympic ideals, and thereby inspire all Americans" (Bylaws of the United States Olympic Committee, n.d., p. 4)

"To enhance opportunities for Canadians to participate and excel in sport" (Sport Canada Mission, n.d.).

Suggestions for Future Research

Further research on resource allocation in the Olympic Movement should compare the system employed in the United States to those utilized in other countries, examining the perspectives of elite and mass participation objectives from a sport policy standpoint. Research examining the change from mass participation to elite sport outcomes in NGBs or NSOs has focused on organizational structure (e.g., Slack & Hinings, 1992; 1994), sport policy (e.g., Green & Houlihan, 2004; Hong, Wu, & Xiong,

2005), and governmental involvement (e.g., Houlihan, 1997; 2005). Nafziger (1996) explored disputes in financial management of athletes by National Olympic Committees, but only compared the United States and the United Kingdom. A study comparing financial resource allocation decisions made in the United States with those made in rival nations. The results of that study may help the USOC modify its resource allocation procedure by illuminating areas in which the USOC could improve its medal totals through the allocation of additional resources.

As discussed in the Main Findings and Implications section of this chapter, organizational justice correlates strongly with other organizational behavior variables (e.g., job satisfaction, organizational commitment, and trust). It would be useful, therefore, to design a study to measure the relationship of distributive justice to those variables. Little research exists on the U.S. Olympic Committee and its National Governing Bodies in any context, perhaps due to the perceived closed nature of the organization. Research may believe it is difficult to obtain information from the USOC. Studies of organizational behavior outcomes would be a significant addition to the literature. In addition, further studies should examine the value of procedural justice in NGBs. The majority of the literature on organizational justice in athletics focuses on distributive justice, but research on procedural justice and interactional justice is also needed. Jordan, Turner, and DuBord (2007) found all three forms of organizational justice had a significant impact on job satisfaction.

Third, future research should examine resource allocation decisions within NGBs to their various programs, not just from the USOC to the NGB. Olberding (2005) studied efficiency within NGBs using data envelopment analysis. A thorough examination of the

resource allocation priorities of NGBs would help illuminate other aspects of organizational efficiency.

Finally, as noted in Chapter 1, this study was grounded in distribution principles and subprinciples identified and examined in intercollegiate athletics. It is entirely possible other distribution subprinciples not studied would influence NGB administrators. Similar to the work of Mahony et al. (2005), further research should seek to qualitatively identify if any distribution subprinciples specific to the Olympic Movement exist.

Conclusion

The purpose of the study was to measure NGB administrators' perceptions of fairness of financial resource allocation within the U.S. Olympic Movement. The study examined seven Distribution Principles: (a) Equality of Treatment, (b) Equality of Results, (c) Equity Based on Medals Won, (d) Equity Based on Membership Size, (e) Need Due to Lack of Resources, (f) Need Due to High Operating Costs, and (g) Need to be Competitively Successful. The study also measured which Distribution Principle NGB administrators believed was the most fair and which principle was the one most likely to be used to make resource allocation decisions. Five of 12 MANCOVAs were statistically significant at the .05 level: (a) distribution of a Private Donation by NGB Budget Size; (b) distribution of a Private Donation by NGB Membership Size; (c) distribution of Value-in-Kind by NGB Budget Size; (d) distribution of Value-in-Kind by NGB Membership Size; and (e) promotion of sport on Television Program by Olympic Medal Won. Study participants most often identified Need to be Competitively Successful as the most fair distribution principle but believed Equity Based on Medals Won was the most likely to be used distribution principle. These results expand the growing literature on

resource allocation in athletics by exploring a new context, the U.S. Olympic Movement, and offer practical understanding as to how U.S. National Governing Body administrators perceive resource distribution decisions.

REFERENCES

- Adams, J. S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, 67, 422-436.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.) *Advances in experimental social psychology*, (Vol. 2, pp. 267-299). New York: Academic Press.
- Alexander, S., & Ruderman, M. (1987). The role of procedural and distributive justice in organizational behavior. *Social Justice Research*, 1(2), 177-198.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Ambrose, M. L., & Arnaud, A. (2005). Are procedural justice and distributive justice conceptually distinct? In J. Greenberg & J. A. Colquitt (Eds.) *Handbook of organizational justice*, (pp. 59-84). Mahwah, NJ: Lawrence Erlbaum Associates.
- Amis, J., Slack, T., & Hinings, C. R. (2002). Values and organizational change. *Journal of Applied Behavioral Science*, 38, 436-465.
- Andrew, D. P. S. (2004). The effect of congruency of leadership behaviors on motivation, commitment, and satisfaction of college tennis players. Unpublished doctoral dissertation, Florida State University.
- Andrews, M. C., & Kacmar, K. M. (2001). Discrimination among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22, 347-366.
- Babbie, E. R. (2001). *The practice of social research* (9th ed.). Belmont, CA: Wadsworth/Thompson Learning.
- Barney, R. K., Wenn, S. R., & Martyn, S. G. (2002). Selling the five rings: The International Olympic Committee and the rise of Olympic commercialism. Salt Lake City, UT: The University of Utah Press.
- Barron, D. (2006, June 26). U.S. Olympic channel may be coming soon. *The Houston Chronicle*. Retrieved June 30, 2006 from LexisNexis Academic database.

- Berrett, T., & Slack, T. (2001). A framework for the analysis of strategic approaches employed by non-profit sport organizations in seeking corporate sponsorship. *Sport Management Review*, *4*, 21-45.
- Blau, P. (1964). Exchange and power in social life. New York: Wiley.
- Borzilleri, M-J. (2005, May 1). USOC says NGBs must show cause to get cash. *Colorado Springs Gazette*. Retrieved Sept. 12, 2005 from http://usoc.gazette.com/fullstory.php?id=4291
- Borzilleri, M-J. (2005, May 2). Federations worried by funding plan from USOC. *Colorado Springs Gazette*. Retrieved Sept. 12, 2005 from http://usoc.gazette.com/fullstory.php?id=4923
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307-311.
- Bylaws of the United States Olympic Committee (n.d.). Retrieved July 3, 2006 from http://www.usolympicteam.com/USOC_Bylaws_as_of_6232006.pdf
- Cartwright Young, C. (1982). *United States Olympic Politics: A public policy case study.* Unpublished doctoral dissertation, University of Missouri-Columbia.
- Chelladurai, P. (1985). *Sport management: Macro perspectives*. Victoria, BC, Canada: Sports Dynamics.
- Chelladurai, P. (1987). Multidimensionality and multiple perspectives of organizational effectiveness. *Journal of Sport Management*, 1, 37-47.
- Chelladurai, P., & Haggerty, T. R. (1991). Measures of organizational effectiveness of Canadian national sport organizations. *Canadian Journal of Applied Sport Sciences*, 16, 126-133.
- Chelladurai, P., Szyszlo, M., & Haggerty, T. R. (1987). Systems-based dimensions of effectiveness: The case of the national sport organizations. *Canadian Journal of Applied Sport Sciences*, 12, 111-119.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A metaanalysis. *Organizational Behavior and Human Decision Processes*, 86, 278-321.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice review. *Journal of Applied Psychology*, 86, 425-445.

- Colquitt, J. A., & Greenberg, J. (2003). Organizational justice: A fair assessment of the state of the literature. In J. Greenberg (Ed.) *Organizational behavior: The state of the science*, (2nd ed.) (pp. 165-210). Mahwah, NJ: Lawrence Erlbaum Associates.
- Colquitt, J. A., Greenberg, J., & Zapata-Phelan, C. P. (2005). What is organizational justice? A historical overview. In J. Greenberg & J. A. Colquitt (Eds.) *Handbook of organizational justice*, (pp. 3-56). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 317-372). New York: Wiley and Sons Ltd.
- Daft, R. L. (1978). System influence on organizational decision making: The case of resource allocation. *Academy of Management Journal*, 21, 6-22.
- Deutsch, M. (1975). Equity, equality, and need: What determines which value will be used as the basis of distributive justice? *Journal of Social Issues*, 31, 137-149.
- Deutsch, M. (1979). A critical review of "equity theory": An alternative perspective on the social psychology of justice. *International Journal of Group Tensions*, 1-4, 20-49.
- Deutsch, M. (1983). Current social psychological perspectives on justice. *European Journal of Social Psychology*, 13, 305-319.
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method* (2nd ed.). New York: John Wiley & Sons, Inc.
- DiMaggio, P. J., Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective reality in organizational fields. *American Sociological Review*, 48, 147-160.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32, 115-130.
- Frisby, W. (1986). Measuring organizational effectiveness of national sport governing bodies. *Canadian Journal of Applied Sport Sciences*, 11, 94-99.
- Gilliland, S. W. (1994). Effects of procedural and distributive justice on reactions to a selection system. *Journal of Applied Psychology*, 79, 691-701.
- Gilliland, S. W., & Beckstein, B. A. (1996). Procedural and distributive justice in the editorial review process. *Personnel Psychology*, 49, 669-691.

- Grant, B. (2004, Aug. 16). A defining image of empty seats. *Washington Post*. Retrieved April 6, 2007 from http://www.washingtonpost.com/wp-srv/sports/leaguesandsports/olympics/2004summer/snippets/aug17.html
- Green, M., & Houlihan, B. (2004). Advocacy coalitions and elite sport policy change in Canada and the United Kingdom. *International Review for the Sociology of Sport,* 39, 387-403.
- Greenberg, J. (1982). Approaching equity and avoiding inequity in groups and organizations. In J. Greenberg and R.L. Cohen (Eds.) *Equity and justice in social behavior* (pp. 389-435). New York: Academic Press.
- Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. Journal of Applied Psychology, 71, 340-342.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, 12, 9-22.
- Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. *Journal of Management*, 16, 399-432.
- Greenberg, J. (1993). The intellectual adolescence of organizational justice: You've come a long way, maybe. *Social Justice Research*, 6, 135-148.
- Greenberg, J., Mark, M. M., & Lchman, D. R. (1985). Justice in sport and games. *Journal of Sport Behavior*, 8, 18-33.
- Greenberg, J., & Tyler, T. R. (1987). Why procedural justice in organizations? *Social Justice Research*, 1, 127-142.
- Greenwell, T. C., & Armstrong, K. L. (2002). Using social exchange theory to examine the allocation of marketing resources in multi-sport athletic programs. *International Journal of Sport Management*, *3*, 34-52.
- Greenwell, T. C., Mahony, D. F., & Andrew, D. P. S. (in press). An examination of marketing resource allocation in NCAA Division I athletics. *Sport Marketing Quarterly*.
- Hartman, S. J., Yrle, A. C., & Galle, W. P. (1999). Procedural and distributive justice: Examining equity in a university setting. *Journal of Business Ethics*, 20, 337-351.
- Hinings, C. R., Thibault, L., Slack, T., & Kikulis, L. M. (1996). Values and organizational structure. *Human Relations*, 49, 885-916.
- Homans, G. C. (1974). *Social behavior: Its elementary forms* (2nd ed.) New York: Harcourt, Brace and Janovich.

- Hong, F., Wu, P., & Xiong, H. (2005). Beijing ambitions: An analysis of the Chinese elite sports system and its Olympic strategy for the 2008 Olympic Games. *The International Journal of the History of Sport*, 22, 510-529.
- Houlihan, B. (1997). *Sport, policy and politics: A comparative analysis*. London: Routledge.
- Houlihan, B. (2005). Public sector sport policy: Developing a framework for analysis. *International Review for the Sociology of Sport, 40*, 163-185.
- Huck, S. W. (2000). *Reading statistics and research* (3rd ed.). New York: Addison Wesley Longman, Inc.
- Hums, M. A., & Chelladurai, P. (1994a). Distributive justice in intercollegiate athletics: Development of an instrument. *Journal of Sport Management*, 8, 190-199.
- Hums, M. A., & Chelladurai, P. (1994b). Distributive justice in intercollegiate athletics: The views of NCAA coaches and administrators. *Journal of Sport Management*, 8, 200-217.
- Hums, M. A., & MacLean, J. C. (2004). *Governance and policy in sport organizations*. Scottsdale, AZ: Holcomb Hathaway, Publishers, Inc.
- Inglis, S. (1997). Roles of the board in amateur sport organizations. *Journal of Sport Management*, 11, 160-176.
- Irwin, R. L., Sutton, W. A., & McCarthy, L. M. (2002). Sport promotion and sales management. Champaign, IL: Human Kinetics.
- Janofsky, M. (1989, February 20). Steinbrenner report faults U.S. progress. *New York Times*, pp. C1.
- Jordan, J. S., Gillentine, J. A., & Hunt, B. P. (2004). The influence of fairness: The application of organizational justice in a team sport setting. *International Sports Journal*, *8*, 139-149.
- Jordan, J. S., Turner, B. A., & DuBord, R. A. (2007). Organizational justice as a predictor of job satisfaction: An examination of university recreation department student employees. *International Journal of Sport Management*, 8, 32-54.
- Kikulis, L. M. (2000). Continuity and change in governance and decision making in national sport organizations: Institutional explanations. *Journal of Sport Management*, 14, 293-320.

- Kikulis, L. M., Slack, T., & Hinings, C. R. (1995). Sector-specific patters of organizational design change. *Journal of Management Studies*, 32, 67-100.
- Konovosky, M. A. (2000). Understanding procedural justice and its impact on business organizations. *Journal of Management*, 26, 489-511.
- Konovosky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, *37*, 656-669.
- Lee, C., & Farh, J. L. (1999). The effects of gender in organizational justice perception. *Journal of Organizational Behavior*, 20, 133-143.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. S. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum Press.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.
- MacMillan, I. C. (1983). Competitive strategies for not-for-profit agencies. In R. B. Lamb (Ed.), *Advances in strategic management* (Vol. 1, pp. 61-82). Greewich, CT: JAI Press.
- Mahony, D. F., Hums, M. A., & Riemer H. A. (2002). Distributive justice in intercollegiate athletics: Perceptions of athletic directors and athletic board chairs. *Journal of Sport Management*, 16, 331-356.
- Mahony, D. F., Hums, M. A., & Riemer, H. A. (2005). Bases for determining need: Perspectives of intercollegiate athletic directors and athletic board chairs. *Journal of Sport Management*, 19, 170-192.
- Mahony, D. F., & Pastore, D. (1998). Distributive justice: An examination of participation opportunities, revenues, and expenses at NCAA institutions 1973-1993. *Journal of Sport and Social Issues*, 22, 127-152.
- Mahony, D. F., Riemer, H. A., Breeding, J. L., & Hums, M. A. (2006). Organizational justice in sport organizations: Perceptions of college athletes and other college students. *Journal of Sport Management*, 20, 159-188.
- Mehta, R., & Sivadas, E. (1995). Comparing response rates and response content in mail versus electronic mail surveys. *Journal of the Market Research Society*, 37, 429-493.

- McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35, 626-637.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76, 845-855.
- Nafziger, J. A. R. (1983). The Amateur Sports Act of 1978. BYU Law Review, 47, 47-99.
- Nafziger, J. A. R. (1996). Resolving disputes over financial management of athletes: English and American perspectives. *Villanova Sports and Entertainment Law Journal*, *3*, 413-422.
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.
- Olberding, D. J. (2003). Examining strategy content in U.S. Olympic sport organizations. *International Journal of Sport Management, 4*, 6-24.
- Olberding, D. J. (2004). Measuring planning process formality in U.S. Olympic sport organizations. *International Journal of Sport Management*, *5*, 91-110.
- Olberding, D. J. (2005). Using data envelopment analysis to measure the efficiency of U.S. national governing bodies of Olympic sport. Presented at the meeting of the North American Society for Sport Management, June 1-4, 2005. Regina, Saskatchewan, Canada.
- Papadimitriou, D., & Taylor, P. (2000). Organizational effectiveness of Hellenic national sports organizations: A multiple constituency approach. *Sport Management Review*, *3*, 23-46.
- Patrick, I. S. C. (2004). Distributive justice in intercollegiate athletics: An examination of equality, revenue production, and need. Unpublished doctoral dissertation, University of Louisville, Louisville, KY.
- Patrick, I. S. C., Mahony, D. F., & Petrosoko, J. M. (in press). Distributive justice in intercollegiate athletics: An examination of equality, revenue production, and need. *Journal of Sport Management*.
- Piore, A. (2004, Aug. 16). Sink or swim. *Newsweek*. Retrieved February 21, 2006 from http://www.msnbc.msn.com/id/5636114/site/newsweek
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on trust, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1, 107-142.

- Price, J. L., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Marshfield, MA: Pittman.
- Reips, U.-D. (2000). Web experiment method. In M. H. Birnbaum (Ed.), *Psychological experiments on the internet* (pp. 89-117). San Diego, CA: Academic Press.
- Schaefer, D. R., & Dillman, D. A. (1998). Development of a standard e-mail methodology: Results of an experiment. *Public Opinion Quarterly*, 62, 378-397.
- Sheehan, K. (2001). E-mail survey response rates: A review. *Journal of Computer-Mediated Communication*, 6(2). Retrieved February 26, 2007 from http://jcmc.indiana.edu/vol6/issue2/sheehan.html
- Shilbury, D. (2001). Examining board member roles, functions, and influence: A study of Victorian sporting organizations. *International Journal of Sport Management*, 2, 253-281.
- Slack, T., & Hinings, B. (1987). Planning and organizational change: A conceptual framework for the analysis of amateur sport organizations. *Canadian Journal of Applied Sport Sciences*, 12, 185-193.
- Slack, T., & Hinings, B. (1992). Understanding change in national sport organizations:

 An integration of theoretical perspectives. *Journal of Sport Management*, 6, 114-131.
- Slack, T., & Hinings, B. (1994). Institutional pressures and isomorphic change: An empirical test. *Organization Studies*, 15, 803-827.
- Smith, C. B. (1997). Casting the net: Surveying an internet population. *Journal of Communication Mediated by Computers*, http://www.usc.edu/dept/annenberg/vol3/issue1/.
- Sport Canada Mission (n.d.). Retrieved Sept. 7, 2006 from http://www.pch.gc.ca/progs/sc/mission/index_e.cfm
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Stevenson, C. L. (1989). Perceptions of justice in the selection of national teams. *Sociology of Sport Journal*, *6*, 371-379.
- Sweeney, P. D., & McFarlin, D. B. (1993). Workers' evaluation of the "ends" and the "means": An examination of four models of distributive and procedural justice. *Organizational Behavior and Human Decision Processes*, 55, 23-40.

- Sweeney, P. D., & McFarlin, D. B. (1997). Process and outcome: Gender differences in the assessment of justice. *Journal of Organizational Behavior*, 18, 83-98.
- Ted Stevens Olympic and Amateur Sports Act, 36 U.S.C. § 220501-220529 (1998). Retrieved July 3, 2006 from www.usolympicteam.com.
- The Final Report of the President's Commission on Olympic Sports (1977). Washington, DC: Author.
- Thibault, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Thibault, L., Slack, T., & Hinings, B. (1993). A framework for the analysis of strategy in nonprofit sport organizations. *Journal of Sport Management*, 7, 25-43.
- Thibault, L., Slack, T., & Hinings, B. (1994). Strategic planning for nonprofit sport organizations: Empirical verification of a framework. *Journal of Sport Management*, 8, 218-233.
- Thoma, J. E., & Chalip, L. (2003). *Sport governance in the global community*. Morgantown, WV: Fitness Information Technology, Inc.
- Tornblom, K. Y. (1982). Reversal in preference responses to two types of injustice situations: A methodological contribution to equity theory. *Human Relations*, 35, 991-1014.
- Tornblom, K. Y., & Foa, U. G. (1983). Choice of a distribution principle: Crosscultural evidence on the effects of resources. *Acta Sociolgica*, 26, 161-173.
- Tornblom, K. Y., & Jonsson, D. R. (1985). Subrules of the equality and contribution principles: Their perceived fairness in distribution and retribution. *Social Psychology Quarterly*, 48, 249-261.
- Tornblom, K. Y., & Jonsson, D. R. (1987). Distribution vs. retribution: The perceived justice of the contribution and equality principles for cooperative and competitive relationships. *Acta Sociologica*, 30, 25-52.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group value model. *Journal of Personality and Social Psychology*, *57*, 830-838.
- Tyler, T. R. (1990). Why people obey the law: Procedural justice, legitimacy, and compliance. Yale University Press: New Haven, CT.
- Tyler, T. R. (1994). Psychological models of the justice motive: Antecedents of distributive and procedural justice. *Journal of Personality and Social Psychology*, 67, 850-863.

- United States Olympic Committee 2005 Annual Report (2006). Colorado Springs, CO: Author.
- Vail, S. E. (1985). Organizational effectiveness and national sport governing bodies: A constituency approach. Unpublished doctoral dissertation, University of Ottawa, Ottawa, Canada.
- Van den Bos, K., Vermunt, R., & Wilke, H. A. M. (1997). Procedural and distributive justice: What is fair depends more on what comes first than on what comes next. *Journal of Personality and Social Psychology*, 72, 95-104.
- Vogt, W. P. (2005). Dictionary of statistics & methodology: A nontechnical guide for the social sciences (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Walker, L., Lind, E. A., & Thibaut, J. (1979). The relations between procedural and distributive justice. *Virginia Law Review*, 65, 1401-1420.
- Welbourne, T. M. (1998). Untangling procedural and distributive justice: Their relative effects on gainshairing satisfaction. *Group & Organization Management*, 23, 325-346.
- Welbourne, T. M., Balkin, D. B., & Gomez-Mejia, L. R. (1995). Gainsharing and mutual monitoring: A combined agency-organizational justice interpretation. *Academy of Management Journal*, 38, 881-899.

APPENDIX A

Scenario 1

The U.S. Olympic Committee has received a multi-million dollar donation from a private source stipulating that the money be allocated to improving our Olympic teams. Please rate the fairness of the following distribution methods.

| | Ver | - | | | | | | Very Fair |
|--|-----|---|---|---|---|---|---|--------------|
| A. All money would be distributed equally among National Governing Bodies. | 1 | 2 | 3 | 1 | 4 | 5 | 6 | 7 |
| B. National Governing Bodies which have received less money in the past should be given the most money. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| C. The National Governing Bodies which won the most medals at the most recent Olympic Games (Athens or Torino) would be given the most money. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| D. The National Governing Bodies which have the highest individual memberships would be given the most money. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| E. The National Governing Bodies which need the money the most due to a lack of resources in their existing budget would be given the most money. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| F. The National Governing Bodies which need the money the most due to the high operating expenses associated with their sport would be given the most money. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| G. The National Governing Bodies which need additional money to be competitively successful on the international stage should receive the most money. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| In your opinion, which option is the most fair? | A | В | С | D | Е | F | G | |
| In your opinion, which option is the most likely to be used? | A | В | С | D | Е | F | G | |

Scenario 2

The U.S. Olympic Committee has a large amount of travel value-in-kind (VIK) in the form of airline tickets to distribute to National Governing Bodies. Please rate the fairness of the following distribution methods.

| | Ver | - | | | *************************************** | | | Very Fair |
|---|-----|---|---|---|---|---|---|--------------|
| A. All travel VIK would be distributed equally among National Governing Bodies. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| B. National Governing Bodies which have received less VIK in the past should be given the most travel VIK. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| C. The National Governing Bodies which won the most medals at the most recent Olympic Games (Athens or Torino) would be given the most travel VIK. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| D. The National Governing Bodies which have the highest individual memberships would be given the most travel VIK. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| E. The National Governing Bodies which need the money the most due to a lack of resources in their existing budget would be given the most travel VIK. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| F. The National Governing Bodies which need the money the most due to the high operating expenses associated with their sport would be given the most travel VIK. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| G. The National Governing Bodies which need additional money to be competitively successful on the international stage should receive the most travel VIK. | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| In your opinion, which option is the most fair? | A | В | С | D | Е | F | G | |
| In your opinion, which option is the most likely to be used? | A | В | С | D | Е | F | G | |

Scenario 3

The U.S. Olympic Committee is producing a prime-time television show highlighting Olympic sports. Please rate the fairness of the following methods for determining which National Governing Bodies are featured on the program and, thus, receive promotional time on television.

| | Ver Uni | • | | | -2. | | Very Fair |
|---|------------|---|---|-----|-----|---|--------------|
| A. Equal programming time should be allocated to all National Governing Bodies. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| B. National Governing Bodies which have received less television exposure in the past should be given the most programming | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| time. C. The National Governing Bodies which won the most medals at the most recent Olympic Games (Athens or Torino) would be given the most programming time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| D. The National Governing Bodies which have the highest individual memberships would be given the most programming time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| E. The National Governing Bodies which need television time the most due to a lack of resources in their existing budget would be given the most programming time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| F. The National Governing Bodies which need the television time and promotion the most due to the high operating expenses associated with their sport would be given the most programming time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| G. The National Governing Bodies which need the television time and promotion to be competitively successful on the international stage should receive the most programming time. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| In your opinion, which option is the most fair? | A | В | С | D E | F | G | |
| In your opinion, which option is the most likely to be used? | A | В | С | D E | F | G | |

Please rate the following statements regarding the USOC's resource allocation plan according to your level of agreement with the statement.

| | Strongly Disagree | | *************************************** | | Strongly Agree |
|---|----------------------|---|---|---|-------------------|
| The design of the resource allocation plan seems fair | 1 | 2 | 3 | 4 | 5 |
| The resource allocation plan formula is the same for all National Governing Bodies | 1 | 2 | 3 | 4 | 5 |
| The resource allocation plan is administered fairly | 1 | 2 | 3 | 4 | 5 |
| The rules used for sharing financial resources with all National Governing Bodies are fair | 1 | 2 | 3 | 4 | 5 |
| The resource allocation plan developed by the USOC to reward National Governing Bodies for their performance is fair and impartial | 1 | 2 | 3 | 4 | 5 |
| When determining whether financial resources will be paid, the USOC uses accurate information about the National Governing Body's performance | 1 | 2 | 3 | 4 | 5 |
| The performance level required to receive financial resources is clear to me | 1 | 2 | 3 | 4 | 5 |

Please respond to the following statements regarding your feelings about your organization.

| | | Strongly Disagree | | | Strongly Agree | | |
|--|---|----------------------|---|---|-------------------|---|---|
| I would be very happy to spend the rest of my career with this organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I really feel as if this organization's problems are my own. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I do not feel like "part of the family" at my organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I do not feel "emotionally attached" to this organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| This organization has a great deal of personal meaning for me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| I do not feel a strong sense of belonging to my organization. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Demographic Questions

| My involvement with my NGB is a) Voluntary b) As a paid staff member c) Other |
|---|
| How many years have you been in that position? |
| My gender is: a) Male b) Female |
| My NGB won at least one medal in the last Olympic Games (Athens or Torino) a) Yesb) No |
| The approximate individual membership of my NGB is |
| The approximate annual budget of my NGB is |

APPENDIX B

July 12, 2006

We are conducting a study on financial resource allocation in the Olympic movement. Specifically, we are interested in the fairness perceptions of National Governing Body administrators toward USOC resource allocation.

The purpose of the study is to measure the perceptions of fairness of financial resource allocation within the U.S. Olympic Movement by NGB administrators. The study examines eight distribution principles: (a) equality of treatment, (b) equality of opportunity, (c) equality of results, (d) contribution based on medals won, (e) contribution based on spectator appeal, (f) need due to high operating costs, (g) need due to lack of resources, and (h) need to be competitively successful.

Your assistance is requested in helping to establish validity for this study by simply completing the attached questionnaire and comment form. Your participation is entirely voluntary. You may refuse to answer questions and may withdraw from completing the questionnaire at any time. You may be assured of complete confidentiality. The questionnaires will not be made available to anyone outside this study. Do NOT include your name or any identification on the survey instrument. Individual responses will not be identified or reported. Any discussion of results will be based on group data. It is estimated that the questionnaire will take 10-15 minutes to complete. Upon completion, return the questionnaire to the person who asked you to fill it out.

Feel free to contact us if you have any questions or concerns.

Sincerely,

Stephen W. Dittmore Doctoral Candidate University of Louisville 502-852-5909 Mary A. Hums, PhD Professor University of Louisville 502-852-5908

Daniel F. Mahony, PhD Professor University of Louisville 502-852-5705

A Study Examining Fairness Perceptions of Financial Resource Allocation in U.S. Olympic Sport

COMMENT FORM

Please read the enclosed survey and respond to the following statements in the space provided. Feel free to also write directly on the questionnaire. Any suggestions for improvement will be appreciated.

The purposes of this survey are to: (a) assess perceptions of NGB administrators toward financial resource allocation; (b) assess how perceptions change based on type of resources allocated; and (c) collect demographic background.

| 1. | Given the purpose of this survey, do you think the questions on the survey collect the information needed? Why or why not? |
|----|---|
| 2. | Is the phrasing and terminology clear and easy to understand? |
| 3. | Are the directions easy to follow? |
| 4. | (a) Is the survey too long to be comfortably completed in one sitting?(b) Approximately how long would it take you to complete it? |

| 5. | Is there any important background information that may be missing? |
|----|--|
| 6. | Are there any statements or categories that should be added or deleted? If so, please explain. |
| 7. | Please include any other comments relevant to the improvement of this survey. |
| | Thank you very much for your time and assistance. |
| | |
| | |

CURRICULUM VITAE

STEPHEN W. DITTMORE Curriculum Vitae

Work Address
East Stroudsburg University Sport Management
225 Zimbar Hall
East Stroudsburg, PA 18301
570-422-3726
sdittmore@po-box.esu.edu

Home Address 3543 Penfield Way Nazareth, PA 18064 610-837-9525 stevedittmore@hotmail.com

EDUCATION

May 2007 PhD, University of Louisville, Louisville, Kentucky

Educational Leadership and Organizational Development

Sport Administration Emphasis; GPA: 3.93/4.00

Dissertation Title: Examining fairness perceptions of financial resource allocation in U.S. Olympic sport. *Chairpersons: Daniel F. Mahony, PhD and Mary A. Hums, PhD*

May 1996 MA, Drake University, Des Moines, Iowa

Mass Communication

May 1991 BA, Drake University, Des Moines, Iowa

News-Editorial Journalism

FACULTY EXPERIENCE

<u>Assistant Professor</u>, East Stroudsburg University Sport Management Program, East Stroudsburg, Pennsylvania (August 2006 to present)

Tenure-track assistant professor; Utilize multimedia tools such as WebCT; Advisor for approximately 60 undergraduate students; Supervise student internships and field experiences

<u>Instructor</u>, University of Louisville Sport Administration Program, Louisville, Kentucky (July 2004 to August 2006)

Faculty instructor; Utilized multimedia teaching tools such as Blackboard; Represented the program to prospective undergraduate students; Wrote, edited and designed program-specific newsletter; Advisor for approximately 60 undergraduate students; Supervised student internships and field experiences

<u>Instructor</u>, Wichita State University Sport Administration Program, Wichita, Kansas (August 2002 to July 2004)

Faculty instructor; Undergraduate program coordinator for 2003-04; Graduate faculty member; Advisor for approximately 100 undergraduate students and 30 graduate students; Utilized multimedia teaching tools such as Blackboard; Wrote, edited and designed program-specific newsletter; Supervised student internships and field experiences

RESEARCH INTERESTS

| Financial Resource Allocation in the | Media Rights as Revenue Streams in Sport |
|--|--|
| Olympic Movement | Organizations |
| U.S. Government Policy and the Olympic | Sport Public Relations and the Use of |
| Movement | Blogs |

Published Articles

- Dittmore, S. W., Mahony, D. F., Andrew, D. P. S. & Phelps, S. (2007) Is sport management research diverse? A five-year analysis of dissertations. *International Journal of Sport Management*. 8(1), 21-31.
- Dittmore, S. (2005). Interview with Naomi Travers, Executive Vice President for Media Rights and Entertainment, C-SET. *International Journal of Sports Marketing and Sponsorship*, 6(3), 147-149.

Research in Progress

- Dittmore, S. W., Keedy, J. L., Hums, M. A., & Mahony, D. F. (manuscript in revision). Are sport management doctoral programs meeting the needs of their students.
- Dittmore, S. W. (manuscript in preparation) How the size of the U.S. Olympic Committee's board structure contributed to a lack of organizational innovation.

Presentations at Refereed Conferences

- Dittmore, S. W., DeWaele, C., & Dane, E. A. (2007). Tomorrow's sport management faculty: Reflections on the role of doctoral programs in preparing teachers. Abstract accepted for presentation at the 2007 North American Society for Sport Management conference. May 30-June 2, 2007. Fort Lauderdale, Fla.
- Dittmore, S. W. (2007). *Does the NFL on the NFL Network make cents?* Abstract accepted for presentation at the 2007 North American Society for Sport Management conference. May 30-June 2, 2007. Fort Lauderdale, Fla.
- Dittmore, S. W. (2006). Why the sun set on C-SET: The case of a failed regional sports network and what can be learned from it. Presented at the annual meeting of the North American Society for Sport Management conference. May 30-June 3, 2006. Kansas City, Mo.
- Dittmore, S. W. (2006). *100 years of turbulent NCAA-USOC relations*. Presented at the Drake Group conference. March 31-April 1, 2006. Indianapolis, Ind.
- Dittmore, S. W., Phelps, S., & Mahony, D. F. (2005). *Diversity in sport management research? An examination of sport management dissertation topics*. Presented at the annual meeting of the North American Society for Sport Management. June 1-4, 2005. Regina, Saskatchewan, Canada.
- Dittmore, S. W. (2005). Digital photography at the 2002 Olympic Winter Games: Implications for sport managers. Abstract accepted for presentation at the United States Olympic Academy, Ithaca, NY. Conference postponed.
- Stoldt, G. C., Vermillion, M., Ross, R. M., & Dittmore, S. W. (2004). Newspaper sports coverage patterns: Implications for media relations professionals. Presented at the annual meeting of the North American Society for Sport Management. June 2-5, 2004. Atlanta, Ga.
- Stoldt, G. C., Dittmore, S. W., & Branvold, S. (2003). *Teaching about sport public relations*. Presented at the annual meeting of the North American Society for Sport Management. May 28-31, 2003. Ithaca, N.Y.
- Stoldt, G. C. & Dittmore, S. W. (2003). Skill assessments and priorities of members of the College Sports Information Directors: Analysis of a national survey. Presented at the annual meeting of the North American Society for Sport Management. May 28-31, 2003. Ithaca, N.Y.

Invited Presentations

- *The Blog: New media monster?* (2006). Invited panel member at University of Arizona's Race Track Industry Program's 33rd Annual Symposium on Racing and Gaming. Dec. 7, 2006. Tucson, Ariz.
- From backpack to briefcase: A panel discussion on working in the sport industry. (2006). Panel moderator at the annual meeting of North American Society for Sport Management. May 31-June 3, 2006. Kansas City, Mo.

Textbook Co-Authorships

Stoldt, G. C., Dittmore, S. W., & Branvold, S. (2006) *Sport public relations: Managing organizational communication*. Champaign, IL: Human Kinetics.

Textbook Chapters

- Stoldt, G. C., Pratt, C., & Dittmore, S. W. (2006) Public relations in the sport industry. In J. B. Parks, J. Quarterman, & L. Thibault (Eds.). *Contemporary sport management* (3rd ed.). Champaign, IL: Human Kinetics.
- Dittmore, S. W. (2004). Educational resources in sport management. In P. G. Comfort (Ed.), *The directory of graduate programs in sport management*. Morgantown, WV: Fitness Information Technology.
- Dittmore, S. W. (2004). Educational resources in sport management. In P. G. Comfort (Ed.), *The directory of undergraduate programs in sport management*. Morgantown, WV: Fitness Information Technology.

Manuscript Reviews

- Invited reviewer for Brown, M., Nagel, M., & Rascher D. *Financial management in sport.* Scottsdale, AZ: Holcomb Hathaway, Publishers (February 2006).
- Invited reviewer for Sport Marketing article, *International Journal of Sports Marketing and Sponsorship* (February 2005).
- Invited reviewer for Sport Public Relations article, *International Journal of Sports Marketing and Sponsorship* (January 2005).
- Invited reviewer for Hums, M. A. & MacLean, J. C. *Governance and policy in sport organizations*. Scottsdale, AZ: Holcomb Hathaway, Publishers (published Spring 2004).

COURSES TAUGHT

East Stroudsburg University

- SMGT 201, Foundations of Sport Management
- SMGT 408, Financing Sport Operations
- SMGT 445, Organization and Administration
- SMGT 486, Field Experience and Internship
- SMGT 523, Organization and Administration (graduate)
- SMGT 547, Sport Business and Finance (graduate)
- SMGT 586, Field Experience and Internship (graduate)

University of Louisville

- SPAD 381, Principles of Sport Administration
- SPAD 390, Sport Governance
- SPAD 402, Internship
- SPAD 404, Sport Finance
- SPAD 472, The Sport Industry

Wichita State University

- KSS 112, Introduction to Sport Management
- KSS 380, Organization and Administration of Sport
- KSS 520, Tournament and Event Management
- KSS 526, Sport Public Relations
- KSS 547, Internship
- KSS 565, Marketing Sport and Physical Activity Programs
- KSS 750L, Olympic Movement Seminar (graduate)
- KSS 847, Internship (graduate)

GRANTS

- March 2007 East Stroudsburg University Faculty Development Research Mini-Grant for research expenses relative to Financial Resource Allocation in Olympic Movement, \$100 Dittmore, S.W. Funded
- December 2006 East Stroudsburg University Faculty Development Research Travel Grant to 2007 NASSM conference, \$800 Dittmore, S.W. Funded
- August 2005 University of Louisville Undergraduate Council Success Engagement Satisfaction Initiative to offset student expense for Sport Finance simulation, \$350 Dittmore, S. W. Funded.
- March 2005 Gerald R. Ford Foundation, research travel grant proposal, \$1,200 Dittmore, S. W. Not funded.
- December 2004 College of Education and Human Development technology mini-grant for desktop publishing software to assist with creation of future technology course in sport administration, \$300 Dittmore, S. W. Funded.

MASS MEDIA APPEARANCES

- <u>January 18, 2007</u> Authored guest editorial in *The Morning Call* newspaper, "Hockey stadium wouldn't help economy." Responded to earlier editorial claiming public subsidies for a hockey arena would help economy by citing empirical evidence which proves the opposite.
- <u>July 31, 2006</u> Authored guest editorial in *Street & Smith's SportsBusiness Journal*, "Bloggers deserve shot at press box." Discussed reasons sport organizations should consider providing media credentials to blog websites.
- <u>July 6, 2006</u> Guest on the *Travis Justice Show*, *Big Sports 590AM*, Omaha, Nebraska. Discussed public relations issues for University of Nebraska at Omaha and pros and cons of switching from NCAA Division II to NCAA Division I-AA.
- May 16, 2004 Authored guest editorial in *Wichita Eagle* newspaper, "My view: County loses if hockey team leaves." Discussed financial considerations of arena financing and Wichita Thunder, a UHL franchise.
- March 18, 2004 Interviewed on KWCH-TV in Wichita, Kansas. Discussed Air Force Academy qualifying for the NCAA Basketball Tournament for first time in 40 years.

SERVICE

Professional

- North American Society for Sport Management (NASSM), 2002 to present
 - o Communications abstract review chair for 2007 NASSM Conference

- NASSM Student Board Representative, June 2005 to May 2006
- Sport Marketing Association (SMA), 2006 to present
- Sport Recreation and Law Association (SRLA), 2006
- College Sports Information Directors of America (CoSIDA), 1999 to 2003
- Olympic Public Relations Association (OPRA), 1993 to 2002

East Stroudsburg University

• Sport Management Program Committee, 2006 to present

University of Louisville

• Sport Administration Program Committee, 2004 to 2006

Wichita State University

- Sport Administration Program
 - Faculty Search Committee, 2004; Graduate Assessment Committee, 2002 to 2004; Undergraduate Assessment Committee, 2002 to 2004; Student Association, Co-Faculty Advisor, 2002 to 2004; Alumni Association, Co-Faculty Advisor, 2002 to 2004
- Department of Kinesiology and Sport Studies
 - Undergraduate Curriculum Committee, 2003-04

HONORS AND AWARDS

- <u>February 2006</u> Nominated by student to attend Red & Black Honors Banquet and Awards Ceremony for University of Louisville Scholar Athletes and their Faculty Mentors.
- <u>April 2005</u> Nominated by student to serve as faculty guest coach for University of Louisville women's softball team.
- <u>February 2005</u> Nominated by two students to attend Red & Black Honors Banquet and Awards Ceremony for University of Louisville Scholar Athletes and their Faculty Mentors.
- April 2004 Nominated for Wichita State University College of Education Teaching Award.
- April 2004 Nominated for Wichita State University College of Education Faculty Service Award.
- <u>February 2004</u> Nominated for Academy for Effective Teaching Award given by the Center for Teaching and Research Excellence at Wichita State University.
- October 2003 Nominated by student to serve as faculty guest coach for Wichita State University women's volleyball team.
- May 2002 Salt Lake Organizing Committee Order of Excellence.
- <u>April 2002</u> Wichita State University Department of Kinesiology & Sport Studies, Sport Administration Practitioner of the Year.

CAREER SUMMARY

Experienced sports management professional familiar with high-profile international events; Extensive experience with major international and domestic members of the media; Successfully trained and managed staff of volunteers and professionals to work in similar environment.

Consultant, Lenovo, Inc., Raleigh, N.C. (June 2005)

Delivered press operations support consulting to International Olympic Committee Olympic Partner Programme sponsor.

<u>Director, Venue Press Services and Facilities,</u> Salt Lake Organizing Committee, Salt Lake City, Utah (May 1999 to May 2002)

Responsible for planning all services and facilities to be used by 3,000 accredited print and photo press at the XIX Olympic Winter Games and VII Paralympic Winter Games.

- Presented press operations department final report to International Olympic Committee's transfer of knowledge program in Turin, Italy;
- Wrote main Venue Press Operations manual which was implemented at all competition and non-competition venues;
- Recruited and trained more than 400 staff to work in press operations during Games;
- Influential in design and make-up of Games-time Info 2002 results and information system;
- Managed day-to-day staff of four full-time employees during pre-Games period;
- Instrumental in development of Olympic News Service procedures and operations;
- Assisted in formulation of Games-time crisis communications plans;
- Conducted press operations walk-throughs with major international news agencies;
- Designed all venue press facilities including media sub-centers, press tribunes, mixed zones, interview rooms and photo positions;
- Worked as an integrated member of multi-function event operations team;
- Participated in all aspects of press operations planning, including Main Media Center, Press Accommodations, Press Accreditation, Media Transportation, Olympic News Service.

<u>Communications Manager</u>, Koch Industries, Inc., Rosemount, Minnesota (November 1997 to May 1999)

Main public relations contact/spokesperson for 12 million gallons-per-day crude oil refinery just outside of St. Paul.

- Pitched stories to local major market media; Cultivate relationships with local reporters;
 Wrote news releases and internal communications; Leveraged company's corporate philanthropic efforts in the community; Developed corporate publications;
- Represented company in community activities such as Rotary and educational programs;
- Experienced with crisis communication and planning;
- Planned and execute community open houses; Develop risk communications plan for public roll-out;
- Maintained corporate website www.kochminnesota.com;
- Worked as an integrated team member in the public affairs department, along with community relations, government relations and regulatory affairs;
- Managed outside pubic relations consultants and advertising agencies;
- Executed logistics of major company news conferences.

<u>Account Executive</u>, Karwoski & Courage Public Relations, Minneapolis, Minnesota (April 1997 to November 1997)

Primary client contact for Koch Refining Company, L.P. in Rosemount, Minn.; Provided message development and communication strategies during crisis communications surrounding a gas leak; Involved in strategic message development for internal communications.

Media Relations Consultant, University of Minnesota Men's Athletics Department, Minneapolis, Minnesota, (January 1997 to April 1997)

Planned and executed press operations for 1997 NCAA Men's Swimming and Diving Championships and 1997 Big Ten Wrestling Championships, including daily programs, credentials, press conferences, results distribution.

<u>Venue Press Operations Coordinator</u>, Atlanta Committee for the Olympic Games, Atlanta, Georgia (May 1995 to September 1996)

Logistically planned all aspects of press operations for the Olympic Center – Georgia Dome, Georgia World Congress Center, and Omni Coliseum – to include press sub-centers, mixed zones, press tribunes, photo areas, interview rooms and press transportation.

- Formulated press operating plan for post-event interview procedures, results distribution and press services for all Olympic competition venues;
- Oversaw management of 30,000-square foot press sub-center which served Georgia Dome and Georgia World Congress Center, encompassing nine sports – basketball, artistic gymnastics, table tennis, weightlifting, fencing, wrestling, handball, judo and modern pentathlon – a total of 78 Olympic medal events;
- Trained staff of more than 300 to work in press operations during 1996 Olympic Games;
- Worked effectively with other functional areas as integrated member of venue teams.

<u>Manager of Public Relations</u>, USA Wrestling, Colorado Springs, Colorado (December 1992 to May 1995)

Managed media relations efforts for National Governing Body.

- Duties included press releases, record keeping, event management and publications for Olympic-level athletes;
- Produced a 160-page media guide including athlete biographies, records and organizational information;
- Designed public relations projects including programs and promotional items;
- Assisted executive director in corporate sponsorship solicitation and fulfillment;
- Coordinated community appearances by resident athletes from the U.S. Olympic Training Center:
- Served as media relations contact at a number of major events, including 1995 Pan American Games, 1994-95 Freestyle World Cup, 1994-95 AAU Sullivan Award, 1993-94 Freestyle World Championships, 1994 Pan American Championships, 1994 U.S. Olympic Festival, 1993 Greco-Roman World Championships.

<u>Graduate Assistant,</u> Drake University Athletic Department, Des Moines, Iowa (August 1991 to December 1992)

Assisted sports information director in operations of 14 intercollegiate sports, plus Drake Relays, a world-class track meet.

ADDITIONAL MAJOR SPORT EVENT EXPERIENCE

Olympic Movement

- Numerous international federation World Cup competitions in summer (gymnastics, handball, rowing, table tennis, volleyball, wrestling) and winter (biathlon, bobsleigh, curling, ice hockey, luge, skating, skiing) sports.
- Xth Paralympic Summer Games, Atlanta, Ga. (August 1996) USOC delegation spokesperson
- Freestyle Wrestling World Championships, Atlanta, Ga. (August 1995) Head of Press Operations
- Pan American Games, Mar del Plata, Argentina (March 1995) USOC Press Officer
- Winter World University Games, Zakopane, Poland (February 1993) USOC Press Officer
- U.S. Olympic Team Processing, Tampa, Fla. (July 1992) USOC Press Officer
- U.S. Olympic Festival, Los Angeles, Calif. (July 1991) USOC Press Officer

- Goodwill Games, Seattle, Wash. (July 1990 to August 1990) Press Operations Assistant
- U.S. Olympic Festival, Minneapolis/St. Paul, Minn. (July 1990) USOC Press Officer
- U.S. Olympic Committee Media Relations Office, Colorado Springs, Colo. (May 1990 to July 1990) Intern

National Collegiate Athletic Association

- Men's East Regional Basketball Tournament, Atlanta, Ga. (March 1996) Media Relations
- Men's Final Four Basketball Tournament, Minneapolis, Minn. (April 1992) Media Relations
- Men's Midwest Regional Basketball Tournament, Minneapolis, Minn. (March 1991) Media Relations