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Computer Program Usage in Sport Organizations and Computer Competencies Desired by Sport Organization Personnel

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Abstract

The purpose of this study was to investigate the specific computer programs used by sport organization personnel, the tasks they completed with those programs, and the expectations personnel possessed with regard to computer competencies they would expect from job applicants who hold a degree in sport management. Thirty-five practitioners employed at various sport organizations participated in semi-structured interviews. Participants utilized programs within Microsoft Office (e.g., Word, Excel) and Adobe Creative Suite (e.g., InDesign, Photoshop) to complete essential job tasks. Various specialty programs were also utilized. Job candidates were expected to possess familiarity and competence with programs used by the participants.

Key words: Computer, Competency, Sport, Personnel

Introduction

In the late 1980's, the Wharton Economic Forecasting Associates Group estimated the sports industry in the United States of America had a value of approximately $52 billion (in DeSensi, Kelley, Blanton, & Beitel, 1990). The value of the sport industry has increased significantly as Plunkett Research, Ltd. sports industry in the United States currently has a value of approximately $440 billion (Plunkett Research, 2014). Along with the growth of the sports industry, the quantity of employment opportunities within many sectors of this industry has increased. Furthermore, the demand for well-educated employees who possess the knowledge and skills that meet the needs of employers within this industry has also increased.

Employers within the sports industry rely upon employees who possess numerous competencies that will result in the execution of tasks essential to the employer's operation. Lucia and Lepsinger (1999) defined competencies as essential skills, knowledge and personal characteristics needed for successful performance in a job. In order for essential skills, knowledge, and characteristics to be developed, training must be provided.

Institutions of higher education have the responsibility of training individuals to become competent practitioners (McLagan, 1993). Sport management programs were developed in response to the growth of the sports industry and the need to develop individuals who could become competent practitioners within the growing number of sport organizations (Quain & Parks, 1986; Parkhouse, 1987). Within sport management programs, this training for competence is accomplished through engagement in a curriculum and immersion in field experiences such as internships. Students are first exposed to a curriculum that includes

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subjects such as facility and event management, marketing, governance, finance, public relations, and sales. The curriculum not only familiarizes students with the various operating areas that exist within the sport management field but also enlightens students with regard to various competencies needed in order to effectively fulfill various positions within these operating areas.

The use of technology in the form of various computer programs is prevalent within many of these operating areas inside sport organizations. Practitioners who work for these organizations utilize various programs that will help them complete essential tasks. In order for individuals to develop competence with these programs, training must be offered. Although training could certainly take place within the sport organization, sport management programs could also contribute to the development of these important competencies. Sport management faculty members play a significant role in the professional development of their students. One way to help students in their professional development is to integrate learning opportunities that focus upon the development of competencies with various computer programs into the curriculum. In order to develop relevant learning opportunities with computer programs, sport management program faculty should consult sport organization personnel in order to learn of computer programs they utilize in order to complete essential tasks. The more that those involved with professional development understand with regard to competencies personnel in the field desire, the better they can design beneficial educational opportunities for their students.

Review of Literature

Competency studies, which aim to determine the knowledge and skills needed to perform a job, have been conducted within the academic discipline of sport management. Scholars within sport management programs have reached out to sport organization personnel. These efforts were made in order to gain a greater understanding of competencies practitioners in this field should possess. The following review of literature includes research that focused on practitioners' assessments of desired computer competencies. Several studies that were conducted with sport organization personnel confirmed that competency with computers in general was desired. Results in additional studies revealed specific computer competencies desired by sport organization personnel.

Case and Branch (2003) surveyed 108 sport facility directors in order to identify essential job competencies for upper level as well as entry level sport facility managers. These individuals were employed at privately owned facilities as well as facilities owned by municipalities. Within these facilities, a variety of sport related programming occurred. The participants were asked to rate 100 competencies. Competencies were rated on a scale that ranged from "unnecessary" to "essential." The survey item related to computer usage to which participants responded was "Knowledge of basic computer terminology." Participants believed that knowledge of basic computer technology was more important for entry level personnel than it was for upper level personnel.

Hurd (2005) surveyed 16 managerial level practitioners employed in municipal parks and recreation departments in order to determine competencies needed by entry level employees in public parks and recreation agencies. The Delphi technique was utilized and after three rounds of reviews, the participants reached a consensus with regard to competencies entry level employees in this field should possess. The "ability to use computers and computer software" was identified as an important competency by this group of practitioners.

Ball, Simpson, Ardovino, and Skept-Arit (2008) interviewed ten campus recreation directors. This group indicated that "understanding technology" was a desired competency. Understanding technology was defined as familiarity with computer programs and

other technologies that serve campus recreation. Participants in this study desired employees who understood and could operate computer programs in order to complete various tasks.

Participants in the studies mentioned earlier desired employees who had a general understanding of technology and the ability to use computers. Additional studies have been conducted in order to gain insight into the perceived importance of competencies that would allow for the completion of various tasks. In the following studies, participants rated the importance of completing various tasks with computer programs.

Cuskelly and Auld (1991) surveyed 124 sport and recreation managers in Australia. The purpose of their research was to examine the importance of various occupational responsibilities. Participants were asked to rate various responsibilities on a five-point scale ranging from "unimportant" to "very important." Items related to computer program usage were included in the survey. Practitioners were asked to rate the importance of competence needed to complete tasks such as "word processing and desktop publishing" as well as "database management and spreadsheets." Competence that would allow for the completion of these tasks was identified as moderately important.

Barcelona and Ross (2004) surveyed 457 directors and chief executive officers who were employed at public recreation agencies in order to determine competencies necessary for the effective administration of recreational sport programs within campus, public, and military settings. The participants indicated competence with computer programs that would allow for completion of tasks such as "scheduling, reservations, and registration" was important. Furthermore, participants identified competence allowing for completion of tasks such as "word processing, creating spreadsheets and presentations" as important as well.

Chia-Chen (2007) surveyed 224 practitioners who were employed at various sport organizations. Participants worked in university settings such as intercollegiate athletics departments and intramurals. Municipal sport and recreation departments, non-profit organizations (e.g., YMCA), and professional sport organizations were additional settings in which participants were employed. Participants reported on the frequency they used computer programs. In addition, they rated the importance competence with computer programs in order to complete certain tasks. The tasks they reported completing frequently included creating, editing, and formatting text. In addition, they frequently created databases and charts. Lastly, they created graphics and added special effects to documents. Participants rated competencies that would allow for completion of these tasks as moderately to highly important.

In summation, personnel who worked in sport organizations indicated that computer competencies in general were desired (Case & Branch, 2003; Hurd, 2005; & Ball et al., 2008). More specifically, computer program competencies in order to complete various tasks were regarded as important (Cuskelly & Auld, 1991; Barcelona & Ross, 2004; Chia-Chen, 2007). Although inquiry has occurred in this area of study, numerous researchers have stressed the importance of continually evaluating competencies sport organization personnel need to possess in order to effectively fulfill their job responsibilities. This inquiry is necessary so that sport management programs can develop curriculum and experiential opportunities that meet the needs of employers. DeSensi et al. (1990) suggested that it is necessary to obtain "continual evaluation and input from diverse perspectives in order to facilitate the development of the best professional sport management programs" (p. 57). With regard to computer programs that are utilized within sport organizations and the tasks that are completed with them, additional investigation is needed. Chia-Chen (2007) stated, "As sport management educators prepare students for the job market in the sport industry, it is vital to gather information regarding the kind of computer applications that sport management professionals need to possess" (p. 72). Ongoing inquiry is needed because

new programs have been developed since Chia-Chen's study was published in 2007. In addition, new features for existing programs have been developed. Therefore, this study was conducted in order to address the ongoing need to investigate computer program usage by sport organization personnel and the tasks they completed with these programs. In order to create relevant learning opportunities for students that could increase their marketability to potential employers, the expectations sport organization personnel held with regard to computer program competencies sport management program graduates should possess were also examined.

General tasks (e.g., scheduling user groups, creating brochures) sport organization personnel completed through the use of various computer programs were revealed in previous studies. This study differs from previous research because the inquiry not only focused upon the tasks practitioners completed with the aid of computer programs but also the specific program that was used in order to complete the task. Numerous programs assist sport organization personnel with tasks such as scheduling user groups, managing ticket sales, and creating marketing materials. Therefore, it is beneficial to know of the specific computer programs that personnel use to complete tasks. Knowing specific computer programs that are used and the specific tasks that are completed with those programs could assist sport management educators in designing beneficial learning opportunities within their courses. These learning opportunities would facilitate the development of skills in students that are desired by sport organization personnel who participate in the selection of applicants to fill position vacancies.

Research questions that focused upon gaining a greater understanding of the computer programs utilized by sport organization personnel, the tasks they completed with these programs, and their expectations with regard to computer competencies sport management degree holders should possess guided this study. They were:

1. What specific computer programs are sport organization personnel currently using?
2. What tasks are sport organization personnel completing with the computer programs they identified?
3. What computer competencies do sport organization personnel expect from candidates who possess a degree in sport management and are seeking a position within their organization?

The purpose of the study was developed in order to answer the research questions and was two-fold. First, it was to investigate the specific computer programs used by personnel currently employed in sport organizations and the tasks they completed with those programs. Second, it was to investigate the expectations personnel possessed with regard to computer competencies they would expect from job applicants who hold a degree in sport management.

Method

Sampling Procedure

Purposeful sampling was utilized for this study. Within purposeful sampling, participants are purposefully selected because they can make specific contributions to the topic being researched (Bogdan & Biklen, 2003). Certain practitioners were invited to participate because of the organization at which they were employed. An aim of this study was to gain insight into the specific computer programs used by personnel employed at various types of sport organizations (e.g., professional sport, intercollegiate athletics, and community sport). Therefore, deliberate attempts to invite personnel from a range of organizational types were made.

The practitioners who were purposefully invited to participate in this study were selected because they fit several criteria. Criterion sampling was also utilized when assembling the pool of participants. Within criterion sampling, participants must meet some pre-

determined criterion of importance (Patton, 1990). Because gaining insight into computer programs used by sport organization personnel was a significant aspect of this study, the first criterion was that potential participants had to be currently employed at a sport organization. In addition, this study focused upon the ways in which specific computer programs were used in order to complete various job tasks. Therefore, the second criterion was that potential participants had to be utilizing at least one kind of computer program in order to complete various job related tasks. Last, the computer competencies sport organization personnel expected from job candidates who graduated with a degree in sport management were a focus of this study. Therefore, the third criterion for potential participants was that they would be involved in screening, interviewing, and selecting candidates for employment within their organizations.

Participants

A total of 45 practitioners who were employed at various sport organizations were contacted to participate in this study. The response rate was 82% as 35 of the 45 who were contacted agreed to participate. Twenty of the participants were male and 15 were female. One of the participants was African-American and the rest were Caucasian.

Ten participants were employed in intercollegiate athletics administration. These participants worked at university athletics departments, conference offices, or national level offices. Nine participants were employed with professional football, baseball, basketball, or hockey teams. Four participants were employed in community based, non-profit organizations and two in organizations that were community based, for profit entities. These non-profit and for profit organizations offered sport programming (e.g., softball, flag football) to youth and adult community members. Three participants were employed with sport marketing organizations. These organizations were privately owned companies that were hired in order to execute marketing activities related to events staged by cities or other private companies. Three participants worked in high school athletics governance. Finally, one participant worked in each of the following areas: sport performance, commercial fitness, amateur sport governance, and sport festival management.

Data Collection

After permission to conduct this study was granted by the authors' Institutional Review Board, the process of data collection began. The potential participants were first contacted via e-mail. They were informed of the purpose of the study and were first asked if they utilized computer programs to complete various job tasks. In addition, they were asked to indicate if they participated in hiring decisions within their organizations. Recipients of this communication were asked to respond via e-mail and were informed that follow-up correspondence would occur in the event a response was not received. Twenty-six recipients responded to the initial request. The second round of correspondence occurred approximately two weeks after the initial e-mail was sent. Nine additional practitioners agreed to participate after the second e-mail was sent. Upon receiving confirmation of their interest, they were informed of the time commitment associated with participation. All interested participants agreed to this commitment; subsequently, arrangements were made to conduct an interview at a time and date convenient to them.

Data focusing upon computer programs utilized by these practitioners were collected through qualitative measures. Qualitative measures were used in order to receive additional elaboration from participants with regard to the ways in which they were using the programs they identified. It also provided an opportunity to share examples of work that were completed with these programs. As a result, a better understanding of not only the specific computer programs that were

being used by these practitioners but also the tasks they were completing with these programs was achieved.

Data were collected through semi-structured interviews. Interviews were audio taped, lasted between 40-50 minutes each, and were conducted at a time and place of each participant's choice. Each interview was conducted at each participant's office. Participants were interviewed individually and were asked a series of pre-formatted, closed-end questions as well as open-ended questions. First, participants were asked to elaborate upon the specific computer programs they frequently utilized in order to complete various tasks. In addition, they were asked to elaborate upon the tasks they completed through the use of those programs. Two questions that were asked of all participants were "What computer programs do you use?" and "For what purpose(s) do you use those programs?"

As the interview progressed, the investigators asked participants to briefly demonstrate how they were using a particular program. In addition, they were asked if they were willing to share examples of work created with those programs. These requests were made so that the researchers could receive additional insight with regard to how the programs were used. Participants were willing to explain how they completed various tasks with the programs. They were also willing to share examples of their completed work.

Another aim of this study was to gain insight into participants' expectations with regard to the computer competencies a candidate for employment who held a degree in sport management would possess. These perspectives were desired so that learning opportunities for sport management students could be created in order to help meet the participants' expectations. In order to gain insight into those expectations, the following questions were asked: "What computer programs do you expect applicants who hold a degree in sport management to be knowledgeable of and able to use?" and "What tasks do you expect applicants who hold a sport management degree be able to complete with those programs?"

Data Analysis

Shortly after the interviews were completed, they were transcribed. In order to analyze interview data, an analytic induction was utilized. An inductive approach is utilized when some specific problem, question, or issue becomes the focus of research. When utilizing this approach, the researcher does not attempt to prove or disprove hypotheses held prior to entering the study (Bogdan & Biklen, 2003). The primary focus of this research was not to prove or disprove any hypotheses but rather to gain insight into computer programs that were utilized by sport organization personnel as well as their expectations regarding computer competencies of job applicants who hold a degree in sport management.

After the interviews were transcribed, the interview data were examined. The process of open coding was utilized in order to organize the interview data. Open coding is a method of sorting descriptive data that has been collected so that it may be more easily referenced and retrievable at a later time (Bogdan & Biklen, 2003). During this process, the authors examined participants' statements in order to gain insight into their own computer program use as well as their expectations with regard to the computer program competencies they expect from job applicants who possess a degree in sport management. As the interview data were examined, certain words, perspectives, or job related activities stood out. Two coding categories, activity codes and perspective codes, were created after examining the transcripts.

The first coding category was activity codes. Activity codes "are directed at regularly occurring kinds of behavior" (Bogdan & Biklen, 2003, p. 164). In this study, participants regularly engaged various activities with computer programs in order to complete tasks. Therefore, activity codes were created in order to

organize data that related to activities in which practitioners engaged in order to complete tasks with various computer programs.

The second category of codes that was utilized was perspective codes. In this category, participants identify their points of view with regard to the topic being studied (Bogdan & Biklen, 2003). Participants were asked to share their perspective with regard to the computer competencies they expected from job applicants who possessed a degree in sport management. Therefore, perspective codes were established in order to organize this data.

Within qualitative inquiry, the investigator is the data collection instrument. An important component of qualitative inquiry includes establishing trustworthiness (Bogdan & Biklen, 2003; Glesne, 2006). Trustworthiness in qualitative studies is contingent upon the "skill, competence, and rigor of the person doing fieldwork" (Patton, 1990, p. 14). Establishing trustworthiness entails the utilization of various procedures in order to convince the reader that the material s/he is reading was accurately reported and that measures were taken to ensure that the material was consistent with what the participants actually said and experienced.

Establishing trustworthiness of the data was achieved in part through a peer review. This external reflection and input on the investigators' work can contribute to the trustworthiness of a study (Glesne, 2006). Therefore, the peer review was the first method that was used in order to increase the trustworthiness of the research. Suggestions and input from a source other than the investigators can provide a differing perspective and an objective view of the data. In addition, external sources can detect bias and lack of clarity that may be missed by the investigator. In this study, a colleague experienced in qualitative research methodologies examined the content collected by the investigators. This person compared the notes and transcripts created by the investigators to the content in the manuscript and confirmed the accuracy of the content included in the manuscript. In addition, this person provided feedback and suggestions in order to improve the clarity of the content within the manuscript.

Trustworthiness was also established through the process of member checking. Member checking allows participants to confirm the statements they gave during an interview were recorded and subsequently reported accurately (Glesne, 2006). Each participant was provided with a copy of his/her transcript and the manuscript. Participants were requested to analyze the documents in order to ensure their accuracy. All of the participants who responded indicated the documents accurately represented their contributions to the study.

Results

This study was conducted in order to investigate the types of computer programs used by sport organization personnel and the tasks they completed with those programs. In addition, this study was conducted in order to investigate practitioners' perspectives with regard to computer competencies they expected from job applicants who hold a degree in sport management. The first research question focused upon computer programs used by the participants. All of them used Microsoft Word and Excel. Participants also used additional programs within Microsoft Office including PowerPoint, Outlook, Publisher, and Access. Twenty-eight participants reported using PowerPoint. Outlook, Publisher, and Access were used by 25, 10, and 6 of the participants, respectively.

Participants reported using a number of programs that were not part of Microsoft Office. Two programs that were part of the Adobe Creative Suite, Photoshop and InDesign, were used. Twenty reported using Photoshop and 10 reported using InDesign. Lastly, five participants reported using Arbitor and five reported using QuickBooks. Table 1 illustrates the quantity of participants that used various computer programs. All participants used more than one program.

Table 1. Software Programs Currently Used by Sport Management Professionals

Software Program	Number	Percentage
Excel	35	100
Word	35	100
Power Point	28	80
Outlook	25	71
Photoshop	20	57
InDesign	12	34
Publisher	10	29
Access	6	17
Arbitor	5	14
QuickBooks	5	14

Programs that were not identified as often were typically used within particular segments of the sports industry. These programs were used to in order to schedule and communicate with referees and umpires, manage financial records, schedule user groups, and edit videos. These programs were also used to manage ticket sales, event volunteers, and donors.

Arbitor was used within the interscholastic setting. Participants who worked for the state governing body and individual schools reported frequent use of this program. Personnel at commercial, multipurpose sport facilities utilized QuickBooks and EZ Facility. Archtix and Glitnir are ticketing programs that were used by personnel who worked for professional sport teams. Participants who worked in organizations that relied upon volunteer assistance reported the use of programs such as E-tapestry and The Registration System (TRS). Personnel employed in the areas of external affairs or development within intercollegiate athletics departments reported using E-tapestry and Razer's Edge. Personnel in sport performance organizations used video editing software such as Dartfish.

The second research question focused upon the tasks participants completed through the use of various computer programs. Microsoft Word was used in order to complete various tasks such as creating correspondence related documents (e.g. letters). Additional ways in which participants used Word and examples of output that were generated are listed in Table 2.

Table 2. Most Common Uses of Microsoft Word

Uses of Microsoft Word	Mentions
Correspondence with external constituents (letter, thank you's, confirmations)	30
Document creation (staff bios, ballots, forms, fact sheets, championship recaps)	24
Plans (marketing plans, game day schedules, operational plans)	7
Internal Communications (agendas, reminders, memos, meeting notes)	6

Microsoft Excel was used in order to create and maintain databases and generate reports. Furthermore, they utilized a number of functions such as mail merge and formulas. The ways in which Excel was used and examples of output generated with the program are listed in Table 3.

Table 3. Most Common Uses of Microsoft Excel

Uses of Microsoft Excel	Mentions
Financials (budgets, commission, forecasting, amount sold)	17
Spreadsheets (customer/participants/prospects/registrant records, contact lists, rosters, donations, databases)	14
Formulas (sales numbers, costs, averages, tabulate ballots, test results)	13
Tracking data (ticket requests, numbers sold, pitched, or promised, rsvp's, registrations)	10
Reports (pivot tables, ticket reports, registration reports, and new member study)	10
Mail merge	7

The range of uses for PowerPoint was not as diverse as it was for Word and Excel. Creating and editing presentations were the primary tasks that were completed with this program. Participants reported using several features within PowerPoint when creating presentations. Importing photos and video, inserting graphics and charts, and utilizing word art in order to enhance the aesthetics of the presentation slides were the features that were used most often.

Microsoft Outlook was used most frequently for

sending and receiving e-mail. To a lesser extent, the calendar feature was also used in order to keep track of staff meetings and other obligations. Participants also reported using this program in order to arrange staff meetings and send reminders for those meetings.

Adobe Photoshop is a program that is used to manipulate photographs. Users can lighten or darken photographs, eliminate content, and "touch up" photos. Of those who used this program, photo manipulation was the main reason why.

Adobe InDesign and Microsoft Publisher are used to create documents such as brochures, fliers, and newsletters. These programs allow the user to integrate various effects in order to enhance the aesthetics of the document. Participants used InDesign and Publisher in order to create employee handbooks, brochures, newsletters, event programs, media guides, press releases, and materials for meetings with internal and external publics.

Microsoft Access is a program that allows users to create databases. Databases can be created from various templates or they can be created "from scratch." Participants used Access in order to create employee schedules. It was also used to maintain records of transactions with vendors the organization did business with. Invoices, payment dates, and balances owed to vendors were managed through this program.

Personnel employed in the interscholastic setting used Arbitor in order to schedule referees or umpires for athletic contests. In addition to scheduling these game officials, participants used the program to manage officials' contact information. Lastly, it was used to communicate with the officials in the form of group and individual e-mails.

Participants who worked in commercial, multipurpose sport facilities that offered sport related programming such as youth and adult recreational softball, soccer, and volleyball were the ones who used QuickBooks most often. This program was used to manage various activities related to the financial management of the organization. Participants used this program to process employee payroll, maintain records of purchases for the facility, create budgets, and create customer invoices. Participants who worked in this setting also reported the use of facility scheduling programs such as EZ Facility in order to create and maintain activity schedules for various spaces within their facilities.

Participants who worked for professional sport organizations in ticket sales capacities used programs such as Archtix and Glitnir. These programs were used in order to track availability of tickets for the organization's games and to maintain customer purchase records. Customer contact information was also managed with these programs.

Programs such as TRS and E-tapestry assisted participants who had the responsibility of scheduling volunteer labor for various events. In addition to creating volunteer schedules, these programs were used to manage volunteers' contact information. Correspondence in the form of mass e-mails was also executed through the use of these programs.

Donor management programs such as E-tapestry and Razer's Edge were used by participants who worked in segments of the sports industry that rely upon the financial support of donors. Donor contact information and history of contributions were maintained with these programs. In addition, correspondence such as appeal letters was created with these programs.

Participants who were employed in the area of sport performance used video editing programs such as Dartfish in order to record clients during their training sessions. The participants would then view the footage with their clients in order to identify inefficiencies in the client's movements that prevented optimal performance. Footage was stored so that the client and trainer could analyze improvements to the client's movements over a period of time.

The third research question focused upon computer program competencies participants would expect from a job candidate who possesses a degree in sport management. The expectations participants possessed

with regard to a candidate's knowledge of computer programs closely aligned with the programs they often utilized in order to complete tasks within their own jobs. The five programs that participants expected job candidates to be knowledgeable of most often were Word, Excel, PowerPoint, Outlook, and Photoshop. Table 4 illustrates a more extensive listing of programs participants would expect a job candidate with a degree in sport management to be knowledgeable of.

Table 4. Computer Programs Graduates With a Degree in Sport Management are Expected to Know How to Use

Software program	Number	Percentage
Word	30	86
Excel	29	83
Power Point	23	66
Outlook	17	60
Photoshop	6	17
Publisher	3	9

The tasks participants would expect job candidates to complete with these computer programs aligned with the tasks they personally complete. Although the variety of tasks participants would expect a job candidate holding a sport management degree to complete was not as extensive as the variety of tasks the participants personally completed with these programs, they indicated a candidate's working knowledge of a program that would allow him or her to complete basic tasks that are conducted with regularity within that organization would be desirable. Participants also stated that a candidate who knew how to utilize various advanced features, such as mail merging and use of formulas in Excel, would be highly desired and that knowledge could be a factor in that candidate getting hired over another.

Discussion and Implications

DeSensi et al. (1990) encouraged ongoing attempts to determine the needs of employers within the sport management field so that learning opportunities could be constructed in order to meet those needs. Hurd (2005) suggested that consultation with professionals in the field could be helpful in determining what skills, knowledge, abilities, and characteristics new graduates need to be successful. Insight gained from such consultation could also be used to evaluate curriculum and detect any possible deficiencies with regard to student preparation. In order to address these concerns, insight from personnel within sport organizations was sought out in order to learn of computer programs they used and the tasks they completed with those programs.

Employers expect a recent college graduate to possess skills that would allow that individual to adequately fulfill the responsibilities present within an entry-level position (Case & Branch, 2003; Hurd, 2005). In order to address employer expectations, inquiry focusing on computer competencies personnel within sport organizations expect from sport management degree holders was conducted. It is hoped that a study of this sort would be a useful model sport management program faculty and administration could use in order to learn of computer program usage among sport organization personnel. By engaging in this type of inquiry, insight could be gained and subsequent learning opportunities could be provided for their students.

Gaining knowledge with regard to computer program usage within sport organizations and then implementing that knowledge into sport management program curriculum in the form of student learning opportunities could be useful to a number of populations. First, students could certainly benefit them as they aspire to become employed in the field. Providing learning opportunities that build a student's knowledge of and ability to use various computer programs could benefit him or her in not only the internship search but also in the search for a full time job after graduation. These learning opportunities could benefit the student because personnel at sport organizations rely upon interns and employees under their direction to use various computer programs in order to complete essential tasks. Therefore, a student who possesses computer skills that

would allow him or her to execute important tasks could receive additional consideration from a potential employer for an internship and possibly an offer for full time employment.

As a result of creating learning opportunities with computer programs for students, the employer could benefit as well. If a candidate is being considered for a position within the organization and s/he possesses knowledge of and the ability to complete tasks with various computer programs, personnel within the organization would not have to train that new employee "from scratch" on various programs. As a result, the amount of time spent on training a new employee could be reduced.

Sport organizations that exist within different sectors of the sport management field could benefit from the various computer competencies possessed by their employees. For example, ticket sales programs are widely used in professional sports. These organizations could directly benefit from having applicants who are proficient with ticket sales programs upon commencement of their employment. Organizations such as intercollegiate athletics departments could benefit from employees that are proficient with computer programs that aid in managing databases of financial benefactors. Non-profit, community based sport organizations frequently use graphics design programs in order to create their marketing materials. Because these organizations often do not have the financial means to outsource this work to another organization, employees are faced with the task of creating those materials because it can be done at a lower cost. Therefore, it would benefit these organizations to hire personnel who could operate these programs for the benefit of the organization. Sport organizations in the community sector that manage their own programming could benefit from employees who are proficient with scheduling programs. These organizations offer programming to community residents of various ages. Numerous activities must be booked within numerous spaces such as basketball courts, soccer fields, and tennis courts. Personnel who are proficient with scheduling programs can prevent overbooking as well as maximize the use of available space.

Lastly, creating learning opportunities as a result of the knowledge that was gained with regard to computer program usage within sport organizations could benefit the sport management program. If students were provided with these opportunities, their marketability during their employment search could increase. If students were provided with learning opportunities that not only provided them with useful skills but also reduced the amount of training time personnel at sport organizations would have to provide, it could result in that student getting hired. Students who are hired by sport organizations benefit the sport management program because those individuals serve as examples of graduates who were successful in obtaining employment. Promoting individuals who have completed the program and subsequently found employment with a sport organization could entice potential future students to choose that university and major in sport management.

The potential benefits that could be gained by students, employers, and sport management programs seem appealing; however, it should be noted that the initiative of developing opportunities for students to learn a variety of computer programs used in sport organizations would be a formidable challenge. It has been suggested that the type and size of an organization setting plays a role with respect to the importance placed various competencies (Barcelona & Ross, 2004). For example, smaller organizations with fewer staff members might require competence with a wider range of programs or a more broad-based knowledge then would employees in larger organization whose focus might be more specialized. Therefore, a challenge in implementation is that each sport organization will generate specific needs and will possess specific expectations for their employees. Naturally, computer programs in general and the specific programs used by sport organizations would change over time. As a

result, keeping up with rapid changes would be difficult.

Another challenge associated with this initiative is that sport management faculty would need to identify computer programs personnel at sport organizations are using in order to complete essential tasks. Upon concluding those efforts, relevant learning opportunities for students would have to be developed. It would be a challenge for sport management program faculty to teach students a large quantity of computer programs that might be used within all sport organizations. Faculty would need to be provided with the time and resources to learn programs to an extent that they would be comfortable with and effective in teaching the programs to students.

Despite the challenges associated with these kinds of initiatives, Barcelona and Ross (2004) advocated for the inclusion of relevant experiences into the curriculum so that students are prepared for initial entry into the field. Inquiry of this nature and the knowledge that is gained could be useful to sport management program personnel. When sport management faculty members are able to gain insight into computer program usage reported among practitioners and their expectations with regard to the computer programs they expect from sport management graduates, they can develop opportunities to develop learning opportunities in their curriculum. Sport management faculty from any institution could conduct inquiry with sport organizations that hire their students. As a result of learning about computer programs these organizations use and the knowledge they define as important, learning opportunities that could fulfill the organization's needs could be created.

With regard to developing relevant experiences based upon what was learned from this inquiry, three new computer programs were purchased at the authors' institution. After learning of the computer programs that were used by this group of personnel, programs including E-Tapestry, Schedule Star, and TRS were purchased. E-Tapestry is a donor management program, Schedule Star is a facility scheduling program, and TRS is a volunteer management program. Students were provided with opportunities in several sport management courses to gain hands-on experience with these programs. In addition, this inquiry resulted in the creation of new learning opportunities with programs that were previously available at the authors' institution. For example, students gained experience with Adobe InDesign and Photoshop. They were given several assignments in order to gain familiarity with various functions within each program. Once those initial assignments were completed, students were able to develop documents such as brochures, fliers, and scorecards that replicated documents that were created with these programs by personnel who participated in this study.

These learning opportunities were useful to the students because they were able to get hands-on experience with computer programs that were used by sport organizations within the community. This knowledge contributed to several students securing internship opportunities at sport organizations within the community. This inquiry led to the acquisition of knowledge with regard to the computer programs sport organizations in the community were using. As a result, these learning opportunities helped increase the students' marketability and increased their potential to contribute to the organization.

Conclusions, Limitations, and Future Research

This study was conducted in order to gain insight into computer programs used by personnel in various sport organizations. Several programs and the ways in which they were used were similar, regardless of the setting. On the other hand, differences emerged with regard to computer program usage based upon the organizational setting (e.g., professional sport, community sport) in which personnel were employed. In

addition, this study focused on expectations sport organization personnel held with regard to computer competencies they would want from candidates seeking employment within their organizations. Personnel expected, although to a lesser extent, graduates possess knowledge of and basic competency with programs they would use in their daily occupational activities.

A limitation of this study is that the sample consisted of personnel who were employed at sport organizations within one metropolitan area. A larger sample stretching over a larger area could have resulted in the discovery of additional computer program usage as well as a wider range of tasks that were completed with those programs. Therefore, the results that were obtained in this study were not meant to imply similar results would be obtained with a different sample. Although it is reasonable to suggest personnel in many organizations utilize similar computer programs to complete similar tasks, there would likely be some variance with regard to the ways in which the programs were used. Future studies on this topic would be useful because additional computer programs used within sport organizations and the tasks completed with those programs could be revealed. This information gained could be useful in developing learning opportunities that would further prepare students to meet the demands of employers in this field.

In closing, DeSensi et al. (1990) encouraged sport management faculty to continually be aware of the various needs of employers and address those needs by incorporating learning opportunities into the course structure whenever possible. That sentiment could be continued with regard to awareness of computer program usage. Although technology usage within sport organizations continues to evolve, it is necessary for sport management educators to be aware of the ways in which personnel in the field are using various computer programs and subsequently incorporate appropriate learning opportunities into the curriculum as best as possible (Chia-Chen, 2007). Despite the challenges associated with meeting the needs of sport organizations, preparing students to become competent practitioners in this field is the primary responsibility of sport management programs. These attempts to develop student competence would be worthwhile because sport organizations would benefit from hiring qualified graduates who are capable of fulfilling their needs.

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