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EXPLORING INTER-ORGANIZATIONAL RELATIONSHIPS BETWEEN PARK AND  
RECREATION AGENCIES WITH WOUNDED WARRIOR PROGRAMS AND  
COMMUNITY SERVICE ORGANIZATIONS

A Thesis

Presented in partial fulfillment of requirements

For the degree of Master of Arts

In the Department of Health, Exercise Science, and Parks and Recreation Management

The University of Mississippi

By

MORGAN A. MCCREARY

May 2012

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## ABSTRACT

Public recreation departments are funded primarily by tax dollars and over the past thirty years the percentage of funding needed to operate quality recreation programs has steadily decreased and threatened the quantity and quality of programs offered. Presently, park and recreation agencies partner with community entities to offset funding reductions and to offer new and/or ancillary programs. Importantly, partnerships must provide mutual benefits to be successful and the antecedents and factors of inter-organizational relations (IOR) are important to discover. The purpose of this study was to determine factors that might predict IOR between park and recreation agencies with Wounded Warrior (WW) Programming, and community service organizations. IOR was measured as the ability and willingness to share manpower, resources, and funding among Park and Recreation Directors and CEO's of community service organizations. Independent variables included military connectedness, patriotism, medical assistance available, community size, quality of life, knowledge of WW programming, shared philosophical orientations, cooperation barriers, and organizational goal congruence. Participants for the study included the CEO's of nineteen community-based Wounded Warrior partnerships that completed a survey exploring IOR. The survey instrument was validated using Cronbach's Alpha and validity was improved after administering a pilot test. The response rate included 250 surveys, or 22%. The data collected was analyzed using independent t-tests, bivariate correlations (Pearson r and Sig. 2-tailed) to determine whether to accept or reject study hypotheses. A Multiple Linear Regression (MLR) was performed to determine if any of the

independent variables were predictors of IOR. Of the variables, MLR revealed that an organizations ability to provide resources for specific WW medical conditions (PTSD, severe burns, amputations, etc.) was significant at ( $p \leq .05$ ). A Hierarchal Cluster Analysis (Ward's Method) provided typological analysis that identified groups of partners with similar traits of IOR. Results of the study revealed that of the three measures of IOR, human resources were most likely to be shared in a WW partnership. Future studies should concentrate on establishing a framework for building partnerships between park and recreation departments and community service agencies. This study revealed five new measures of IOR which can be used to explore future IOR. The five new measures were named appropriately by the researcher as Sponsorship, Donation, and Cost Partners (SDCP), Recreational Facility and Equipment Partners (RFEP), Indoor Facilities Partners (IFP), Program Operation Partners (POP), and Specialized Assistance and Credentialed Partners (SACP).

## DEDICATION

This thesis is dedicated to all to of the service men and women both past and present of the United States Army, Navy, Air Force, Marine Corps, and Coast Guard who have suffered significant combat injuries while fighting for the United States of America.

I would also like to thank Dr. Kim Beason who has helped and guided me through one of the most challenging and rewarding efforts I have ever encountered. I want to thank you for your time, effort, and support with this research study.

The thesis is also dedicated to all members of the armed services both current and past who have suffered combat related injuries while protecting the American way of life.

## LIST OF ABBREVIATIONS AND SYMBOLS

WW Wounded Warrior Program

IOR Inter-organizational Relationships

QOL Quality of Life

MLR Multiple Linear Regression

NRPA National Recreation Parks Association

USOC United States Olympic Committee

AWEP Aquatic Warrior Exercise Program

SDCP Sponsorship, Donation, Costs Partners

RFEP Recreational Facility and Equipment Partners

IFP Indoor Facility Partners

POP Program Operation Partners

SACP Specialized Assistance and Credentialed Partners

HR Human Resources

SR Shared Resources

FR Financial Resources



## ACKNOWLEDGEMENTS

I express my deepest appreciation to my advisor, Dr. Kim Beason and my committee members, Dr. Don Rockey and Dr. Michael Dupper. I would also like to thank Dr. Jim Gilbert, Dr. Allison Ford-Wade, Dr. Jeffrey Hallam, and Dr. Martha Bass, my other graduate school professors who prepared me to conduct this research study.

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## **CHAPTER I**

### **INTRODUCTION**

The United States has been at war for over ten years and the number of injured soldiers continues to grow. These servicemen and women once injured are entered into the Warrior Transition Command and the Army's Wounded Warrior Program (WW), which is the official program that assists and advocates for the severely wounded, ill, and injured soldiers (Warrior Transition Command, 2011). The goal of this program is to support these soldiers and their families throughout their recovery and transition, into Veteran status. Moreover, the mission of the program is to get the soldiers to be as independent as possible. Ultimately, WW programs act as catalysts so that soldiers can live and work at a comfortable level upon completion. Recently, community-based recreation agencies have played a role in insuring soldiers continue to stay active upon either transitioning out of the Army or recovering from injuries suffered during combat at their civilian residence by providing programs, resources, and facilities specifically for this population.

One big challenge for Wounded Warrior (WW) programs is the ability to develop quality sustainable partnerships with organizations that support efforts to reintegrate wounded American soldiers into society or prepare them to return to active duty. One method to address this challenge is to build inter-organizational relationships (IOR) with not-for-profit organizations and park and recreation agencies to meet outreach goals of WW Programs. However, there are challenges to WW programs that retard meaningful inter-organizational relationships. These challenges include, in addition to the lost contact with wounded service personnel, factors such as globalization, advanced technology, tough economic challenges, and evolving social expectations. Overcoming the barriers to IOR and discovering the specific factors of IOR important to building successful WW partnerships, are critical in helping the soldiers that are returning from Iraq and Afghanistan recover from their injuries.

The processes and procedures for creating collaborative partnerships do not need to be re-invented; it has become normal practice to link businesses, corporations, educational institutions, and park and recreation agencies together to insure programs meet the needs of the people, are affordable, and of high quality. In practice, government agencies embrace public-private partnerships, whereas for-profit organizations create strategic alliances and joint ventures, and not-for-profit organizations establish collaborative relationships with nontraditional partners (Conlon & Giovagnoli, 1998).

The established benefits of partnerships, alliances and collaborations include innovation, strategic value, and increased effectiveness within networks of interactions among organizations within the partnership. However, factors that facilitate IOR are different based on the philosophy, vision, and mission of each stakeholder and become more like a blueprint or

“fingerprint” and result in varied arrangements and configurations and thus, a nexus of factors need be determined for each IOR and are unique for each relationship (Beason & Selin, 1990).

In summary, IOR occurs between all types of organizations and in all sectors, including government, business, nonprofit, and charity and although these relationships can take many forms (e.g., joint ventures, sponsorships, or cooperatives); they all have common foundations (Hamel, 2000). IORs have been embraced by leisure service agencies to access or create new markets; adjust to turbulent social, political, and technological environments; share the financial risk; and/or take advantage of the knowledge, skills, and expertise that were not available internally (Beason & Selin, 1990). Finally, over the past twenty years an enormous amount of research focused on inter-organizational relationships within the Recreation Leisure fields has been conducted. Using this past research as a baseline research that explores IORs between park and recreation departments and not-for-profit organizations specific to building effective and quality WW programs is timely and warranted.

### **Statement of Purpose**

The purpose of this study was to determine manpower, resource, and funding factors that support partnerships between park and recreation agencies currently providing Wounded Warrior programs and the service organizations within the host community. Presently, 23 communities are sponsored by the National Recreation Park Association (NRPA) and the United States Olympic Training Committee (USOC) to provide Wounded Warrior Programs. The communities include Austin, TX; Boulder, CO; Eugene, OR; Fairfax Co., VA; Fayetteville, NC; Groton, CT; Houston, TX; Las Vegas, NV; Reno, NV; Richland Co., SC; Tampa, FL; Anchorage, AL; Rockford, IL; Orange Co., FL; Colorado Springs, CO; Cincinnati, OH; Cedar



Rapids, IA; Wichita, KS; Columbus, OH; Maui, HI; Fort Collins, CO; Washington, DC; and Phoenix, AZ. The service organizations are all affiliated partners with the United Way in each community.

One sub-objective of the study was to identify IOR factors that best predict or indicate partnerships between park and recreation departments and local non-profit organizations.

Another sub-objective of the study was to develop and validate scales that will measure IOR between park and recreation directors and not-for-profit service organization chief executive officers (CEO).

### **Importance of the Study**

Community recreation programs are funded primarily by tax dollars and over the past thirty years these funds have steadily dwindled as demands increase at a pace greater than tax revenue can recover. Moreover, during the past five years the fading U.S. economy has accelerated the negative effects of lost tax revenue and magnified funding shortfalls across the country; park and recreation departments continue cutting back and having to do more with less (James, 1999). Unfortunately, sustaining staff, building, maintenance, and programming budget items are not conducive to adding new programs no matter how appropriate or important. Therefore, to provide quality recreation for WWs at acceptable costs park and recreation agencies must rely heavily on partnerships to assure they have adequate funding, resources, and manpower.

In 2008, community-based recreation programs for soldiers started appearing across the country. Understanding the factors that promote IOR and partnership dynamics are more

important than in the years preceding 2008 now that WW programs are being integrated within community-based recreation.

Therefore in order for community recreation agencies to build and support Wounded Warrior programs partners and stakeholders willing to share funding, resources, and manpower necessary to provide quality programs for wounded servicemen returning from Iraq and Afghanistan must be cultivated. Importantly, recreation programs and many service organizations provide services and funding for these types of programs to assist in the rehabilitation and therapy of wounded servicemen.

A partnership is “an on-going arrangement between two or more parties, based upon satisfying specially identified, mutual needs (Uhlik, 2007). CEOs of agencies in a WW partnership are responsible for operationalizing the philosophy, mission and vision (PVM) of their organizations and would be the most obvious contact person to provide information on their organizations ability to build partnerships with community Recreation agencies. However, partnerships can also be created at other levels of leadership such as supervisor or programmer levels. Therefore, to discover IOR factors necessary to build a WW program the park and recreation directors that currently provide WW, recreation programs and the CEO’s of community service organizations that are members of United Way partnerships were chosen as participants in this study. These CEOs were administered a survey to determine the quality and quantity of IOR that has occurred and IOR which may occur in the future.

The independent variables that were used in this study could help form the basis for future partnerships between park and recreation agencies and the service organizations for not only WW programs but other beneficial relationships. The factors chosen for this study were:

military connectedness, patriotism, medical assistance factors, quality of life, knowledge of WW programs, shared philosophical orientation, cooperation barriers, organizational goal congruence, and community size.

### **Hypotheses**

The following are the hypotheses posited for the study.

Hypothesis One ( $H_0^1$ ). There will be no significant differences between IOR scores of Park and Recreation agencies and United Way Affiliates/Service Organizations.

Hypothesis Two ( $H_0^2$ ). There will be no significant relationships among IOR scale measures: shared resources, human resources, and financial contributions.

Hypothesis Three ( $H_0^3$ ). There will be no significant relationship between IOR scores and military connectedness scores.

Hypothesis Four ( $H_0^4$ ). There will be no significant relationship between IOR scores and patriotism scores.

Hypothesis Five ( $H_0^5$ ). There will be no significant relationship between IOR scores and the availability of medical assistance within their community.

Hypothesis Six ( $H_0^6$ ). There will be no significant relationship between IOR scores and the quality of life scores indicated in the communities.

Hypothesis Seven ( $H_0^7$ ). There will be no significant relationship between IOR scores and knowledge of WW program scores.

Hypothesis Eight ( $H_0^8$ ). There will be no significant relationship between IOR scores and shared philosophical orientation scores.

Hypothesis Nine ( $H_0^9$ ). There will be no significant relationship between IOR scores and cooperation and relations scores.

Hypothesis Ten ( $H_0^{10}$ ). There will be no significant relationship between IOR scores and organizational goal congruence scores.

Hypothesis Eleven ( $H_0^{11}$ ). There will be no significant difference in IOR scores between large communities (over 100,000) and small communities (under 100,000) that host WW programs.

### **Definition of Terms**

For the purpose of the study the following definitions of terms were used:

1. CEOs. Chief Executive Officers. The member of a Park and Recreation agency or local partner of the United Way that holds the primary leadership position. CEO's may be full-time, part-time, or appointed volunteers.
2. Collaboration. "A process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible" (Gray, 1989).
3. Dyadic Relationship. IOR that occurs between Park and Recreation CEOs and the non-profit organization CEOs.
4. Financial Resources- Direct financial contribution, fund-raising, fund generated by charitable events, donations, joint sponsorships, operational funding, in-kind financial

support, facility and administration costs, and/or other financial resources organizations may share.

5. Human Resources- Individuals within an organization that includes: experts, shared advisory board members, licensed and certified professionals (teachers, lawyers, and doctors), volunteers, organizational support staff (maintenance, office secretaries, etc.), administrative support (CEOs, Directors, and Associate Directors), and/or other human resources that may be shared.
6. Inter-organizational Relationships (IOR). Deliberate relations between otherwise autonomous organizations for joint accomplishment of individual goals.
7. Joint Activities. The presence of joint interactions between the CEOs of Park and Recreation departments and the CEOs of local partners of the United Way and other service organizations.
8. Legitimate Stakeholder. CEOs with perceived right and capacity to participate in developmental processes associated with IOR.
9. Medical Conditions- Injuries suffered by soldiers in combat operations include: Traumatic Brain Injuries (TBI), Post Traumatic Stress Disorder (PTSD), loss of limbs (arms or legs), severe burns, blindness or loss of vision, and paralysis or spinal cord injuries.
10. Medical Personnel- Experts available within a community to assist in the rehabilitation of WWs include: Certified Therapeutic Recreation Specialists (CTRS), Physical Therapists (PT), Occupational Therapists (OT), Speech Pathologists, Rehabilitation Specialists, Specialty Physicians, and Surgeons.

11. Organizational Goal Congruence- Organizations that share similar goals and objectives.
12. Partnership. A partnership is “an on-going arrangement between two or more parties, based upon satisfying specifically identified mutual needs” (Uhlik, 1995).
13. Park and Recreation CEO. Leader of a municipal park and recreation department. Most commonly referred to as Director.
14. Quality of Life – Used to evaluate the general well-being of individuals and societies. Standard indicators of the quality of life include not only wealth and employment, but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging.
15. Shared Philosophical Orientation- Organizations that share similar philosophy, vision, and mission statements. (PVM)
16. Shared Resources- Any type of vehicles, facilities (indoor, outdoor, meeting spaces, activity space, and support buildings), open spaces, field equipment (turf management, lawn mowers, and supplies), recreation/leisure equipment, technology, office supplies, and/or any other resources that may be shared.
17. United Way (United Way of America). A nationwide civic organization or any of its affiliated local groups that raise funds through individual contributions and allocate them to benefit civic and charitable programs and organizations, such as the YMCA and Red Cross.
18. Wounded Warriors Program (WW). The U.S. Army created the AW2 program in response to the needs of the most severely wounded, injured, or ill soldiers from the

Global War on Terrorism. The initiative is a response to the growing number of soldiers wounded in operations in the Iraq War and Afghanistan.

### **Delimitations**

The following delimitations were placed on this study:

1. This study was limited to the park and recreation agencies that were selected by NRPA and the USOC to implement Wounded Warrior programs.
2. The study was limited to only surveying the park and recreation CEOs and the CEOs from the local non-profit partners of the United Way and identifiable service organizations in each community.
3. The determination of IOR was limited to the perceived relationships between the park and recreation CEO and the CEOs of the United Way and affiliates based on the likelihood of being a current partner and/or being a compatible partner that support Wounded Warrior programs.
4. The study was limited by the time allowed for responses.
5. CEOs being citizens of the United States of America.

### **Limitations**

The following were limitations of the study:

1. The study was limited to implementing the use of an internet survey technique due to the samples in the study being dispersed throughout the United States.
2. The study was limited to the 23 agencies funded by NRPA but the criterion used by NRPA for selecting the communities was not released.
3. The study was limited by the lack of control and random participant selection process.

4. Study was limited by the reliance on United Way CEOs to disseminate the survey to their service agency partners.

### **Assumptions**

In the research design for the study the following assumption were necessary:

1. All responses to the internet survey by both the CEOs of the park and recreation agencies and the CEOs of the local partners of the United Way will be accurate to the best ability of the subjects.
2. All CEOs responding were responsible for understanding and operationalizing the philosophy, mission, and vision of their organizations.
3. Participants in the study were representative of all parks and recreation agencies and United Way partners participating in the research study.



## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

Over the past ten years the literature on inter-organizational relationships (IORs) which include partnerships, coordination between two or more entities implementing strategic alliances, joint ventures, and the use of social networking has expanded. Research dealing with how organizations learn and prosper through developing these types of strong partnering relationships with one another can be applied to park and recreation agencies and the local not-for-profit service organizations that will benefit from forming these partnerships, especially for Wounded Warriors. The related literature used to identify IORs specific to this study are presented under the following headings: (1) conceptual definitions of IOR, (2) operational definition, (3) research design, and (4) background of Wounded Warrior Program.

## **Conceptual Definition of Inter-Organizational Relationships (IOR's)**

IORs have become increasingly important and there is literature focused on how businesses and organizations can establish, implement, and use IORs. There are two concepts of IOR that stand out from the review of literature used to form partnerships. They are cooperation and collaboration.

In order to survive in today's economy, especially in park and recreation; leaders must look to form partnerships with organizations that have a similar philosophy, mission, vision, and goals (PVM's). To thrive, CEOs of organizations must find strong partners. In today's tough economy, park and recreation departments struggle to react quickly to ever-changing customer needs, alliances, and technologies. The CEOs of park and recreation agencies and the local service organizations need to know how to keep their eye on the prize, promote openness, embrace a diversity of ideas and approaches for processing new information, be able to adapt and make changes to keep pace with other organizations in the field, and appreciate the value of building the relationship skills needed to forge enduring partnerships (Dent and Krefft, 2004).

There are many instances where partnering is currently taking place in parks and recreation. The U.S Olympic Training Committee and NRPA partnered to provide funding for qualified community-based recreation departments across the country. The recreation departments design and implement programming specifically for the soldiers who have been or are currently in the US Army's Wounded Warrior Program (O'Brien, 2010).

Another research article from NRPA discussing the types of programming that the Park and Recreation agencies are providing with the funding from the NRPA and the US Olympic Training Committee comes from Fairfax, Virginia. Operation WOW (Wellness Opportunities

for Warriors) is the name of the Park and Recreation program that focuses on the goal of getting injured service members to benefit from community recreation and physical activity. One of the problems that the Park and Recreation agency found was the ability to provide effective outreach to the targeted population. They had to implement a plan to get soldiers to believe in the program. Participation was slow until a mentoring program was established through a partnership between local veterans from the American Legion and Fairfax County Employees. One of the mentors, Kenneth Curry, a retired Army Lt Col, said that volunteering with wounded warriors is his passion (O'Brien, 2010).

In the article "Come Together" by Jason Bocarro and Bob Barcelona, they ask the question "Why isn't collaboration and partnering happening more often?" Their study addressed partnerships between university personnel and those who are working in the community. Some researchers have described how many of the problems behind collaborative efforts stem from a power in equity between the university and the community (Barcelona & Bocarro, 2003). The importance of learning to share and trust one another is a major issue in partnering.

Barcelona and Bocarro (2003), go on to state, in the few studies that have examined collaborative partnerships within the park and recreation field have found a large discrepancy between the support for partnerships and the actual collaborative efforts that are taking place. They conclude the research suggests that park and recreation professionals conceptually recognize the promise of collaboration but lack the knowledge, motivation, skills, or resources to initiate and maintain partnerships.

Research also shows in most circumstances, bigger is better. In size there is strength, comfort, and safety. Partnerships, collaborations, alliances, mergers, and acquisitions all came

about because organizations were obsessed with the over-arching goal of becoming the largest and the best (Conlon & Giovagnoli, 1998). The mission and vision of Park and Recreation agencies is to provide the best programs, to the most people possible, for an equitable and fair cost. Forming relationships with the local not-for-profit service organizations in the community would be of great benefit for programs like the Wounded Warriors and its potential to reach an expanding audience.

The definition of partnerships from Conlon and Giovagnoli (1998) relates well to park and recreation and this research study: a temporary or permanent joining of two or more organizations through a mutual agreement. Given this, there are four common reasons to form partnerships: 1) to become larger and dominate a market, 2) to acquire expertise, technology, money, or other resources the organization may lack, 3) to fend off an aggressive moves by a competitor, becoming bigger and stronger and in better position to deal with that competitor, 4) to do a deal; to use combined resources to jump on a market bandwagon. Service organizations and clubs would benefit greatly from partnerships with Park and Recreation agencies. This research will attempt to discover what factors cause high IOR's scores between Park and Recreation agencies and the local service organizations so that both receive exposure within the community. Combining resources such as manpower, resources, and costs would be tremendous for all parties involved. Currently, the Wounded Warrior Program is very popular in the news and media. Combining with one another will allow the communities to capitalize on this opportunity to jump on a market bandwagon.

Another form of IOR is cooperative strategy which is the attempt by organizations to realize their objectives through cooperation with other organizations, rather than in competition with them (Child & Faulkner, 1998). A cooperative strategy can offer significant advantages for

organizations which are lacking in a particular areas or resources to secure these partnerships with others possessing complementary skills or assets. It may also offer easier access to new markets, and opportunities for learning. Park and Recreation departments often lack in their use of technology and ability to raise funding for programs like the Wounded Warriors. United Way affiliates may have the funding and the current up-to date technology to help equip Wounded Warrior Programs.

Cooperation between organizations creates a mutual dependence between them and requires a great deal of trust in one another in order to succeed. There are many definitions of trust; the literature tends to agree that trust refers to the willingness of one party to relate with another in the belief that the others actions will be beneficial rather than detrimental to the first party, even though this cannot be guaranteed (Child & Faulkner, 1998). Uncertainty about partner motives and lack of detailed knowledge about how they operate requires that a basis for trust be formed for cooperation between two organizations to exist.

An example of cooperation dealing with the US Army Wounded Warrior Program and municipal Park and Recreation agencies is a new US Army Therapeutic Therapy Aquatic Program. Doctors have for decades prescribed aquatic therapy for re-building and strengthening injured bodies while managing the pain they experience (Warrior Transition Command, 2011). Recently, in an effort to standardize alternative therapies for Wounded Warriors, the Army has piloted a two-pronged aquatic rehabilitation program. The Aquatic Warrior Exercise Program (AWEP) and developed by aquatics and fitness expert Dr. Mary Wykle. The results of the pilot study have been nothing short of dramatic, especially considering that soldiers recommended for aquatic therapy are often those with incapacitating pain, atrophied muscles, and serious injuries. A variety of pain scale tests showed an average of 50% reduction in pain levels due to the type of

exercises being practiced during the pilot test. Study results showed that resting heart rate decreased an average of 49%, the ending heart rate increased 61%, and time to complete the steps decreased 75%. The Army was willing to enter into a cooperative relationship with Dr. Wykle and trusted that her program would help their injured soldiers. She had to volunteer her time and efforts to show the Army the worth of her new program and how it could influence the recovery process for injured soldiers. The Army could have just used a program that had already been created, but they wanted to explore new ideas to find the best possible results. The Army would not have a program of such high standards for the wounded soldiers to participate in during their recovery process if the cooperation between the two sides didn't take place.

Yet another method used to form partnerships is collaboration. A number of years ago, a marketing executive for a Fortune 100 company released that if he could choose anyone as his partner it would be his fiercest competitor, because "if we got together with them and exchanged ideas, sparks would fly (Conlon & Giovagnoli, 1998, p. 17)." Collaborating with a competitor was viewed as collaborating with the enemy. It is important for organizations to recognize that such collaboration can be beneficial especially from a "co-opportunity" standpoint (Conlon & Giovagnoli, 1998). The way technology is today and the fast moving, rapidly changing marketplace it's difficult for any one organization to possess all the resources necessary to capitalize on all the opportunities available. Not all collaboration has to be with a competitor. There are many examples in Park and Recreation where collaboration exists between two or more entities that share information, cost, resources, manpower, etc. Collaboration also looks to solve a set of problems which neither can solve individually. Organizations must work together to solve major problems and find solutions in order to provide the best services or product available.

The US Army and Penn State University collaborated and created a program called “Inclusive” Recreation Training. Penn State had the facilities and resources to train the Morale, Welfare, and Recreation managers but didn’t have the recreation professionals to study and help. Penn State was able to collaborate with the Army and worked together to get their MWR professionals to their campus (McIlvaine, 2008). Often times trying to locate the injured soldiers is a very hard task. When soldiers transition out of the Army and the Wounded Warrior program they are pushed back into the civilian world. Penn State was able to get the civilian recreation managers on military bases that have direct contact with the soldiers on a daily basis. This is a first of its kind training program for military recreation managers and it takes place on Penn State’s campus in University Park. Starting in 2008, the program provided the knowledge, tools, and resources Morale, Welfare, and Recreation managers on Army bases needed to integrate active-duty wounded warriors into their existing recreation programs on military bases. This program allows individuals to have an outlet to share their experiences and emotions in a positive environment. US Army had to collaborate and find a partner that would train their MWR managers to help the active duty soldiers that were on military bases. Based on this study it is suggested that the US Army Wounded Warrior administration partner through collaborative dynamics with community recreation departments so beneficial recreation programming is provided to WW serviceman and women.

Conceptually, the best definition of IOR for the purpose of this study is Dent and Krefft’s definition of smart partnering. They define smart partnering as “Organizations that are organic networks, neural webs. Networks grow by propagating connections. Connectivity happens when organizations form strategic partnerships within and between themselves. Partnerships produce astonishing results only when information flows freely and people involved trust each

other and are loyal to one another” (Dent and Krefft, 2004, p.135). Based on this proclivity to form partnerships, Park and Recreation departments and the communities they serve will be used for this study examining factors that predict IOR measures of money, manpower, and resources.

### **Operational Definition of IORs**

There are specific indicators of partnerships that may be used to determine if an inter-organizational relationship can exist. The literature describes several rules of engagements that either facilitate or constrain an organization’s ability to form partnerships.

An organization’s ability to have successful partnerships depends on the common roles and responsibility of the two organizations that want to join an alliance. For this study these factors or causes must be set before a successful partnership can be formed. These factors include; Financial (who will invest how much when; under what circumstances the investment formula might change); Resources (technology and human; what hard and soft skills Organization A will provide versus Organization B); Time (how many hours both partners will devote to the alliance in field work, meetings, presentations, and the like); Key people and or manpower (who from each organization will be point people on the alliance team); and Boundaries for the alliance (markets, geography’s, size of opportunities, and the like; no alliance can be positioned as all things to all the organizations involved).

Defining roles and responsibilities is important when Park and Recreation agencies pursue an opportunity involving coordination. It is also necessary when one wants to maintain a productive relationship with a partner when there is no immediate financial gain from the alliance (Conlon & Giovagnoli, 1998).



As the literature suggests, it might be easy to find a partnership to share knowledge and provide outreach opportunities about the marketplace, or about a competitor's product developments, but they still fail because they did not define the roles and responsibilities of each partner. Maintaining a solid partnership based on knowledge or research requires as much focus and attention as one based on a business opportunity (Conlon and Giovagnoli, 1998).

Clearly, Park and Recreation departments and the service organizations in the community should be looking to form cooperative and collaborative partnerships to help one another. Many indicators from the literature research can be implemented by the organizations to provide shared resources, human resources, and financial resources to help initiate and sustain Wounded Warrior Programs.

In this study, we want to determine from the entities involved, factors likely to form strong partnerships to fostering offering quality WW and recreation opportunities once they are released from the Army. Partnerships between the Park and Recreation agencies and the local not-for-profit service organizations need to exist. In order for inter-organizational relations to occur each organization must meet their organizational goals and the partnership must exist within the bounds of their organizational philosophy, mission, and vision (PVM) (Parent & Harvey, 2009).

The local not-for-profit service organizations in the community likely to partner in WW programs should have PVM congruent with the Wounded Warrior Program. The first opportunity for community involvement and military connectedness while supporting the men and women who were injured would be one factor. The second factor may be providing psychological services for WW soldiers and for some achieving goals considered patriotic. A

third factor is to receive the community exposure that the Army Wounded Warriors Program would bring to a community through radio ads, newspapers, articles, television, sponsorship opportunities, and social media. Another factor that would facilitate partnership formation would be achieving organizational goals related to medical and mental health issues. According to the Department of Defense, more than 164 million men and women have been deployed to Iraq and Afghanistan since 2001 (Kleban, 2011). It is estimated that one in four of those who serve will require treatment for a medical or mental health issue (Kleban, 2011).

The Park and Recreation agencies seek help from the service organizations so they can receive resources and financial contributions to create Wounded Warrior Programs (Kleban, 2011). By creating partnerships the Park and Recreation departments will be able to provide the best programs, to the most soldiers, for an equitable amount.

The United Way envisions a world where all individuals and families achieve their human potential through education, income stability and healthy lives. Their mission is to improve lives by mobilizing the caring power of communities around the world to advance the common good (United Way, 2012). They may serve as important partners for three reasons; First, they have funding to help the Wounded Warrior Program flourish in communities as long as the program meets criterion necessary to receive the United Way funding. The second reason UW should be involved is their influence over their member partners. The third way UW may contribute to Wounded Warriors is through their relationships and contacts with local business and corporations. These sponsorships have the potential to generate large sums of money quickly if you have a strong product or service to sell. The Wounded Warrior Program has the numerous amounts of sale points needed to bring in big sponsors. Everyone wants to get

involved with helping the soldiers who are fighting overseas; especially those that have suffered major injuries while protecting America's freedom.

The human resources to operate Wounded Warrior programming would be generated through the local service organizations that partner with the UW such as the American Red Cross, Wounded Warrior Project, and Salvation Army. The service organizations want to be involved in the community and help with providing outreach. These organizations that are able to provide a large number of volunteers, experts, and administrative personnel to help with the daily Wounded Warrior programs. Volunteers from these organizations may be able to directly participate and also help run certain programs for the Park and Recreation Departments. The Wounded Warrior Program also needs the assistance from UW and their partners, experts, and administrative personnel who have years of experience working with programs in the community that have already been established.

Facilities, manpower, and operational funds used by the Wounded Warrior Programs need to come from the Park and Recreation entities. An important manpower resource needed by the Wounded Warriors that the Park and Recreation profession can provide Certified Therapeutic Recreation Specialists (CTRS) that help design, implement, and evaluate programs offered to the wounded soldiers. The most important resource recreation agencies can provide are recreation facilities that include the swimming pools, basketball courts, baseball/softball fields, tennis courts, and trails. The third resource recreators can provide are specific equipment necessary to run the WW programs efficiently and effectively.

## **Key Factors or Causes of IOR for this Study**

The factors or independent variables used to determine effects on IOR scores and future partnerships within the communities are 1) military connectedness, 2) patriotism, 3) medical assistance availability (conditions and personnel), 4) quality of life, 5) knowledge of WW programs, 6) shared philosophical orientation, 7) cooperation barriers, 8) organizational goal congruence, and 9) community size. In the following paragraphs the independent variables will be operationalized.

Military connectedness can be linked to the type of people within the community who enlist in military services, enroll in college ROTC programs, or work for the military as a civilian. The U.S. military became an all-volunteer force in 1973. As a consequence, it is now subject to labor market dynamics and has come to rely on the enlistment of disadvantaged young people (Elder, Wang, Spence, Adkins, and Brown, 2010). This shift to an all-volunteer force has raised questions about the circumstances and characteristics of young people that orient them to enlist—especially during wartime and military involvement abroad. The voluntary nature of contemporary military recruitment focuses inquiry on the question of why some young Americans enlist in the military instead of entering college or the labor market. The study “Pathways to An All-Volunteer Military” by Elder, Wang, Spence, Adkins, and Brown (2010) investigates the role of a disadvantaged background, the lack of social connectedness, and behavioral problems in channeling young men to the opportunities of the all-volunteer military instead of to college or the labor market. Data from three waves of the National Longitudinal Study of Adolescent Health in the United States are employed. The analytic sample consists of 6,938 white, black, and other males. The greatest likelihood of military service versus college or the labor force occurs when young men of at least modest ability come from disadvantaged

circumstances, experience minimal connectedness to others, and report a history of adolescent fighting. The findings highlight the value of access to post high school education and work life opportunities as a military service incentive for less advantaged young men in the all-volunteer era. Over the past five years, the Army has shifted back towards a competitive enlistment and very competitive officer training program at West Point and or university ROTC programs (McIlvaine, 2008). The Army is downsizing due to the war on terror coming to an end and our country's financial crisis and debt (McIlvaine, 2008). Now more than ever, Americans are looking for jobs and the Army just can't allow everyone to join like back when the draft was in effect. Questions that will be reworded to fit the research needs, will come from the National Longitudinal Study of Adolescent Health in the United States will be used to help determine the community's level of military connectedness for this study. The study also addresses the community in which the children or soldiers were raised; leading back to their disadvantaged background and whether or not the community had a military presence such as military schools, active military bases, ROTC in their high schools, National Guards, military parades, etc.

There were two questions used to measure military connectedness in the communities for this study. The first question was "It is important that my community\_\_\_\_". The fill in the blank responses were display its cultural diversities, display its patriotism, participates in community service, values times with their families, celebrates the 4<sup>th</sup> of the July every year, celebrates Memorial Day every year, supports their National Guard, and celebrates Veterans Day every year. The second question was "My community has a \_\_\_\_currently within my community". The fill in the blank responses were the following; United Service Organization (USO), Veterans of Foreign Wars (VFW), National Guard, Army Base, Navy Base, Air Force Base, Marine Base, American Red Cross, Veteran Home, VA Office, Veterans Hospital, College/University with

ROTC programs, MWR program (Morale, Welfare, and Recreation), Private military school, Public military school, Higher education military schools (Citadel, West Point, VMI).

There is broad agreement on the meaning of patriotism as “a deeply felt affective attachment to the nation” (Conover & Feldman, 1987) or the “degree of love for and pride in one’s nation” (Kosterman & Feshbach, 1989). More pronounced disagreement emerges, however, over the way in which patriotism is measured. Patriotism items are commonly tinged with political ideology in the United States, resulting in greater apparent patriotism among political conservatives than liberals. Consider the Symbolic Patriotism Scale in the American National Election Studies (ANES), which combines pride in being American with pride in the flag and anthem (Conover & Feldman, 1987). Some questions from the Symbolic Patriotism Scale will be used in this study to determine the level of patriotism within the selected communities. The study “Patriotism in Your Portfolio” by Shive and Morse, will be used to determine a scale to measure patriotism in the participating communities. The World Value Survey Scale was used by Morse and Shive in 2008 to examine patriotism and its effect on the way people from around the world choose to make investments. The study investigated if patriotism had any effect on the way that investors decided to keep their money in domestic stocks or look to go abroad with their finances. The World Value Survey scale was created at the University of Michigan (Morse & Shive, 2008). The survey looked at three questions towards a person’s view on patriotism. The ISSP National Identity Survey was also used to help measure patriotism in this study. The study found that the United States, Russia, Poland, and Hungary scored high on patriotism and investing in their countries domestic stocks (Morse & Shive, 2008). Meanwhile, the following countries scored a low patriotism score and a low domestic holdings score; Germany, Netherlands, and United Kingdom. The study also revealed

that in the United States the following states were the most patriotic and invested in domestic stocks: Texas, Louisiana, Oklahoma, and Mississippi (Morse & Shive, 2008).

The question used to measure patriotism in this study was participants responses to the following statements: I am proud to be an American citizen, I would be willing to fight for the United States of America, I believe that employers should give jobs to American citizens first before immigrants, I feel very close to the United States of America, I would rather be a member of the United States of America than any other country, It is important to me to be part of the United States of America, and I support my country even when it is in the wrong.

Quality of life in a relatively new approach can be looked at by the level of happiness within a community. Is happiness actually measurable? It is likely that debates about the right interpretation of subjective measures will continue throughout the 21st century and beyond. Frey and Stutzer (2002) summarized ways to validate happiness data. Krueger and Schkade (2008) showed that people reported well-being numbers are reasonably stable through time. Oswald and Wu (2010) demonstrated that across the United States there is a strong match between subjective and objective well-being. What are noticeable about this line of modern social science research are not merely the discoveries that have been made but the attention that such work has garnered outside academia. People are interested in the topic. Hundreds of recent newspaper articles have appeared discussing happiness research. There are a number of popular “science of happiness” books. Politicians on the left and right have shown interest, and a recent commission led by Nobel Prize-winning economists Joseph Stiglitz and Amartya Sen produced a long report making recommendations on how, looking to the future of the industrialized nations, we might move away from simple GDP measurement (Blanchflower & Oswald, 2011). The study took data on 48,000 individuals from the General Social Survey (GSS) of the United States, which since 1972

has been asking an annual random sample of Americans this question: “Taken all together, how would you say things are these days: Would you say that you are very happy [approximately 32% give this answer], pretty happy [56%], or not too happy [12%]?” So the vast majority of respondents are quite happy or very happy, and the distribution of answers is fairly consistent with those of other nations, as shown in the literature. The study also asked questions concerning the participant’s view on their community’s livability and community crime rates. Similar questions from the (GSS) will tailored and utilized to help determine the quality of life in the communities selected for study.

Quality of life was measured using two questions for this research. The first question was “Our community has \_\_\_\_\_that affect quality of life”. The fill in blank responses were minor crime rates (graffiti, vandalism, public urination), moderate crime rates (theft, domestic violence, gangs), and serious crime rates (murder, rape, drugs). The second question was “My community has\_\_\_\_\_”. The fill in the blank responses were high divorce rates, significant safety issues, serious problems with infrastructure (roadways, sewage, utilities), a small town feel, a good location, a diverse population, adequate parks and lakes, enough schools and teachers, a wide variety of open spaces, a variety of services available, high property taxes, and job opportunities.

In 1990, Beason and Selin researched cooperation dynamics between the U.S Forest Service and the Chamber of Commerce and Tourism Associations in the Ozark National Forest. In their research, they used a detailed questionnaire and interview process to discover measures of shared philosophical orientation, barriers and limitations, and organizational goal congruence. Questions from their research pertaining to goal congruence will be used in this research to



determine factors of IOR's between park and recreation agencies and not-for-profit service organizations.

There were two questions used to measure shared philosophical orientation and organizational goal congruence. The first question was "I believe that my organization's PVM is similar with that of the WW program. The second question was "I believe that my organizations goals and objectives are similar to those of the WW program.

The question that was used in this study to measures potential barriers or limitations to forming partnerships was "My organization may have difficulty working with a WW partnership because of \_\_\_\_". The fill in the blank responses were; Timing issues with when the program is offered, Reimbursement procedure issues, Logistical issues providing materials to support the program, Availability of my organizations facilities to support the program, Lack of human resource to support programs, Capital for program startup, Budget constraints that would prohibit program support, and my organizational philosophy and goals are not compatible with the program.

There were two questions used to measure medical assistance for this research. The first question was "My organization provides resources, manpower, and financial contributions to programs aimed specifically for individuals who suffer from \_\_\_\_". The fill in the blank responses were; TBI (Traumatic Brain Injuries), PTSD (Post Traumatic Stress Disorder), Loss of limbs (arms or legs), Severe burns, Blindness or loss of vision, Paralysis or spinal cord injuries. The second question was "My community has an adequate number of \_\_\_\_ to support a Wounded Warrior Program". The fill in the blank responses were; Certified Therapeutic Recreation

Specialists (CTRS), Physical Therapists, Occupational Therapists, Speech Pathologists, Rehabilitation Specialists, Physicians, and Surgeons.

### **Research Design**

Researchers have used many different levels of analysis and data collection to study IORs. Two levels of analysis have been used frequently in IOR research –collaboration and cooperation partnerships.

Organizations forge partnerships and enter into IOR relationships with other organizations for co-production and social commerce by using IOR networking (Babiak, K. (2007). Within the organization, IOR networks of managers or CEOs play a crucial role in cross-functional integration, as is the case with networks of marketing and organizational professionals engaged in new programs or service development (Babiak, K. (2007).

It is of great importance that the different organizations involved develop strong partnerships and form collaborative efforts in order to meet the needs of the Wounded Warrior Programs. By analyzing the measures involved with collaboration and partnerships, researchers are able to determine what interactions and exchanges between the organizations are indicative of IOR relations. An IOR scale may be used to rank each organization from highest to lowest with their likelihood of forming a relationship conducive to Wounded Warrior Programming. It will also allow us to observe which communities will be able to sustain AW2 programs, which are on the bubble, and which are not close at all.

Survey research involves administering questionnaires to a sample of respondents selected from a large population. In this research, CEOs from park and recreation agencies and service organizations were selected as the participants and the twenty-three communities were

selected due to having WW programs established in their community. We used the participants in those communities to make inferences about the population of interest. Unlike a census where everybody is surveyed, responses from the sample almost never perfectly match the population. Survey sampling is the art and science of “coming close” and producing “good estimates” of what people think or do (Vaske, 2008).

There have been numerous methods used to study IORs. In this study the researcher used survey methodology and a sample of individuals from a population with a view towards making statistical inferences about the population (Mellenbergh, 2008). Surveys provide important information for all kinds of research fields, e.g., marketing research, psychology, health professionals and sociology (Mellenbergh, 2008). A survey may focus on different topics such as preferences (e.g., for a presidential candidate), behavior (smoking and drinking behavior), or factual information (e.g., income), depending on its purpose.

In conclusion, the literature has revealed several levels of analysis and data collection methods relevant in IOR relations. Survey of a population was chosen for this study. There was potential for phone conversations as well. These were used to establish a survey to administer to the population and to gather data for the study.

### **Background of the Wounded Warrior Program (WW)**

It is very important to know the background and the type of people these programs will be servicing through community-based recreation opportunities. The Wounded Warrior Program (WW) had its genesis in January 2004 when an Army task force was created for the purpose of “assisting grievously wounded soldiers returning from the War on Terror” (US Army Wounded

Warrior Program, 2008). Within a short period, the Army leadership agreed that there was a need for a program that would respond to the needs of seriously-wounded soldiers who were returning from Operations Iraqi Freedom and Enduring Freedom.

The focus of the WW program is the Warrior Ethos, that is, to “never leave a fallen comrade.” The WW mission is to ensure the holistic well-being of the severely wounded, injured, and ill soldiers and their family members. Like other health professionals, the WW program utilizes a nonmedical case management model, which guides the wounded, injured, and ill soldiers from their evacuation through treatment, rehabilitation, return to active duty, or military retirement, and ultimately transition into the civilian community.

The other military services have similar programs. Specifically the U.S Marine Corps has the Wounded Warrior Regiment, the U.S Air Force has the Air Force Wounded Warrior Program, which was frequently called Palace Hart (Helping Airmen Recover Together), and the U.S Navy has Safe Harbor.

The Wounded Warrior Program falls under the Warrior Transition Command which is the lead proponent for the Warrior Care and Transition Program (WCTP). It is an Army-wide structure that provides support and services for the soldiers when they come back from combat situations. This command makes it possible for the Army to evaluate and treat the soldiers through a comprehensive, soldier-centric, process of medical care, rehabilitation, professional development, and achievement of personal goals (Warrior Transition Command, 2011). The major elements of the Warrior Transition Command include: Warrior Transition Units, Army Wounded Warrior Program, Comprehensive Transition Plan, Education and Employment, Soldier and Family Assistance Centers, and Adaptive Sports such as the U.S Paralympics.

In order to best understand what exactly the Wounded Warrior Program is all about you have to step back and look at the Army's big picture or vision. The Army is the largest and most structured organization in the United States. Each Army mission has a specific purpose and or places a soldier in a position where learning is inevitable. These elements of the Warrior Transition Command all work as a team to generate and provide the best care and service possible for our soldiers to either get them back out in the combat zones of active duty or transition them into the civilian world as proud, productive Veterans. Normally, the soldiers need at least six months of rehabilitative care and complex medical assistance once arriving at the Wounded Warrior Program.

Each soldier in the Warrior Transition Unit will have a unique, personal experience, based on their medical condition and treatment requirements. Upon entering the Unit, soldiers will in-process to the new unit through the Headquarters Company. Anytime a soldier is transferred or re-assigned to a new unit or platoon they must go through in-processing upon arrival. The in-processing includes clinical screenings and administrative actions, such as receiving orders, ID cards, and meal cards. While in-processing through the Headquarters, the soldiers complete a Comprehensive Transition Plan within 30 days of arriving at the Warrior Transition Unit. It is a six-part process for every soldier that includes an individual plan the soldier builds for him/herself with the support of the staff. By using the Transition Plan, the soldier and family can develop specific, personal goals that they want to achieve during each stage of recovery. This plan will guide the soldier's day to day activity for the rest of his time in the program.

The key to their success is in the hands of what is called the Triad of Care. These professionals work together to plan and coordinate all aspects of the soldier's medical and non-

medical care. The Primary Care Manager is usually a physician, who develops a treatment plan for the soldier. The physician also provides care to address all medical concerns and issues. The Nurse Care Manager helps the soldier regain health or improved functional capability, they work with the soldier on meeting the goals created in the Comprehensive Transition Plan, and coordinates with the primary care manager to set up appointments and assist with the treatment process (Warrior Transition Command, 2011). The Squad Leader is the first line supervisor for the soldier and the soldier's link to the Chain of Command and helps resolve any administrative issues that occur. In the Army, you are constantly being evaluated by someone who has higher authority than you; this person makes sure you are completing your task or mission, and then reports the findings to the higher command. This occurs when a soldier is on active duty and even in the recovery phase. The Triad of Care can't possibly take care of all of the wounded soldiers in the Army, they need help and they receive it from a Multidisciplinary team consisting of social workers, physical therapists, occupational therapists, Wounded Warrior Advocates, and many other professionals (Warrior Transition Command, 2011).

The soldiers that qualify for the Wounded Warrior Program are assigned as soon as possible after arriving at the Warrior Transition Unit. Each soldier is assigned an Advocate who provides personalized local support to the soldiers and their families. The Advocates are located at all military facilities who receive wounded warriors. These advocates typically stay with their soldiers even when they move into Veteran status. There is only one VA treatment facility in Mississippi, the G.V Montgomery VA Medical Center in Jackson, MS. Every state will have a VA facility where Veterans and soldiers can receive care. Most soldiers who are returning from overseas contingency operations and are admitted into the Wounded Warrior Program will be placed at Walter Reed Medical Center in Washington, DC or Brooke Army Medical Center in

Sam Houston, TX. They can be relocated to a hospital closer to their family or hometown as long as the hospital can provide the level of care necessary for treatment. Facilities are critical in order to operate a successful program and the US Army has built some remarkable hospitals and centers to care for our soldiers.

In order to be eligible for the Wounded Warrior Program, soldiers have to suffer from injuries that occurred in the line of duty after September 10, 2001, in support of the terrorist attack on New York City. These soldiers must receive or expect to receive an Army Physical Disability Evaluation rating of 30% or greater in one or more of the following specific categories or deficiencies.

The first category is blindness or loss of vision. There are different levels of vision loss. A soldier with “low vision” has a significant reduction of visual function that cannot be fully corrected to a “normal” level by glasses or contacts, medical treatment, and or surgery (Centers for Disease Control and Prevention, 2004). The most severe level of vision loss, complete blindness, leaves a soldier in the dark. Soldiers who have served during the Global War on Terrorism have suffered more eye injuries than in the last 160 years of American Wars (Zampieri, 2008). The top three contributors to combat eye injuries have been roadside bombs or improvised explosive devices (IED’s). These violent weapons account for 56.5% of the injuries. Rocket-propelled grenades (RPG’s) and mortars which are muzzle loading cannons with a short tube that throw projectiles at high angles represent the other two weapons (Zampieri, 2008). Even though soldiers wear protective eyewear at the time of the explosion, the force of the blast can remove this protection and leave the eyes exposed for damage. The explosion of these weapons shoots shrapnel that can cause a great deal of damage to a soldiers eye.

The second category is loss of a limb, which refers to the absence of any part of an extremity, such as an arm or leg, due to surgical or traumatic amputation (Amputee Coalition of America, 2008). Military amputees are typically young and healthy adults, while civilian amputees are more likely to be older adults with health problems (Amputee Coalition of America, 2008). Soldiers experience these injuries due to munitions' blast; such as from improvised explosive devices, landmines, and rocket-propelled grenades, small weapons fire, or motor vehicle accidents. Due to the type of war that we are currently fighting on Terrorism, lower-extremity amputees occur more often than upper. There have been over 1100 major or partial amputations during the Global War on Terrorism. Today's military has advanced significantly in their body armor that soldiers are trained to fight in, this allows more soldiers to live through these injuries where without the armor they couldn't survive (National Limb Loss Center, 2008). But living through the explosion means the soldier will have to deal with a loss of a limb which creates another battle the wounded warrior must face psychologically. Medical evacuations using Army helicopters have also been critical in saving soldiers from having to be amputated. Time is everything when dealing with this type of injury during combat operations.

The third category is Post Traumatic Stress Disorder. It is an anxiety disorder that develops after someone has experienced or witnessed a life-threatening traumatic event. The Army tends to place soldiers in situations where it becomes extremely hard to avoid these types of events such as in combat operations, natural disasters, terrorist's incidents, and sexual assaults (Hamblen, 2008). The post-traumatic stress disorder usually begins immediately after the experience, but it can start years later. Currently 25%, of soldiers who have served in Iraq and Afghanistan have developed PTSD (Hamblen, 2008). The Wounded Warrior Program does an outstanding job with treating this disorder through talk therapy with mental health professionals



and medications such as anti-depressants. The earlier the treatment begins, the better off the soldier will be.

The fourth category in order to be eligible for the Wounded Warrior Program is severe burns. Burn injuries during military conflicts are usually caused by an explosive device detonation. Burns are categorized and defined by four types (Medline Plus, 2008): First-degree burns damage the outer layer of skin; Second-degree burns damage the outer layer of skin and the layer underneath; Third-degree burns (full thickness) damage the deepest layer and tissues underneath; Fourth-degree burns extend through the skin to injure muscles, ligaments, tendons, and nerves

When a burn victim arrives at the Wounded Warrior program, their bodies are carefully cleaned to remove any blisters or dead skin. The doctors will cut away the dead tissue to prevent infection and cover the area with skin and try to promote new skin growth (Block, 2008). The staff will work to manage the pain, prevent infection, maintain proper nutrition, regain movement, and try to lessen the scarring if possible.

The fifth category is Paralysis or Spinal Cord injury. This is the complete loss of function or feeling, involving the motion or sensation in a part of the body (Mayo Clinic, 2007). Soldiers are exposed once again to explosions or other types of accidents that may cause damage to the brain or spinal cord. Nearly 26,000 veterans with spinal cord injuries and disorders were treated by the Wounded Warrior Program in 2006. The program staff will determine if the injury to the soldier is complete or incomplete. An incomplete injury allows a person to have some sensory or motor function below the level of the injury because the spinal cord was not totally damaged and feeling may come back at some point. A complete injury damages nerves and blocks every message coming from the brain to the body parts (US Department of Veteran

Affairs, 2007). The medical staff will develop a rehabilitation program with strengthening exercises, new styles of movement, and special equipment to help the wounded soldier.

The sixth and final category is Traumatic Brain Injuries (TBI). There are three different levels of concussions (mild, moderate, and severe) based on the severity of damage to the brain (Brain Injury Association of America, 2008). The more concussions a service member suffers from, the more likely he/she may have behavior or personality changes and lasting brain damage without even knowing it. Approximately 30% of all patients treated at Walter Reed Medical Center from 2003 to 2005 sustained a traumatic brain injury during combat (PD Health, 2008). The path to recovery is different for everyone. In order to speed up the process these things might help such as getting plenty of sleep, increasing physical activity slowly, carrying a notebook to write things down, establishing a regular daily routine, and only doing one thing at a time. Things to avoid while suffering from this injury include; avoiding dangerous activities such as combat, alcohol, caffeine, and excessive use of over the counter sleeping aids (Brain Injury Association of America, 2008). The Wounded Warrior staff work closely with the soldier and family to develop an individualized treatment plan and help them to regain the most independent level of functioning possible.

When a soldier arrives at the Warrior Transition Unit, they go through the Physical Disability Evaluation System which determines a soldier's physical fitness level for continued military service. If the soldier is found unfit to return to duty, the Warrior Transition Unit will determine the level and type of compensation due to the soldier and initiate the type of treatment and relevant procedures to separate or retire the soldier. The Physical Evaluation Board is comprised of at least two physicians. They evaluate a soldier's medical history and condition, document the extent of the injury or illness, and decide whether the soldier's medical condition is

severe enough to impede his ability to serve the Army at full capacity. The Physical Evaluation Board determines (Warrior Transition Command, 2011): Fitness or unfitness to continue military service; Eligibility for disability compensation; Disability codes and percentage rating for program like Wounded Warrior; Disposition of the Soldier's case; Whether or not the injury or illness is combat-related. This is an extremely important process for soldiers to go through because it determines their future with the Army and their career. It usually takes 90 days to complete the entire board process and during that time the soldier is working closely with the Triad of Care. The soldier must attend all scheduled appointments, take the comprehensive physical exam, and assist the Warrior Transition Unit in providing accurate information to the board. The board will determine a soldier's rating score. This score determines how much disability they will receive and what type of treatment they will be provided. As I mentioned earlier in the research, the soldier must score 30% or higher in one or more of the categories/injuries in order to be entered into the Wounded Warrior Program and receive VA disability compensation.

While soldiers are in the Wounded Warrior Program they can compete in adaptive sports in order to help them achieve their physical fitness goals. The program offers several adaptive sports options to supplement the soldier's therapy. It is often in coordination with the US Paralympics Military Program. In 2010, US Paralympics held the inaugural Warrior Games at the US Olympic Training Center in Colorado Springs, CO. Over 200 athletes from all military services, including nearly 100 Wounded Warrior Program soldiers, competed for medals in nine sports.

The program has grown since its inception. In the first year, 2004, there were 340 soldiers. In 2005, there were 909 soldiers, which grew to 1,476 in 2006. By 2007, there were

2,432 soldiers. By the end of 2008, approximately 4,000 soldiers were eligible for support provided by WW. The program grows by approximately fifty soldiers per month.

Approximately 76% of the soldiers are from the active duty component while 16% are from the National Guard component. The remaining 8% are reserve component soldiers.

The cost of the program is approximately 20 million dollars per year. The cost includes civilian pay, facilities, supplies, equipment, two annual training programs, and five contracts.

Until 2010, the funding has been through the Global War on Terror (GWOT) source. However beginning in 2011, the funding will be through the Department of Defense's Planning,

Programming, Budget, and Execution System.

Once the soldier is completed with the Wounded Warrior program, there are three options available based on their progress in the program and their medical evaluation board results. The first option is to return to active duty. The Army wants to keep their soldiers and help them continue their careers in their desired military occupational specialty but they must be able physically to handle the stress of missions. The second option is to return to active duty with a new military occupational specialty. These soldiers choose to stay active, but their injury was just too great and still affects their ability to continue their original military job. The soldier must request another Military Medical Review Board Evaluation to determine if they may be retained with the Army and be trained to work in another area or job. The third option is to separate from the Army. The soldier will coordinate with the local Department of Veterans Affairs to ensure that they receive the benefits for which they deserve. Soldiers will focus on their career and educational goals, allowing them to transition to civilian life as a proud, productive Veteran (Warrior Transition Command, 2011). There are several Federal programs designed specifically to help Wounded Warriors transitioning out of the military.

The last line in the Warrior Ethos is extremely important: “never leave a fallen comrade.” The nation can rest assured the Army will be there and do whatever it takes to help severely wounded soldiers and their families during and after the recovery process. The men and women have made great sacrifice and may need assistance for the rest of their lives. They deserve nothing but the best from the United States. The WW program provides that level of excellence.

## **CHAPTER III**

### **METHODOLOGY**

The chapter on methodology will be presented in four sections. The first section discusses criteria and characteristics of the population and subjects to be used in the study. The second section describes how the data will be collected. The third section describes the development of the research instrument. The final section concerns the procedures used in the analysis of the data.

The purpose of this study was to determine factors that predict IOR between park and recreation agencies, funded by the National Recreation and Park Association and United States Olympic Training Committee to support Wounded Warrior (WW) Programming, and community service organizations. Specifically, this study investigated factors that influence sharing manpower, money, and other resources among park and recreation directors and CEOs of community service organizations. Independent variables included military connectedness, patriotism, medical assistance available, community size, community quality of life, knowledge of WW programming, shared philosophical orientations, resource scarcity and dependence, and organizational goal congruence.

## **Participants**

Participants for the study included the population of the CEO's of 23 community-based Wounded Warrior partnerships currently involved in WW programs that completed a survey exploring IOR. The CEO's of the not-for-profit organizations in this study had the following knowledge, skills, and or abilities. The ability the CEOs to be an advocate for the staff's welfare, to listen, to be cool, tactful, and thoughtful under pressure. They also have good oral and written communication skills and the ability to network with key stakeholders. Moreover, the CEOs are responsible for fulfilling the philosophy, vision, and mission that grounds their organizational directives.

In selecting a population for this study, the following criteria were incorporated. Subjects included Directors or CEOs of the Park and Recreation Departments and local not-for-profit service organizations that partner with the United Way from twenty-three communities that currently provide Wounded Warrior Programs funded by the NRPA and USOC. Park and Recreation CEOs, or the person directly responsible for the WW programs, were chosen as participants for the study. CEOs from service agencies, groups, and United Way affiliates were chosen based on their responsibility for operationalizing agency philosophical orientation and their ability to make decisions on sharing manpower, resources and/or money.

The park and recreation agencies and UW affiliates represent the 23 communities around the United States. The communities have been exposed to WW recreation programs and services. Each park and recreation department Director or CEO was recruited to participate in the research. The CEOs of the United Ways were all contacted by phone to obtain a list of electronic mailing addresses for their partnering service organizations. Many of the United

Ways chose to forward out the consent letter and survey to their partners from their personal data system instead of providing the electronic mailing address. The others were administered the survey by electronic mail from the University of Mississippi. CEOs of local community service groups and service agencies that partner with the United Way or as an identified service organization (Lions Clubs, Rotary Clubs, Veterans of Foreign Wars, Etc.) were also surveyed.

The CEO or directors from each of the twenty-three community-based park and recreation agencies were asked to complete the survey. Additional surveys were completed by members of the park and recreation personnel that were directly involved with operating of the Wounded Warrior programs. The park and recreation CEOs provided the contact information for those additional survey respondents.

Participants were assured that their responses to questions were confidential and only made available to the researcher and the researchers committee. All participants were asked if they would like results of the study sent to them once completed.

### **Profile of the Sample**

Of the 1400 surveys that were sent to CEOs of not-for-profit service organizations and the CEOs of park and recreation directors for the twenty-three communities, 121 were “returned to sender” as result of a wrong addresses or changes of address. There were 134 “out of office replies” and/or responses to the survey as “not having anything in common with the survey”. There were 255 surveys received, indicating a total response rate of 22%. Of the 255 total surveys, 187 were completed to include response to the dependent and independent variables and included in data analysis. After examining the data and assuring that participants in the study completed sections on IOR and independent variable indicators a total of 151 usable surveys were



included in the preceding data analyses. There were a total of twenty-nine park and recreation professionals and one hundred and twenty-two service organizations used in the data set.

The demographic composite and breakout by park and recreation agency and service organization is presented in Appendix D. Of the 188 surveys included in the study 30% (n=57) were male and 70% (n=130) were female. The United Way U.S.A. site reports that 62% of United Way CEOs are female and 30% are minorities (United Way, 2012). The median age of all respondents was 50-54 years old. The majority of respondents were White/Caucasian (92%, n=158).

Respondents indicated that over half (52%, n= 95) worked with 25 or fewer full-time employees and 8 respondents (5%) indicated they worked in an organization with more than 500 employees. Organizations also used part-time employees with over half (52%, n=81) using ten or fewer. Only 3% (n=6) indicated they included over 500 part-time employees in their organizational size. Over half (52%, n= 85) of the CEOs indicated that their organizations used at least 75 volunteers. The largest numbers of respondents in a specific age group was 60-64 (18.1%), the majority of the participants, 32.5%, fell into ages 50-59. The majority (56%) of the participants were at the CEO and/or Executive Director Management level.

Community size and location were also reported with 56% located in communities under 400,000. However, there was a good dispersion among all community sizes.

The service organizations in the following communities did not have the opportunity to respond to the survey: Phoenix AZ, Austin TX, Fayetteville NC, and Washington DC. Each community response rates are presented in table 1 below.

Table 1  
*Response Rate of Communities Participating in the Study*

City	Response Rate(n)	Park & Rec (n)	Service Organizations (n)
Anchorage, AK	33% (22)	4	18
Boulder, CO	20% (8)	1	7
Eugene, OR	15% (16)	1	15
Groton, CT	56% (15)	2	13
Houston, TX	25% (17)	1	16
Las Vegas, NV	6% (27)	5	22
Reno, NV	17% (12)	1	11
Columbia, SC	24% (26)	2	24
Tampa, FL	20% (13)	1	12
Rockford, IL	25% (12)	1	11
Orlando, FL	2% (6)	1	5
Colorado Springs, CO	19% (8)	1	7
Cincinnati, OH	33% (18)	1	17
Cedar Rapids, IA	10% (2)	1	1
Wichita, KS	19% (13)	1	12
Columbus, OH	22% (17)	1	16
Maui, HI	5% (2)	1	1
Fort Collins, CO	10% (5)	0	5
Washington, DC	73% (12)	3	9

*Note:* Washington DC was used as the pilot study. Table 1 includes the Park and Recreation professionals and service organizations combined.

### **The Data Collection Method**

The data was collected using a structured survey administered using the online tool Survey Monkey. Informed consent was included in the survey on the first page. A data confidentiality statement was provided in the consent form. The respondent was given an option to withdraw from survey.

Park and Recreation agencies were contacted initially by phone and provided the purpose and importance of the study. The contact person was the Director or CEO. There were 23 park and recreation agencies that were asked to respond to the survey. The CEOs of United Way

not-for-profit organizations were also contacted by electronic mail. In order to assure high response rates the following steps were performed: message content (explained in detail the purpose and importance of this study); used only clean and updated lists (e-mail lists came from the United Way in each community; all 23 communities were willing to forward the survey out to their partners); timing and delivery of invitation to professionals; and scheduled reminders (reminders were sent a couple of days apart). Since the audience is mostly working professionals, the surveys were not sent out on Friday, Saturday, or Sunday. In addition, Mondays were avoided as well because many people have work to get started for the week and emails to catch up or clean out their in-boxes.

The WW IOR Survey was designed using questions chosen from studies previewed in the review of literature and from professionals in the fields of recreation and leisure. A pilot study was conducted using the Park and Recreation Department and not-for-profit service organizations in Fairfax, Virginia and Washington DC. The directors of the Wounded Warrior programs for Fairfax County and Fairfax City Parks and Recreation Departments were contacted by phone. The directors evaluated and critiqued the instrument. Feedback on the survey was taken into consideration and used to revise the survey. The pilot study was used to determine reliability and validity of the instrument. For the pilot, 12 respondents, or 73% that received the pilot, answered the survey. The split-halves method of reliability was used, which divides the total set of items into halves and the scores on the halves are correlated to obtain an estimate of reliability (Vaske, 2008). The halves can be considered approximations to alternative forms. Unlike the test-retest and alternative-form methods for assessing reliability that require two separate administrations with the same group of people, the split-half method can be conducted

on one occasion. The Spearman-Brown prophecy formula is a form of the split-halves reliability measure and was used to determine reliability.

Internal consistency methods can be thought of as “all possible split-halves” and therefore, are the recommended approach for estimating reliability (Vaske, 2008). Cronbach-Alpha was used to estimate internal consistency of items in the scale. Statisticians have debated about what constitutes an acceptable size for Cronbach’s alpha. By convention, an alpha of .65 to .70 is often considered “adequate” scale in parks, recreation, and human dimensions research (Vaske, 2008). For this research, .80 or above was the required cut-off for a “good scale.” The pilot test revealed the Cronbach’s Alpha was  $\alpha = .921$ .

The support of the validity depends on the effect size guidelines proposed by Vaske, Gliner, and Morgan (2002; i.e., minimal, typical, substantial). Predictive potential refers to the likelihood that one survey question can explain variation in a second variable. When the two questions are measured at the same level of specificity the predictive potential increases. When there is less measurement correspondence between the variables, the predictive potential decreases. The surveys included open-ended questions asking the subjects to describe their impressions of the instrument including comments on any additional deliberate relationships they might have in a partnership with Wounded Warriors.

Therefore, the validity and reliability of the survey instrument was established by jury review using the CEOs in Fairfax, Virginia and through reliability test, respectively. Dr. Kim Beason, Dr. Don Rockey, and Dr. Michael Dupper from the University of Mississippi in the fields of Health, Exercise Science, and Park and Recreation Management provided additional expert opinion on the construct validity of the instrument. Content validity was augmented by

assuring that the subjects chosen were leaders of their organizations and agencies and the principal representative capable of accurately responding to the survey items.

The instrument for the study is found in Appendix A. The survey includes the following sections: 1) general inventory of organization characteristics, 2) dependent variable indicators of IOR that include questions on the willingness to share manpower, resources and money to support a WW program, 3) independent variable indicators that may affect IOR, and 4) demographic and organismic variables. The survey uses the following precision measurement scale, 1=Strongly Disagree; 2=Disagree; 3= Somewhat Disagree (SWD); 4= Somewhat Agree (SWA); and 5= Agree; and 6 = Strongly Agree, for the dependent and most independent variables

### **Dependent Variables**

The dependent variable indicators are the measures of shared resources, human resources, and financial resources that may be shared in a partnership that supports WW programs. The shared resources measures, human resources measures, and financial resources measures were combined and the mean score used to form a total IOR score.

The first IOR measure shared resources, had 13 measures to place into a computed variable. The question was scored on the 6-point Likert Scale. The question “My organization can provide/\_\_\_\_\_ to help provide a Wounded Warrior Program” was provided. The following measures were chosen field equipment, indoor facilities, meeting and activity spaces, open spaces, outdoor facilities, parking spaces, recreation and leisure equipment, share information kiosks, share office spaces, share vehicles, support facilities, and technology.

The second IOR measure, human resources, had nine measures to place into a computed variable. The question was scored on the 6-point Likert Scale. The question “My organization can provide/\_\_\_\_to help provide Wounded Warrior Program” was provided. The following measures were chosen non-certified/non-licensed experts, experts (financial, programming, management, technological), advisory board members, area professionals that are certified (lawyers, doctors, teachers, CPA’s, nurses), volunteers, administrative staff, support staff, programmers, and supervisors.

The third IOR measure, financial resources, had seven measures to place into a computed variable. The question was scored on the 6-point Likert Scale. The question “My organization can provide/\_\_\_\_to help provide a Wounded Warrior Program” was provided. The following measures were chosen direct support through financial obligations, fund-raising and/or charitable events, donations, joint sponsorships, operational funding, in-kind financial support, and facility and administration costs.

The dependent variable questions all relate to shared resources, human resources, and financial resources. The questions were scored and ultimately resulted in a Total IOR score that can be used as a continuous variable measure.

### **Independent Variables**

The independent variables were the effects, causes, or predictors of IOR measured by recording UW affiliated service organizations and parks and recreation CEO responses in the specific communities selected for the study. For the basis of this study, the independent variables chosen were: military connectedness, patriotism, medical assistance, quality of life, knowledge of WW programs in the community, shared philosophical orientation, cooperation

barriers, organizational goal congruence, and community size. Like the dependent variable, the independent variables were scored on a 6-point likert Scale. The questions were scored 1=Strongly disagree, 2=Disagree, 3=Somewhat disagree (SWD), 4=Somewhat agree (SWA), 5=Agree, and 6=Strongly agree.

Military connectedness will be measured using two questions. The first question had eight measures and asked the CEOs “Is it important that my community: 1) displays its cultural diversities, 2) displays its patriotism, 3) participates in community service, 4) values time with their families, 5) celebrates the 4<sup>th</sup> of July, 6) celebrates Memorial Day, 7) supports the State National Guard, and 8) celebrates Veterans Day”. The measures were scored on the 6-point Likert Scale and placed into a computed variable for total military connectedness. The second question asked the CEOs “My community has \_\_\_\_currently within my community”. The fill in the blank choices were: 1) United Service Organization (USO), 2) Veterans of Foreign Affairs, 3) National Guard, 4) Army Base, 5) Naval Base, 6) Air Force Base, 7) Marine Base, 8) American Red Cross, 9) Veteran Home, 10) VA Office, 11) College/University with an ROTC program, 12) MWR program, 13) private military school, 14) public military school, and 15) higher education military schools. These measures were included with the 8 measures above to form one military connectedness variable.

Patriotism in this study was scored using seven measures from the World Values Survey and the ISSP National Identity Survey. The questions were scored on the 6-point Likert Scale. The questions asked the CEOs in this study their opinion on the following statements: 1) I am proud to be an American citizen, 2) I would be willing to fight for the United States of America, 3) I believe that employers should give jobs to American citizens first before immigrants, 4) I feel very close to the United States of America, 5) I would rather be a member of the United

States than any other country, 6) It is important to me to be part of the United States of America, and 7) I support my country even when it is in the wrong. The responses to those seven statements were scored and placed into a computed variable to create a total patriotism score.

Medical assistance availability is a problem in most cities especially when it comes to the treatment and rehabilitation for the injured servicemen and women. The specific medical conditions that soldiers experience on the battlefield and the type of personnel that work with the soldiers were considered when asking the CEOS opinion of their community's ability to provide them. The two questions were scored on the 6-point Likert Scale. The first statement was "My organization provides human resources, financial contributions, and other resources to programs aimed specifically for individuals who suffer from\_\_\_\_." The following medical conditions are the most frequent in combat situations: 1) TBI (traumatic brain injury), 2) loss of limbs (arms or legs), 3) Post Traumatic Stress Disorder (PTSD), 4) severe burns, 5) loss of vision or blindness, and 6) paralysis or spinal cord injury. The second question was "My community has an adequate number of\_\_\_\_to support a Wounded Warrior Program". The following medical personnel work directly with the WW program and soldiers: 1) Certified Therapeutic Recreation Specialists, 2) Physical Therapists, 3) Occupational Therapists, 4) Speech Pathologists, 5) Rehabilitation Specialists, 6) Specialty Physicians, and 7) Surgeons. The two questions combined to have 13 measures and were placed into a computed variable for total medical assistance. They were also computed as separate variables for statistical testing.

Quality of life variable was scored using two questions that combined for 15 measures. In Oswald and Blanchflower's study in 2011 on International Happiness, they addressed a person's ability to be happy by looking at crime, community livability, income, debt, and healthcare. The first question is "Our community has \_\_\_\_ that affect quality of life." The fill in



the blank choices that were scored on the 6-point Likert Scale were: 1) Minor crime rates (graffiti, vandalism, public urination), 2) Moderate crime rates (theft, domestic violence, gangs), and 3) Major crime rates (murder, rape, drugs). The second question asks “My community has\_\_\_: The fill in the blank choices were: 1) High divorce rates, 2) significant safety issues, 3) serious problems with infrastructure, 4) a small town feel, 5) a good location, 6) a diverse population, 7) adequate parks and lakes, 8) enough schools and teachers, 9) a wide variety of open spaces, 10) a variety of services available, 11) high property taxes, and 12) job opportunities. Some of these measures were reversed scored when computed into the variable for total quality of life.

Knowledge of a program within the community often can be related to how well the program recruits new participants and flourishes. All of the communities that participated in this study currently have a Wounded Warrior recreation program. The question asked to the CEOs was “In my opinion, the community I work within is aware that there is an active Wounded Warrior program being administered to U.S servicemen”. It was scored on the 6-point level of agreeableness Likert Scale.

The philosophy of community-based Wounded Warrior Programs is to get severely injured service members and veterans to benefit from community recreation, physical activity, and rehabilitation. In order to explore the organizations philosophical orientation the following question was asked to the CEOs, “I believe that my organization’s philosophy, vision, mission (PVM) is similar with that of the WW Programs”. The question responses were scored on the 6-point level of agreeableness Likert Scale.

Cooperation barriers or limitations are encountered in all types of partnerships and it is no different when working with park and recreation agencies and service organizations. There are 8 measures that were used for this study to explore barriers and limitations to potential partnerships. The question asked to the CEOs was “My organization may have difficulty working in a Wounded Warrior partnerships because of \_\_\_”. The following fill in the blank barriers or limitations were chosen for this study: 1) Timing issues when the program is offered, 2) reimbursement procedure issues, 3) logistical issues providing materials to support the program, 4) availability of my organizations facilities to support the program, 5) lack of human resources, 6) capital for program startup, 7) budget constraints that would prohibit program support, and 8) my organizational philosophy and goals are not compatible with the program. The measures were combined into a computed variable in order to create a total cooperation barriers score. The measures were scored on the 6-point level of agreeableness Likert Scale.

Organizational goal congruence was used to evaluate the similarity of organizational goals related to philosophy, vision, and mission of each agency participating in the study. The question was used by Beason (1990): “Do you know what the organizational goals of \_\_\_\_\_ are?” For this study, the CEOs were asked to answer the following question, “I believe that my organizations goals and objectives are similar to those of the WW program”. The mission and vision of community-based WW programs was included in the directions. The question was scored on the 6-point level of agreeableness Likert Scale and put into a computed variable called total organizational goal congruence.

The final independent variable is community size. The size of the cities or communities was split at 100,000 people (less than 100,000 and more than 100,000). The study explored

significant differences in IOR scores between large communities (over 100,000) and small communities (100,000 or less) that host WW programs.

### **Data Analysis**

The purpose of this study was to determine the human resources, shared resources, and financial resources as well as other factors that support partnerships between park and recreation agencies that currently provide Wounded Warrior programs and the service organizations within the host community.

IORs were determined by the amount of shared resources, human resources, and financial contributions an organization could provide in support of Wounded Warrior Programs. Statistical analyses will be conducted to determine which Service Agencies, Service Groups, and Park and Recreation Departments exhibited the greatest degree of IORs. With this information, Park and Recreation Departments interested in implementing programming for Wounded Warriors will have a rank order of service agencies and groups in their community that have high amounts of PVM congruence and IOR rating scores with supporting the Wounded Warriors. Descriptive statistical analysis and Cronbach alpha results will be used to explore the sub-objectives of the study: identifying IOR factors and validating the IOR scale.

The statistics used to investigate the null hypotheses for this study were descriptive analysis, independent t-test, bivariate correlations (Pearson  $r$ , sig. 2-tailed), multiple linear regression (MLR), and cluster analysis. The Pearson's correlation was used as a descriptive statistic similar to the mean or standard deviation and no distribution assumptions were required (Vaske, 2008). The Pearson's correlation is used to find a correlation between at least two continuous variables. The value for a Pearson's falls between 0.00 (no correlation) and 1.00

(perfect correlation). Other factors such as group size will determine if the correlation is significant. Generally, correlations above 0.80 are considered pretty high (Vaske, 2008, p. 411). Multiple linear regressions include more than one independent variable. In this research, there are nine independent variables. Multiple linear regression attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data. Every value of the independent variable  $x$  is associated with a value of the dependent variable  $y$  (Vaske, 2008).

Cluster analysis using Ward's Method may be useful to reduce the number of independent predictor variables. Cluster analysis is an exploratory data analysis tool which aims at sorting different objects into groups in a way that the degree of association between two objects is maximal if they belong to the same group and minimal otherwise. It simply discovers structures in data without explaining why they exist (Hill and Lewicki, 2007).

Statistical analysis of the dependent variable indicators and the independent variable predictors are based on the number of subjects in the study. If fewer than 30 subjects are surveyed, non-parametric statistics will be used. However, since the number of surveys received was over 30, analyses were accomplished using correlation coefficients. The statistical package Statistical Package for Social Sciences (SPSS) will be used in the analysis of data.

Several types of data were collected to determine significant relationships among variables. These included mean responses by the CEO's and Director of Operations, mean responses for the dependent and independent variables, and mean responses by the type of organizations that responded to the email survey.

For the purpose of this particular study, Multiple Linear Regression (MLR) will determine if any single or set of predictor variables may predict IOR. This type of regression is similar to logistic regression, but it is more robust because the dependent variable is not restricted to two categories. A specific example of MLR results might reveal communities with high military connectedness may also have high IOR scores and thus, more likely to build a WW program. More broadly, by performing MLR after principle components analysis may reveal combinations of predictors that when present within a community may enhance successful WW program partnerships.

There are two categories of general recommendations in terms of minimum sample size in factor analysis. One category says that the absolute number of cases (N) is important, while another says that the subject-to-variable ratio (p) is important. Arrindell and van der Ende (1985), Velicer and Fava (1998), and MacCallum, Widaman, Zhang and Hong (1999) have reviewed many of these recommendations. For this study, the Rule of 150 was used: Hutcheson and Sofroniou (1999) recommends at least 150 - 300 cases, more towards the 150 end when there are a few highly correlated variables, as would be the case when collapsing highly multicollinear variables (Garson, 2008).

## **CHAPTER IV**

### **RESULTS**

The purpose of this study was to determine the human resources, shared resources, and financial resources (IOR) as well as other factors that support partnerships between park and recreation agencies that currently provide Wounded Warrior programs and the service organizations within the host community. Findings of the research have been presented by describing the pilot study effort, by addressing the hypotheses, and sub-objectives of the research.

#### **Pilot Test**

The pilot test was conducted in Washington DC to determine the validity of the instrument and the reliability of the measures of IOR used for the study. The survey was forwarded to 15 affiliated partners of the United Way in the National Capital Area. The survey was also reviewed by the park and recreation departments in Fairfax City and Fairfax County Virginia. For the pilot,  $n=12$ , or 73%. The pilot study was used to assess validity and reliability of the instrument used for the study. Cronbach's alpha was used to estimate internal consistency of the instrument ( $\alpha = .921$ ). For this research, .80 or above was the required cut-off for a "good scale." The validity of the instrument was determined by jury.

Minor changes to content and context were made to the instrument following the pilot study. Based on results of the pilot study and advice of the jury the vernacular of questions was simplified to be better interpreted by the participant's responding to the survey and to increase the validity and reliability of the scale measures. These changes resulted in a calculated combined independent and dependent variable ( $\alpha = .441$ ). However, the alpha for the dependent variables, shared resources ( $\alpha = .916$ ), human resources ( $\alpha = .901$ ), financial resources ( $\alpha = .897$ ), and combined IOR measures were ( $\alpha = .952$ ) respectively. The independent variables were military connectedness ( $\alpha=.887$ ), patriotism ( $\alpha=.878$ ), medical assistance ( $\alpha =.915$ ), quality of life ( $\alpha= .870$ ), cooperation barriers ( $\alpha=.914$ ), and organizational goal congruence and shared PVM ( $\alpha=.949$ ). This determines that construct validity was high with no alpha level falling below ( $\alpha \leq .80$ )

### **Hypotheses of the Study**

The hypotheses were tested using Pearson r correlations and Independent t-tests analysis and the level of significance was set at  $p>.05$ . For the purpose of this study the dependent variable, IOR, was measured as the sub-measures Human Resources, Other Shared Resources, and Financial Resources. These three sub-measures were combined to form an overall IOR score. Participants chose answers from a 6-point Likert-type scale with 1= strongly disagree to 6=strongly agree.

Table 2 presents the means, standard deviations and standard error of the means for each question for each of the 13 sub-measure questions for Other Shared Resources (SR). The Overall SR score was ( $\bar{x}=2.58$ ).

Table 2  
*Other Shared Resources IOR Item Analysis*

	Mean	SD	S.E. of Mean
• Share information kiosks	3.06	1.60	.13
• Share our vehicles.	2.04	1.27	.10
• Share our office spaces.	2.47	1.35	.11
• Technology (computers, TV's, etc.)	2.54	1.48	.12
• Field equipment (turf management, lawn equipment, etc.)	1.97	1.31	.11
• Open spaces (fields, industrial park, parks, etc.)	2.36	1.61	.13
• Parking spaces and lots.	2.85	1.70	.14
• Indoor facilities (offices, meeting spaces, activity space, etc.)	3.63	1.63	.13
• Outdoor facilities (storage areas, developed recreation areas, etc.)	2.25	1.53	.12
• Meeting and activity space	4.05	1.40	.11
• Support facilities (garages, repair/maintenance) for WW programs.	1.91	1.17	.10
• Recreation and leisure equipment.	2.46	1.64	.13
• Shared Resources	2.58	1.06	.09

Table 3 presents the means, standard deviation, and standard error of the mean for each question for each of the ten sub-measure questions for Human Resources (HR) sub-measure of IOR. The Overall HR score was ( $\bar{x}$ =3.68).



Table 3  
*Human Resources IOR Item Analysis*

	Mean	SD	S.E. of Mean
• Non-certified/non-licensed experts	2.95	1.46	.13
• Experts (financial, programming, management, technological, etc)	2.73	1.31	.12
• Advisory board members	3.67	1.23	.12
• Area professionals that are certified and licensed (lawyers, doctors, teachers, CPA's, Nurses, etc)	2.59	1.33	.12
• Volunteers	3.53	1.49	.14
• Administrative staff (CEO, Director, Assistant Directors)	3.07	1.42	.12
• Support staff (Maintenance, office staff, etc.)	2.61	1.33	.11
• Programmers	2.31	1.37	.12
• Supervisors	2.60	1.36	.11
• Human Resources	3.68	1.62	.13

Table 4 presents the means, standard deviations, and standard error of the mean for each question for each of the eight sub-measures for the third measure of IOR-Financial Resources (FR). The Overall FR score was ( $\bar{x}$ =2.24).

Table 4  
*Financial Resources IOR Item Analysis*

	Mean	SD	S.E. of Mean
• Direct support through financial obligations	1.77	.94	.08
• Fund-raising and/or charitable events	2.32	1.27	.10
• Donations- tax exempted gifts	1.93	1.04	.08
• Joint sponsorship	3.02	1.46	.12
• Operational funding	1.81	.98	.08
• In-kind financial support	2.65	1.40	.11
• Facility and administration costs	2.19	1.22	.10
• Financial Resources	2.24	.94	.08

The foregoing three measure IOR scores were used as the dependent variable for all analysis involving tests of significance. The following sections will present the results of testing the null hypotheses for the study.

Hypothesis One:

The first hypothesis states that there would be no statistically significant difference in the amount of IOR between Park and Recreation Agency CEOs and the CEOs of United Way affiliates/service organizations. A 6-point Likert-type agreeableness scale was used to measure IOR. The Total IOR score for the parks and recreation directors was ( $\bar{x}$ =3.85) and the Total IOR score for the Service Agencies was ( $\bar{x}$ =2.64). The descriptive statistics for the parks and recreation departments and the service agencies are presented in the Table 5.

Table 5  
*Parks and Recreation and Service Agencies Overall IOR*

	Park and Recreation Agency (Local, Municipal, State, Federal)			Service Agency (United Way, Red Cross, Salvation Army, etc.)		
	Mean	SD	S E of Mean	Mean	SD	S E of Mean
• SR	3.88	.89	.18	2.33	.91	.08
• HR	4.62	1.49	.30	3.49	1.58	.14
• FR	3.04	.90	.18	2.09	.88	.08
• Total IOR	3.85	.86	.18	2.64	.95	.08

An independent t-test was performed to determine if there was a significant difference ( $p < .05$ ) between the IOR scores of parks and recreation departments and service agencies. The t-test results for Hypothesis 1 are presented in Table 6, the park and recreation departments and service organizations ability to share resources in order to support WW programs.

Table 6  
*Independent Samples t-test of IOR Scores Parks and Recreation and Service Agencies*

	t	df	p
• SR	7.51	33.9	.000
• HR	2.84	34.5	.002
• FR	.390	33.8	.000
• Total IOR	5.48	34.9	.000

Hypothesis Two:

The second hypothesis states that there will be no statistically significant relationships among IOR scale measures: shared resources, human resources, and financial resources. A 6-point Likert agreeableness scale was used to measure the IOR. The descriptive statistics for the measures of IOR are presented in the Table 7.

Table 7  
*Descriptive Responses for IOR*

	Mean	SD	S. E.of Mean
• Shared Resources	2.58	1.06	.09
• Human Resources	3.68	1.62	.13
• Financial Resources	2.24	.94	.08
• Total IOR	2.84	1.03	.08

In the Table 8, Pearson’s r and significance (2-tailed) was performed to determine any significant relationships among the scale measures of IOR. There were significant relationships found between the measures of IOR.

Table 8  
*Correlation Matrix Exploring Significant Relationships between IOR Measures*

		Shared Resources	Human Resources	Financial Resources	Total IOR
Shared Resources	r	1			
	P				
Human Resources	r	.506**	1		
	P	.000			
Financial Resources	r	.583**	.631**	1	
	P	.000	.000		
Total IOR	r	.790**	.894**	.839**	1
	p	.000	.000	.000	

\*\* (p<0.01)

Hypothesis Three:

The third hypothesis states that there will be no statistically significant relationship between IOR scores and military connectedness scores. A 6-point Likert-type agreeableness scale was used to measure military connectedness. There were eight measures of military connectedness and the total mean for the military connectedness measures was ( $\bar{x}$ =5.16). The

descriptive statistics for the eight measures of military connectedness are presented in the Table 9.

Table 9  
*Exploring Attitudes towards Military Connectedness*

	Mean	SD	S E of Mean
• Display its cultural diversities.	5.16	1.21	.10
• Display its patriotism	5.06	1.19	.10
• Participates in community service.	5.30	1.12	.10
• Values time with their families.	5.30	1.13	.10
• Celebrates July 4th every year.	5.17	1.20	.10
• Celebrates Memorial Day every year	5.13	1.18	.10
• Supports the National Guard.	5.06	1.34	.11
• Celebrates Veterans Day every year.	5.15	1.20	.10

There were 15 measures of military connectedness for the second question. The question was scored as 1=No and 3=Yes. The numbers of “yes” responses to the question are included in Table 9. The question was “My community has a \_\_\_currently within my community.” The descriptive statistics for the 15 measures of military connectedness are presented in Table 10.

Table 10  
*Exploring Attitudes towards Military Connectedness*

		n	N %
United Service Organization (USO).	Yes	50	36.5%
Veterans of Foreign Wars (VFW).	Yes	120	86.3%
National Guard.	Yes	118	84.9%
Army Base.	Yes	43	30.9%
Naval Base.	Yes	20	14.4%
Air Force Base.	Yes	57	41.0%
Marine Base.	Yes	11	7.9%
American Red Cross.	Yes	125	89.9%
Veteran Home.	Yes	60	43.8%
VA Office.	Yes	119	86.2%
Veterans Hospital.	Yes	76	54.7%
College/university with an ROTC program.	Yes	101	72.7%
MWR program (Morale, Welfare, Recreation).	Yes	31	22.3%
Private military school.	Yes	19	13.7%
Public military school.	Yes	11	8.0%
Higher education military schools (West Point, Citadel, VMI).	Yes	15	10.8%

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and military connectedness; the relationship is presented in Table 11. The military connectedness measure is based on the opinion of CEOs that participated. A scatter plot of the data representing Total IOR and military connectedness views is presented in the Appendix F, Figure 1 with the  $r^2=.03$ .

Table 11  
*Total IOR and Military Connectedness*

		Shared Resources	Human Resources	Financial Resources	Total IOR
Military	r	.103	.228**	.062	.174*
Connectedness	p	.228	.007	.472	.040

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

#### Hypothesis Four

The fourth hypothesis states that there will be no statistically significant relationship between IOR scores and patriotism scores. A 6-point Likert agreeableness scale was used to measure patriotism. There were seven measures of patriotism and the total mean for the patriotism measures was ( $\bar{x}$ =4.96). The descriptive statistics for the seven measures of patriotism are presented in Table 12.

Table 12  
*Exploring Attitudes towards Patriotism*

	Mean	SD	S.E.Mean
• I am proud to be an American citizen.	5.56	.77	.07
• I would be willing to fight for the United States of America.	4.81	1.39	.12
• I believe that employers should give jobs to American citizens first before immigrants.	4.16	1.50	.13
• I feel very close to the United States of America.	5.26	.94	.08
• I would rather be a member of the United States of America than any other country.	5.36	.99	.09
• It is important to me to be a part of the United States of America.	5.37	.97	.08
• I support my country even when it is in the wrong.	3.99	1.44	.13
• Total Patriotism.	4.96	.90	.08

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and Patriotism; the relationships are presented in Table 13. The patriotism measure is based on the opinion of CEOs that participated in the study and responded to the foregoing Patriotism measure. A scatter plot of the data representing Total IOR and Patriotism is presented in the Appendix F, Figure 2 with the  $r^2=.092$ .

Table 13  
*Total IOR and Patriotism Relationships*

	SR	HR	FR	Total IOR
Patriotism Views	r .244**	.289**	.227**	.303**
	p .004	.001	.007	.000
I am proud to be an American citizen.	r .129	.118	.061	.124
	p .130	.166	.476	.145
I would be willing to fight for the United States of America.	r .288**	.298**	.292**	.342**
	p .001	.000	.001	.000
I believe that employers should give jobs to American citizens first before immigrants.	r .206*	.264**	.207*	.271**
	p .018	.002	.017	.002
I feel very close to the United States of America.	r .190*	.210*	.127	.213*
	p .026	.014	.138	.012
I would rather be a member of the United States of America than any other country.	r .124	.190*	.126	.181*
	p .154	.028	.146	.037
It is important to me to be a part of the United States of America.	r .151	.223**	.122	.205*
	p .079	.009	.156	.016
I support my country even when it is in the wrong.	r .152	.184*	.236**	.221*
	p .081	.035	.006	.011

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



## Hypothesis Five

The fifth hypothesis states that there will be no statistically significant relationship in IOR scores and the availability of medical assistance within their community. A 6-point Likert agreeableness scale was used to measure the two questions addressing medical assistance. The first question addressed participant's opinion on the amount of specific medical personnel available within their community to provide care for WW soldiers. There were seven measures of medical personnel and the total mean for the medical personnel measures was ( $\bar{x}$ =2.97). The descriptive statistics for the seven measures of medical personnel are presented in the Table 14.

Table 14  
*Exploring Attitudes towards Medical Personnel*

	Mean	SD	S E of Mean
• Certified Therapeutic Recreation Specialists (CTRS) available.	2.07	2.18	.18
• Physical Therapists (PT) available.	2.32	2.23	.18
• Occupational Therapists (OT) available.	2.26	2.22	.18
• Speech Pathologists available.	2.02	2.19	.18
• Rehabilitation Specialists available.	2.06	2.21	.18
• Specialty Physicians available.	2.15	2.28	.19
• Surgeons available.	2.21	2.28	.19

The second question addressed the participant's opinion on the amount of resources their organization could provide for specific injuries or medical conditions experienced by WW soldiers. There were seven measures of medical injuries and the total mean for the medical

injuries measures was ( $\bar{x}$ =2.66). The descriptive statistics for the six measures of medical injuries are presented in the Table 15.

Table 15  
*Exploring Attitudes towards Medical Injuries or Conditions*

	Mean	SD	S E of Mean
• TBI (traumatic brain Injuries).	2.63	1.99	.16
• Loss of limbs (arms or legs).	2.57	1.92	.16
• Post-Traumatic Stress Disorder (PTSD)	3.15	2.07	.17
• Severe burns.	2.15	1.70	.14
• Loss of vision or blindness.	2.40	1.82	.15
• Paralysis or a spinal cord injury.	2.46	1.87	.15

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and medical personnel; the relationship is presented in Table 16. The medical personnel measure is based on the opinion of CEOs that participated in the study and responded to the foregoing medical personnel measure. A scatter plot of the data representing Total IOR and medical personnel views is presented in the Appendix F, Figure 3 with the  $r^2=.068$ .

Table 16  
*Total IOR and Medical Personnel Relationships*

		SR	HR	FR	Total IOR
Medical Personnel	r	.144	.242*	.269**	.261**
	p	.135	.011	.005	.006
Certified Therapeutic Recreation Specialists (CTRS)	r	.175*	.270**	.241**	.277**
	p	.032	.001	.001	.001
Physical Therapists	r	.089	.259**	.277**	.252**
	p	.278	.001	.001	.002
Occupational Therapists	r	.080	.243**	.270**	.239**
	p	.331	.003	.001	.003
Speech Pathologists	r	.100	.184*	.180*	.186*
	p	.224	.025	.028	.023
Rehabilitation Specialists.	r	.067	.260**	.229**	.230**
	p	.413	.001	.005	.005
Specialty Physicians	r	.101	.330**	.319**	.306**
	p	.218	.000	.000	.000
Surgeons	r	.104	.242**	.280**	.248**
	p	.205	.003	.001	.002

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and medical injuries; the relationship is presented in Table 17. The medical injuries measure is based on the opinion of CEOs that participated in the study and responded to the foregoing medical injuries measure. A scatter plot of the data representing Total IOR and medical injuries views is presented in the Appendix F, Figure 4 with the  $r^2=.177$ .

Table 17  
*Total IOR and Medical Injuries Relationships*

		SR	HR	FR	Total IOR
Medical Injuries	r	.217**	.451**	.333**	.420**
	p	.009	.000	.000	.000
TBI	r	.202*	.310**	.204*	.295**
	p	.013	.000	.012	.000
Loss of Limbs (Arms and Legs)	r	.193*	.423**	.282**	.375**
	p	.018	.000	.000	.000
PTSD	r	.087	.446**	.239**	.338**
	p	.290	.000	.003	.000
Severe Burns	r	.156	.361**	.303**	.336**
	p	.057	.000	.000	.000
Loss of Vision or Blindness	r	.217**	.420**	.279**	.382**
	p	.008	.000	.001	.000
Paralysis or Spinal Cord Injuries	r	.193*	.389**	.271**	.354**
	p	.018	.000	.001	.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### Hypothesis Six

The six hypothesis states there will be no statistically significant relationships in IOR scores and quality of life scores. A 6-point Likert agreeableness scale was used to measure the two questions addressing quality of life. The first question addressed the participant's opinion on crime rates in their community. There were three measures of crime rate and the total mean for the crime rate measures was ( $\bar{x}$ =2.79). The descriptive statistics for the three measures of crime rates are presented in the Table 18.

Table 18  
*Exploring Attitudes towards Community Crime Rates*

	Mean	SD	S E of Mean
• Minor crime rates (graffiti, vandalism, public urination)	2.45	1.31	.11
• Moderate crime rates (theft, domestic violence, gangs)	2.51	1.28	.11
• Serious crime rates (murder, rape, drugs)	3.17	1.46	.12

The second question addressed the participant's opinion on their community's livability. There were 12 measures of livability and the total mean for the livability measures was ( $\bar{x}$  =4.15). The descriptive statistics for the twelve measures of livability are presented in the Table 19.

Table 19  
*Exploring Attitudes towards Community Livability*

	Mean	SD	S E of Mean
• High divorce rates.	2.39	1.55	.13
• Significant safety issues.	3.37	1.56	.13
• Serious problems with our infrastructure (roadways, sewage, utilities, etc.)	3.48	1.55	.13
• A small town feel.	3.80	1.51	.12
• A good location.	4.99	1.12	.09
• A diverse population.	4.82	1.35	.11
• Adequate Parks and lakes available for daily activities.	4.84	1.25	.10
• Enough schools and teachers.	4.48	1.33	.11
• A wide variety of open spaces.	4.84	1.32	.11
• A variety of services available,	4.83	1.26	.10
• High property taxes.	2.84	1.47	.12
• Job opportunities.	3.67	1.50	.13

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and crime rates; the relationship is presented in Table 20. The crime rate measure is based on the opinion of CEOs that participated in the study and responded to the foregoing crime rate measures. A scatter plot of the data representing Total IOR and crime rate views is presented in the Appendix F, Figure 5 with the  $r^2=.006$ .

Table 20  
*Total IOR and Community Crime Rates Relationship*

		SR	HR	FR	Total IOR
• Crime Rates	r	.012	.058	.137	.076
	p	.883	.489	.102	.363
• Minor crime rates (graffiti, vandalism, public urination)	r	-.142	.003	.096	-.018
	p	.098	.976	.265	.833
• Moderate crime rates (theft, domestic violence, gangs)	r	.099	.077	.170*	.127
	p	.243	.363	.043	.133
• Serious crime rates (murder, rape, drugs)	r	-.070	.014	-.030	-.026
	p	.415	.870	.730	.765

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and livability; the relationship is presented in Table 21. The livability measure is based on the opinion of CEOs that participated in the study and responded to the foregoing livability measures. A scatter plot of the data representing Total IOR and livability views is presented in the Appendix F, Figure 6 with the  $r^2=.031$ .

Table 21  
*Total IOR and Community Livability Relationship*

		SR	HR	FR	Total IOR
• Community Livability	r	.138	.180*	.105	.176*
	p	.097	.031	.209	.034
• High divorce rates.	r	-.069	.078	-.022	.010
	p	.405	.350	.790	.900
• Significant safety issues.	r	.045	.152	.020	.102
	p	.588	.068	.820	.222
• Serious problems with our infrastructure (roadways, sewage, utilities, etc.)	r	-.063	-.055	-.140	-.093
	p	.450	.510	.089	.261
• A small town feel.	r	-.086	-.151	-.183	-.145*
	p	.300	.067	.026	.045
• A good location.	r	.014	.088	-.002	.051
	p	.864	.285	.980	.539
• A diverse population.	r	-.005	.037	.008	.020
	p	.947	.659	.924	.811
• Adequate Parks and lakes available for daily activities.	r	.059	.145	.053	.113
	p	.474	.079	.523	.172
• Enough schools and teachers.	r	.118	.173*	.082	.157
	p	.153	.036	.326	.058
• A wide variety of open spaces.	r	.136	.174*	.117	.174*
	p	.098	.034	.156	.034
• A variety of services available,	r	.081	.180*	.096	.152
	p	.329	.029	.248	.066
• High property taxes.	r	-.085	-.045	-.115	-.079
	p	.487	.589	.162	.343
• Job Opportunities	r	.154	.191*	.116	.189*
	p	.066	.022	.167	.023

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



## Hypothesis Seven

The seventh hypothesis states that there will be no statistically significant relationship in IOR scores and the knowledge of WW program scores. A 6-point Likert agreeableness scale was used to measure knowledge of WW programs. There was one measure for knowledge of WW programs and the total mean for the knowledge of WW measure was ( $\bar{x}$ =3.30). The descriptive statistics for the one measure of knowledge of WW programs is presented in the Table 22.

Table 22  
*Exploring Attitudes towards Knowledge of WW Programs*

	Mean	SD	S E of Mean
<ul style="list-style-type: none"> <li>In my opinion, the community I work within is aware that there is an active Wounded Warrior program being administered to U.S. Servicemen.</li> </ul>	3.30	1.35	.09

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and Knowledge of WW Programs; the relationship is presented in Table 23. The knowledge of WW measure is based on the opinion of CEOs that participated in the study and responded to the foregoing knowledge of WW measure. A scatter plot of the data representing Total IOR and Knowledge of WW Program views is presented in the Appendix F, Figure 7 with the  $r^2=.106$ .

Table 23

*Total IOR Measures and Knowledge of WW Programs Relationship*

		Shared Resources	Human Resources	Financial Resources	Total IOR
Do you feel that your community is aware of the WW program?	r	.353**	.240**	.248**	.326**
	p	.000	.003	.002	.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

## Hypothesis Eight

The eighth hypothesis states that there will be no statistically significant relationship in IOR scores and shared philosophical orientation scores. A 6-point Likert agreeableness scale was used to measure shared philosophical orientation. There were two measures of shared philosophical orientation and the total mean for the measures was ( $\bar{x}$ =3.97). The descriptive statistics for the two measures of shared philosophical orientation are presented in the Table 24.

Table 24

*Exploring Attitudes towards Shared Philosophical Orientation*

	Mean	SD	S E of Mean
• I believe that my organization's philosophy, vision, mission (PVM) is similar with that of the WW Program mentioned in the past.	4.01	1.32	.11
• I believe that my organizations goals and objectives are similar to those of the WW Program.	3.92	1.26	.11

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and Shared Philosophical Orientation; the relationship is presented in Table 25. The shared philosophical orientation measure was based on the opinion

of CEOs that participated in the study and responded to the foregoing shared philosophical orientation measure. A scatter plot of the data representing Total IOR and Shared Philosophical Orientation views is presented in the Appendix F, Figure 8 with the  $r^2=.265$ .

Table 25  
*Total IOR Measures and Shared Philosophical Orientation Relationships*

	SR	HR	FR	Total IOR
I believe that my organization’s philosophy, vision, mission (PVM) is similar with that of the WW Program mentioned in the past.	r .352** p .000	.503** .000	.414** .000	.509** .000
I believe that my organizations goals and objectives are similar to those of the WW Program.	r .336** p .000	.476** .000	.442** .000	.498** .000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### Hypothesis Nine

The ninth hypothesis states that there will be no statistically significant relationship in IOR scores and cooperation barriers scores. A 6-point Likert agreeableness scale was used to measure barriers and limitations. There were eight measures of barriers and the total mean for the barrier measures was ( $\bar{x}=3.65$ ). The descriptive statistics for the eight measures of barriers are presented in the Table 26.

Table 26  
*Exploring Attitudes towards Barriers and Limitations to Partnerships*

	Mean	SD	S E of Mean
• Timing Issues with when the program is offered.	3.25	1.83	.14
• Reimbursement procedure issues.	3.31	1.89	.15
• Logistical issues providing materials to support the program.	3.25	1.79	.14
• Availability of my organizations facilities to support the program.	3.28	1.81	.14
• Lack of human resource to support programs.	3.89	1.80	.14
• Capital for program startup.	4.36	1.92	.15
• Budget constraints that would prohibit program support.	4.29	1.82	.14
• My organizational philosophy and goals are not compatible with the program.	2.05	1.50	.12

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and barriers; the relationship is presented in Table 27. The barriers measure is based on the opinion of CEOs that participated in the study and responded to the foregoing barriers measure. A scatter plot of the data representing Total IOR and Barrier views is presented in the Appendix F, Figure 9 with the  $r^2=.019$ .

Table 27  
*Total IOR and Barriers to Partnership Relationships*

		SR	HR	FR	Total IOR
• Timing Issues with when the program is offered.	r	.016	-.025	.028	.001
	p	.846	.758	.773	.993
• Reimbursement procedure issues.	r	-.048	.057	.010	.016
	p	.561	.492	.906	.842
• Logistical issues providing materials to support the program.	r	-.022	-.047	-.008	-.035
	p	.786	.569	.919	.671
• Availability of my organizations facilities to support the program.	r	-.091	-.033	-.029	-.058
	p	.270	.686	.724	.483
• Lack of human resource to support programs.	r	-.053	-	-.092	-.131
	p	.519	.160*	.261	.110
• Capital for program startup.	r	.024	-.076	-.035	-.043
	p	.771	.355	.670	.605
• Budget constraints that would prohibit program support.	r	.033	-.092	-.020	-.043
	p	.691	.265	.810	.602
• My organizational philosophy and goals are not compatible with the program.	r	-.077	-.160	-.108	-.144
	p	.348	.052	.189	.080

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### Hypothesis Ten

The tenth hypothesis states that there will be no statistically significant relationships in IOR scores and organizational goal congruence scores. A 6-point Likert agreeableness scale was used to measure organizational goal congruence. There was one measure of organizational goal congruence and the total mean for the measures was ( $\bar{x}$ =3.92). The descriptive statistics for the measure of organizational goal congruence is presented in the Table 28.

Table 28  
*Exploring Attitudes towards Organizational Goal Congruence*

	Mean	SD	S E of Mean
I believe that my organizations goals and objectives are similar to those of the WW Program.	3.92	1.26	.11

A Pearson product-moment correlation coefficient was computed to assess the relationship between IOR measures and Organizational Goal Congruence; the relationship is presented in Table 29. The organizational goal congruence measure is based on the opinion of CEOs that participated in the study and responded to the foregoing measure. A scatter plot of the data representing Total IOR and organizational goal congruence views is presented in the Appendix F, Figure 10 with the  $r^2=.248$ .

Table 29  
*Total IOR and Organizational Goal Congruence Relationships*

		Shared Resources	Human Resources	Financial Resources	Total IOR
My organization has similar goals and objectives with that of the WW program.	r	.336**	.476**	.442**	.498**
	p	.000	.000	.000	.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Hypothesis Eleven

The eleventh hypothesis states that there will be no statistically significant difference in IOR scores between large communities (over 100,000) and small communities (under 100,000) that host WW programs. The descriptive statistics are presented in Table 30.

Table 30  
*Descriptive Exploring Community Size*

	Mean	SD	S E of Mean
Community Size	7.24	2.55	.19

The overall mean population of the communities was ( $\bar{x}=7.24$ ), which places the median between 300,000 and 400,000 for the average population size in the study. An independent-samples t-test was conducted to compare Total IOR scores between large communities (over 100,000) and small communities (under 100,000) that host WW programs. The results of are presented in Table 31.

Table 31  
*Independent Samples t-test of IOR scores and Community Size*

	<100,000		t	p	>100,000		t	p
	Mean	Std. Deviation			Mean	Std. Deviation		
Shared	2.61	.901	-.222	.825	2.55	0.96	-.222	.825
Human	3.00	1.19	.201	.047	3.81	.155	.201	.047
Financial	2.11	.644	.609	.543	2.25	.892	.609	.543
Total IOR	2.57	.759	1.18	.240	2.87	1.02	1.18	.240

*Note:* There were no significant relationships

### Sub-Objectives of the Study

One sub-objective of the study was to identify IOR factors that best predict partnerships between park and recreation departments and service organizations. In order to explore this sub objective, Multiple Linear Regression (MLR) and cluster analysis (Ward's method) were used. In Table 30, the model summary is presented for MLR. Based on table 32, total variance in the outcome

model was 34.7%. For this study, the 10 measures that were identified as possible influences on IOR were used as predictors of IOR. Each possible influence was hypothesized to be a useful predictor of IOR and thus; a predictor of factors for partnership formation between park and recreation departments and service agencies. In other words, higher levels of these factors were hypothesized to be associated with greater levels of IOR.

Table 32  
*Variance Represented by the Independent Variables*

Model	r	R-Square	Adjusted R Square	Std. Error of the Estimate
1	.589a	.347	.266	.85199

In Table 33, the coefficient table represents the significance of each of the independent variables ability to predict the dependent variable (Total IOR). There were 10 variables and a constant included in the coefficient table. When the analysis was performed, the ability for organizations to provide for WW medical conditions was the only variable that was significant at ( $p \leq .05$ ).



Table 33  
*Predictor Variables of IOR*

Variables	B	p
• Military Connectedness	.180	.556
• Medical Personnel	.031	.579
• Medical Injuries	.233	.000**
• Patriotism	.186	.141
• Knowledge of WW	.111	.131
• Community Size	.041	.298
• QOL Crime Rates	-.321	.254
• QOL Livability	-.953	.433
• QOL Total	1.378	.354
• Barriers or Limitations	-.057	.496
• Constant	-.135	.889

Note: The only independent variable that was significant at ( $p \leq .05$ ) was medical injuries.

Analysis of the 3-group clusters is located in Table 34. A graph displaying the 3-group solution is located in Appendix G, Figure 1. The graph gives a visual representation of the 3-group cluster.

Table 34.  
*3-group Cluster Means*

Variables	Cluster 1 (54%)	Cluster 2 (22%)	Cluster 3 (24%)
• Resources	2.56	1.99	3.37
• Human Resources	3.68	2.60	5.95
• Financial Resources	2.34	1.72	3.21
• Total IOR	2.86	2.10	4.18
• Barriers	3.89	3.43	3.11
• Patriotism	5.02	4.54	5.37
• Medical Injuries	2.49	1.27	4.77
• Medical Personnel	3.46	1.68	3.71
• Medical Assistance	3.01	1.50	4.19
• Community Livability	4.20	3.96	4.47
• Community Crime Rates	2.73	3.33	3.33
• Quality of Life	3.92	3.84	4.24
• Knowledge of WW	3.53	2.85	3.68
• Organizational Goal Congruence	3.92	2.80	5.18
• Military Connectedness	3.05	2.75	3.23

*Note:* Based on means Medical injuries and Barriers standout for further analysis

Group 1 (Average IOR) contained 54% of the participants. This group was noted for being highly patriotic and exhibited that their community had a high livability. Group 2 (Low IOR) contained 22% of the participants. This group was noted for being highly patriotic but was extremely low when providing medical assistance and IOR. Group 3 (High IOR) contained 22% of the participants. This group was noted for having the human resources available for WW partnerships, highly patriotic, and was able to provide medical assistance for the WW programs.

## Sub-Objective Two:

The second sub-objective of the study was to develop and validate scales that measure IOR between park and recreation directors and not-for-profit service organization chief executive officers (CEO).

Responses to the 28-item IOR segment of the questionnaire were subjected to a principal component analysis (PCA) using ones as prior communality estimates. Principal component analysis (PCA) is a mathematical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components. A PCA was calculated for CEOs of park and recreation agencies (n = 29), CEOs of service agencies (n = 122), and a combination of all CEOs (n = 151) responses to IOR questions. The principal axis method was used to extract the components, and this was followed by an Oblim with Kaiser Normalization (non-orthogonal) rotation.

For park and recreation CEOs six components displayed eigenvalues greater than 1, and the results of a scree plot suggested that only the first four components were meaningful. Therefore, only the first four components were retained for rotation. Combined, components 1 - 4 accounted for 93% of the total variance.

For service agency CEOs seven components displayed eigenvalues greater than 1, and the results of a scree plot suggested that only the first six components were meaningful. Therefore, only the first six components were retained for rotation. Combined, components 1 - 6 accounted for 72% of the total variance.

For combined CEOs sixteen components displayed eigenvalues greater than 1, and the results of a scree plot suggested that only the first five components were meaningful. Therefore,

only the first five components were retained for rotation. Combined, components 1 - 5 accounted for 68% of the total variance.

Questionnaire items and corresponding factor loadings are presented in Appendix H Tables 1, 2, and 3. In interpreting the rotated factor pattern for the combined CEO PCA, an item was said to load on a given component if the factor loading was .40 or greater for that component. Using these criteria, eight items were found to load on the first component, which was subsequently labeled the sponsorship, donation and cost partners (SDCP) and accounted for 46% of the variance. Eight items loaded on the second component, which were subsequently labeled recreational facility and equipment partners (RFEP) which accounted for 10% of the variance. Four items were found to load on the third component and were labeled indoor facility partners (IFP) which accounted for 7% of the total variance. Six items were found to load on the fourth component, which was subsequently labeled program operation partners (POP) and accounted for 6% of the total variance. The fifth and last component loaded with three items, which was labeled the specialized assistance and credentialed partner (SACP) component which accounted for 5% of the variance. The eight value tables, scree plots of eigenvalues and rotated factor pattern tables are found in Appendix H.

In order to initially validate the scales, Cronbach's Alpha was performed on each of the questions used to measure the overall dependent variable (IOR) and sub measures of IOR shared resources, human resources, and financial resources.

The first dependent variable sub measure of IOR was shared resources. There were twelve questions that measured participant's ability to contribute shared resources within a WW partnership. Questions included participant's agreement level with their ability to share field equipment, indoor facilities, meeting spaces, open spaces, outdoor facilities, parking spaces and

lots, recreation and leisure equipment, share information kiosks, share office spaces, share vehicles, support facilities, and technology. Of those responding to the survey, 57.4% (n=140) completed the questions measuring shared resources IOR; results indicate a high scale reliability score ( $\alpha = .916$ ).

The first dependent variable sub measure of IOR was human resources. There were nine questions that measured participant's ability to contribute human resources within a WW partnership. Questions included participant's agreement level with their ability to share non-certified/non-licensed experts, experts (financial, programming, management, technological), advisory board members, area professionals that are certified and licensed (lawyers, doctors, teachers, CPA's, Nurses), volunteers, administrative staff, support staff, programmers, and supervisors. Of those responding to the survey, 32% (n=78) completed the questions measuring human resources IOR; results indicate a high scale reliability score ( $\alpha = .901$ ).

The third dependent variable sub measure of IOR was financial resources. There were seven questions that measured participant's ability to contribute financial resources within a WW partnership. Questions included participant's agreement level with their ability to share direct support through financial obligations, fund-raising, donations, joint sponsorships, operational funding, in- financial support, and facility/administration costs. Of those responding to the survey, 60.2% (n=147) completed the questions measuring financial resources IOR; results indicate a high scale reliability score ( $\alpha = .897$ ).

Resources, human resources, and financial resources were combined to have a total IOR score representative of the population. The total IOR n=72, or 29.5% with ( $\alpha = .952$ ). There were twenty-eight measures included in the total IOR Cronbach's score.

The study was validated by using the pilot test conducted in Washington DC. Content validity was represented; the pilot test was examined by an external panel of experts. It was also reviewed by faculty members at the University of Mississippi in the Health, Exercise Science, and Recreation Management Department. Findings of this study have been presented that describe the profile of the sample and address the hypotheses and sub-objectives of the research.

## **CHAPTER V**

### **CONCLUSIONS, DISCUSSIONS, RECOMMENDATIONS**

The purpose of this study was to determine the human resources, shared resources, and financial resources as well as other factors that support partnerships between park and recreation agencies that currently provide Wounded Warrior programs and the service organizations within the host community. One sub-objective of the study was to identify IOR factors that best predict partnerships between parks and recreation departments and local not-for-profit organizations. The factors chosen for this study were patriotism, military connectedness, medical assistance availability, community size, knowledge of WW programs, shared philosophical orientations, organizational goal congruence, and quality of life. Another sub-objective of the study was to develop and validate a scale that will measure IOR between park and recreation directors and not-for-profit service organizations CEOs. Data was collected and analyzed to determine whether to reject or fail to reject the null hypotheses and to discover significant relationships between dependent and independent variables. The intent of this chapter is to present a discussion of this data with respect to the hypotheses and sub-objectives of the study. Recommendations for future research will conclude this chapter.

### Hypothesis One:

Hypothesis One ( $H_o^1$ ) posited that there will be no significant differences among IOR scores of Park and Recreation agencies and United Way service organizations. An independent samples t-test was computed to assess significant differences between the amount of IOR exhibited by the CEOs of park and recreation agencies and the CEOs of service organizations that existed within the communities studied. Significant differences between the park and recreation agencies and service organizations was determined in all measures of IOR (Shared Resources ( $p=.000$ ), Human Resources ( $p=.002$ ), Financial Resources ( $p=.000$ ), and Total IOR ( $p=.000$ ). For  $H_o^1$ , results support rejecting the null hypothesis.

### Hypothesis Two:

Hypothesis Two ( $H_o^2$ ) posited that there will be no significant relationships among the IOR scale measures: shared resources, human resources, and financial contributions. A Pearson product-moment correlation coefficient was computed to assess the relationships between the three IOR scale measures. There were significant relationships between the three IOR measures ( $p<.05$ ). There was a strong positive overall correlation between the three measures that formed Total IOR, (Shared resources  $r = .790$ ,  $n = 150$ ,  $p = .000$ ), (Human Resources  $r=.894$ ,  $n=150$ ,  $p=.000$ ), and (Financial Resources  $r=.839$ ,  $n=150$ ,  $p=.000$ ). There were significant ( $p<.01$ ) positive correlations among all IOR sub measures. The two variables, IOR and Shared Resources, were strongly correlated,  $r(n) = .790(150)$ ,  $p < .01$ . The two variables, IOR and Human Resources, were strongly correlated,  $r(n) = .894(150)$ ,  $p < .01$ . The two variables, IOR and Financial Resources, were strongly correlated,  $r(n) = .839(150)$ ,  $p < .01$ . For  $H_o^2$ , results support rejecting the null hypothesis.



### Hypothesis Three:

Hypothesis Three ( $H_0^3$ ) posited that there will be no significant relationships between IOR scores and military connectedness scores. A Pearson product-moment correlation coefficient was computed to assess the relationships between the amount of IOR exhibited and the military connectedness that existed within the communities studied. Analyses indicated that there was a significant relationship between the dependent and independent variables ( $r = .174$ ,  $n = 138$ ,  $p = .040$ ). There were significant ( $p < .05$ ) positive correlations for the IOR sub measures except “shared resources”, ( $r = .103$ ,  $n = 138$  and  $p = .228$ ) and “financial resources”, ( $r = .062$ ,  $n = 138$ , and  $p = .472$ ). A scatterplot summarizes the results (Appendix F, Figure 1). The two variables, IOR and Military Connectedness, were correlated,  $r(138) = .174$ ,  $p < .05$ . There was a significant positive relationship ( $r = .174$ ,  $p = .040$ ) between IOR and military connectedness. For  $H_0^3$ , results support rejecting the null hypothesis.

### Hypothesis Four:

Hypothesis Four ( $H_0^4$ ) posited that there will be no significant relationships between IOR scores and patriotism scores. A Pearson product-moment correlation coefficient was computed to assess the relationship between the amount of IOR exhibited and the patriotism that existed within the communities studied. There was a significant positive correlation, ( $r = .303$ ,  $n = 138$ ,  $p = .000$ ). There were significant ( $p < .01$ ) positive correlations for all IOR sub measures. A scatterplot summarizes the results (Appendix F, Figure 2), The two variables, Total IOR and Patriotism, were correlated,  $r(138) = .303$ ,  $p < .01$ . There was a moderate positive linear correlation between the two variables. For  $H_0^4$ , results support rejecting the null hypothesis.

#### Hypothesis Five:

Hypothesis Five ( $H_0^5$ ) posited that there will be no significant relationships between IOR scores and medical assistance scores. A Pearson product-moment correlation coefficient was computed to assess the relationship between the amount of IOR exhibited and the amount of available personnel that existed within the communities studied and their organizations abilities to provide resources for specific injuries suffered by the WW. Analyses indicated that there was a significant positive overall correlation,  $r = .460$ ,  $n = 148$ ,  $p = .000$ . There were significant ( $p < .01$ ) positive correlations for all IOR sub measures. A scatterplot summarizes the results (Appendix F, Figure 3 and 4), The two variables, IOR and Medical Assistance, were correlated,  $r(148) = .460$ ,  $p < .01$ . For ( $H_0^5$ ), results support rejecting the null hypothesis.

#### Hypothesis Six:

Hypothesis Six ( $H_0^6$ ) posited there will be no significant relationships between IOR scores and quality of life scores. A Pearson product-moment correlation coefficient was computed to assess the relationship between the amount of IOR exhibited and the quality of life (crime rates and livability) that existed within the communities studied. Analyses indicated that there was a positive correlation,  $r = .166$ ,  $n = 144$ ,  $p = .046$ . There was one significant ( $p < .05$ ) positive correlations between quality of life and the IOR sub measures “Human Resources”, ( $r = .168$ ,  $n = 144$ ,  $p = .043$ ). A scatterplot summarizes the results (Appendix F, Figure 5 and 6). The correlation revealed a positive correlation similar to that of military connectedness. For ( $H_0^6$ ), we reject the null hypothesis.

#### Hypothesis Seven:

Hypothesis Seven ( $H_o^7$ ) posited that there will be no significant relationships between IOR scores and Knowledge of WW Programs. A Pearson product-moment correlation coefficient was computed to assess the relationship between Total IOR exhibited and the amount of knowledge about WW programs existing within the communities studied. Analyses indicated that there was a significant positive relationship between the dependent and independent variables, ( $r = .326$ ,  $n = 144$ ,  $p = .000$ ). There were significant ( $p < .05$ ) positive correlations between Knowledge of WW programs and all IOR sub measures. A scatterplot summarizes the results (Appendix F, Figure 7). For ( $H_o^7$ ), results support rejecting the null hypothesis

#### Hypothesis Eight:

Hypothesis Eight ( $H_o^8$ ) posited that there will be no significant relationships between IOR scores and Shared Philosophical Orientation scores. A Pearson product-moment correlation coefficient was computed to assess the relationship between the Total IOR exhibited and the amount of shared philosophical orientation that existed within the communities studied. Analyses indicated that there was a significant positive relationship between the two variable measures, ( $r = .514$ ,  $n = 147$ ,  $p = .000$ ). There were significant ( $p < .05$ ) positive correlations for the all IOR sub measures. A scatterplot summarizes the results in Appendix F, Figure 8. For ( $H_o^8$ ), results support rejecting the null hypothesis.

#### Hypothesis Nine:

Hypothesis Nine ( $H_o^9$ ) posited that there will be no significant relationships between IOR scores and cooperation barriers to forming WW partnerships. A Pearson product-moment correlation coefficient was computed to assess the relationship between the Total IOR exhibited

and the amount of cooperation barriers that existed within the communities studied. Analyses indicated that there was not a significant relationship between the dependent and independent variables with a negative overall correlation between the two overall variable measures, ( $r = -.137$ ,  $n = 143$ ,  $p = .101$ ). There was a significant negative correlation for the IOR sub measure “Human Resources”,  $r = -.164$ ,  $n=143$ ,  $p=.049$ . A scatterplot summarizes the results in Appendix F, Figure 9). For ( $H_o^9$ ), results suggest a failure to reject the null hypothesis; there was no significant relationship between overall IOR and barriers to forming WW partnerships.

Hypothesis Ten:

Hypothesis Ten ( $H_o^{10}$ ) posited that there will be no significant relationships between IOR scores and Organizational Goal Congruence scores. A Pearson product-moment correlation coefficient was computed to assess the relationship between the amount of IOR exhibited and the amount of organizational goal congruence that existed within the communities studied. Analyses indicated that there was a positive overall correlation between the two variable measures, ( $r = .498$ ,  $n = 142$ ,  $p = .000$ ). There were significant ( $p < .05$ ) positive correlations for all IOR sub measures. A scatterplot summarizes the results in Appendix F, Figure 10. For ( $H_o^{10}$ ), results support rejecting the null hypothesis.

Hypothesis Eleven:

Hypothesis Eleven ( $H_o^{11}$ ) posited that there will be no significant difference in IOR scores between large communities (over 100,000) and small communities (under 100,000) that host WW programs. Analyses indicated that there was not a significant difference between the two groups ( $p < .05$ ). An independent samples t-test was computed to assess significant differences between the populations exhibited within the communities studied. There were no

significant differences found in IOR scores ( $p < .05$ ). Significant difference between large communities and small communities did not exist. An ANOVA was performed as well as splitting the population into three groups instead of two. There were still no significant differences between the groups. For  $H_0^{11}$ , results support failing to reject the null hypothesis.

#### Sub-Objective One:

Multiple Linear Regression (MLR) was performed to determine if any independent variables significantly predicted IOR. There was one independent variable that significantly predicted IOR; medical injuries scores, ( $B = .233$ ,  $t(225) = 3.91$ ,  $p < .001$ ), the abilities to assist WW with their medical injuries also explained a significant proportion of variance in IOR scores,  $R^2 = .347$ ,  $(150) F = 4.30$ ,  $p < .001$ .

#### Sub-Objective Two:

The second sub-objective of the study was to develop and validate scales that measure IOR between park and recreation directors and not-for-profit service organization chief executive officers (CEO). A PCA was calculated for CEOs of park and recreation agencies ( $n = 29$ ), CEOs of service agencies ( $n = 122$ ), and a combination of all CEOs ( $n = 151$ ). Eight items were found to load on the first component, which was subsequently labeled the sponsorship, donation and cost partners (SDCP) and accounted for 46% of the variance. Eight items loaded on the second component which was subsequently labeled recreational facility and equipment partners (RFEP) which accounted for 10% of the variance. Four items were found to load on the third component and were labeled indoor facility partners (IFP) which accounted for 7% of the total variance. Six items were found to load on the fourth component, which was subsequently labeled program operation partners (POP) and accounted for 6% of the total variance. The fifth

and last component loaded with three items, which was labeled the specialized assistance and credentialed partner (SACP) component which accounted for 5% of the variance.

This research used three measures of IOR (shared resources, human resources, and financial resources). For future research, the five new components of IOR discovered (SDCP, RFEP, IFP, POP, and SACP) may be used to continue to explore IOR between parks and recreation agencies and service organizations.

## **Discussion**

A discussion of the conclusions found in this study will be explored in this section. The discussion is addressed in the following order; 1) Hypotheses 2) Sub-Objective One 3) Sub-Objective Two.

### **Hypothesis One:**

Hypothesis One ( $H_01$ ) stated that there will no significant differences between IOR scores of park and recreation agencies and United Way service organizations. The hypothesis was rejected. The significant differences indicated park and recreation CEOs are more willing to share resources, manpower and money than the local service organizations. Results suggest that Park and recreation departments have greater ability to provide manpower, money, and other resources in support of WW programming than the local service organizations.

This study was suggested by the NRPA. The 19 communities represented in this study all had active WW programs supported by the park and recreation departments within the community. The results of testing Hypothesis One are not surprising but do establish that the CEOs of park and recreation departments would be logical leaders for forming WW partnerships.

Ultimately, Park and recreation departments are mandated to share their facilities to provide programs such as WW but are not limited to just one population; they are in business to serve and provide recreation opportunities for the entire community. Therefore, it is logical to assume park and recreation CEOs would have a greater ability to support WW programs within their communities than the service organization partners of United Ways. Park and Recreation departments' mandate; to provide quality programs at affordable prices for all constituents, strongly suggests they would be more likely to support recreation as part of effective WW programs. Prior to this study the unknown entity was the level of agreeableness that service agencies within the community had toward forming partnerships. While some service organizations may score high IOR they are not higher than park and recreation CEOs. This result will be considered in the remaining discussions in this chapter.

Hypothesis Two:

Hypothesis Two ( $H_02$ ) stated that there would be no significant relationships among the IOR scale measures: shared resources, human resources, and financial contributions. The hypothesis was rejected. There were significant relationships indicating that all three IOR scale measures were strongly correlated. Obviously, to build viable and lasting partnerships based on the knowledge gained from investigating the IOR measures chosen for this study one would first want to see a strong correlation among the IOR measures. The measures were correlated; however, human resource measures were the strongest ( $M = 3.68$ ,  $SD = 1.62$ ) suggesting that this measure of IOR is most important in forming a WW partnership. This makes some sense as organizations, in today's unpredictable and turbulent economy, would not be as likely to share financial resources and hesitant to offer their agency resources to others. They may share meeting space or parking lots but if items that are costly were lost or broken, they would be hard

pressed to replace them. But, they do have volunteers and professionals that could assist in offering WW programs. Park and recreation departments can look for service organization in their community where volunteering is a main goal or objective. Many service clubs may love to get involved; their members are veterans and may be potential participants of the WW programs as well.

### Hypothesis Three:

Hypothesis Three ( $H_03$ ) stated that there will be no significant relationships between IOR scores and military connectedness scores. The hypothesis was rejected. There were significant a correlation indicating that the more military services and support present in the community the more likely the community is to provide IOR in support of WW programming. Presence is strong, and supported by related service agencies that include the Veterans of Foreign Wars (VFW), National Guard Reserves, Armed Forces Recruiting Centers, and active duty bases within a community. Wounded Warriors are likely to live in these communities as well.

Therefore, results suggest that communities that are known as having a strong military presence have potential for building future partnerships in the community to support WW programming. Park and recreation directors should partner with service agencies that provide assistance and support to military based organizations to not only find wounded service men and women but to gain resources and funding to support recreation programming for these individuals. Moreover, NRPA's, Shelley O'Brien, stated that "park and recreation directors have struggled with finding soldiers to participate in the programming that is being provided and it is difficult to locate them once out of the armed services". Military based organizations are a great place to start in order to begin seeking participants for the programs.



#### Hypothesis Four:

Hypothesis Four ( $H_04$ ) stated that there will be no significant relationships between IOR scores and patriotism scores. The hypothesis was rejected. There were significant relationships suggesting that the more patriotism present in a community, the more likely the community is to provide IOR in support of WW programming. Results also support the premise that communities that exhibit patriotism also have high IOR. The study also suggests that patriotism was higher in the park and recreation CEOs compared to the service organization CEO. The only patriotism measure that was not significantly related to IOR was “I am proud to be an American citizen”. This was due to at least three of the participants responding to the survey that were not American citizens.

The majority of the participants viewed themselves as highly patriotic based on the means in the descriptive Table 8. Therefore, communities that value patriotism have greater potential for future IOR partnerships in support of WW programming. Patriotism is manifested in many ways, parades, flag raising, reciting the pledge of allegiance in schools and through organizations that count patriotism as one of their core beliefs. Park and recreation directors and CEOs may consider yearly events such as the 4th of July parades, Memorial Day, Veterans Day, and September 11 Memorial days as excellent times to offer WW programs that result from a coordinated partnership. These events are also opportunities to recruit and promote WW programming. Veterans, soldiers, and families are also present at these types of events and may encourage WWs to become actively involved in the WW recreation programs within the community.

From the review of literature, the study “Patriotism in Your Portfolio” by Shive and Morse was used to measure patriotism and its effect on the way people from around the world

choose to make their financial investments. The results from their study revealed that patriotism did affect the way investors choose to place their money in either domestic or foreign stocks. This study revealed that patriotism had significant relationships with IOR and forming WW partnerships.

Hypothesis Five:

Hypothesis Five (H<sub>05</sub>) stated that there would be no significant relationship between IOR and Medical Assistance scores. The hypothesis was rejected. There were significant correlations indicating that the more medical assistance that is available within a community, the more likely the community will be to support WW programming. Communities that exhibit strong abilities to provide IOR for specific medical conditions and also have the medical personnel available to help rehabilitate wounded soldiers are communities where IOR is highly correlated. Medical personnel such as Physical Therapists, Occupational Therapists and Certified Therapeutic Recreation Specialist (CTRS) may work with these WWs and could use facilities, programs, and professionals within by parks and recreation departments to build WW partnerships. Based on the results and demonstrated within Table 15, the ability to treat the various maladies associated with wounded service men and women was the strongest predictor for forming WW partnerships. Any partnership built to support WW programs should seek medical personnel within the community to help directly treat and support WWs. Moreover, recreation and service agencies that currently employ CTRS professionals may be especially likely to form partnerships.

The second measure associated with medical professionals centered on the ability to provide for TBI, PTSD, Loss of Vision or Blindness, Paralysis or Spinal Cord injuries, and

Severe Burns; which were all significantly related with higher IOR. Therefore, communities that have medical personnel available or with strong abilities to treat the medical conditions experienced by WW are good candidates for a WW partnership.

From the review of literature, an example of cooperation dealing with the ability to treat medical injuries and conditions specific to WW soldiers was represented by the U.S Army's Therapeutic Therapy Aquatic Program. The results of the program have revealed unbelievable results especially when dealing with the reduction of pain that soldiers experience from the beginning to the end of the program (Wykle, 2011). This study revealed that the answer for providing quality recreational experiences for this population may come from future partnerships with organizations that provide medical care.

Hypothesis Six:

Hypothesis Six ( $H_06$ ) stated that there would be no significant relationship between IOR and quality of life scores. The hypothesis was partially rejected. There were significant relationships indicating that communities which have a higher livability than others, will be more likely to exhibit a higher IOR and thus opportunity to form a WW partnership. Community crime rates were not significantly correlated with higher IOR. This may indicate that communities with higher crime rates would not prohibit WW partnership formation. However, community livability was significantly correlated with IOR; three measures of livability were used for this study.

First, in order for a WW partnership to occur, factors that increase QOL such as job opportunity and open spaces may need to be present within the community. Logically, if communities had higher QOL then WWs would be more likely to live there.

Second, results suggest that IOR would be higher in communities with the livability measure; small town feel. Basically, communities with high measures of this livability score may be more conducive to forming WW partnerships between park and recreation departments and service agencies. It is important to note that small town feel does not necessarily relate to the actual size of the community, rather the effect of feeling within a close-knit, congenial, and friendly community that offers support and services among those living in the community. Moreover, the park and recreation department and services agencies within a small town feel community may be more willing to support recreation programming as they are more inclined to have a close-knit network of volunteers and staff, know more people within the community that may provide support, rely on sharing resources more often and be willing to pool financial resources or develop funding sources.

The third livability measure highly correlated with higher IOR scores was the availability of open spaces. Results suggest that communities with available open spaces may encourage WW partnerships. Open spaces can be used for large special events but also support the ability for WWs to enjoy nature and relaxing outside. Open spaces may be a catalyst to form partnerships between park and recreation agencies and service agencies. WW programs that occur outside in city parks, national forests, open prairie and along beaches and lakes would be good partnership opportunities that link local, state, and federal governmental recreation providers to related service agencies (The Nature Conservancy, Sierra Club, Autobahn Society, etc.).

Finally, communities with a high livability index provide higher levels of IOR and thus, partnership formation opportunities. Quality of Life, open spaces, and small town feel are all

qualities that describe the best communities in the country. It is reasonable to assume those communities with these positive livability indicators would also have good medical care, quality recreation departments, and active service agencies; all needed for WW partnerships.

Hypothesis Seven:

Hypothesis Seven ( $H_{07}$ ) stated that there would be no significant relationship between IOR and Knowledge of WW program scores. The hypothesis was rejected. There were significant correlations indicating that when the community is aware that a particular program is present, the more familiar they become, and more likely they will be to support it. Communities that exhibit the knowledge that the WW program exists also are communities where IOR is high. This study only used one measure for this independent variable. There may have been a lack of precision. However, communities that are familiar with the WW program and acknowledge its existence may support future WW partnerships.

From the review of literature, it is hard to get soldiers to believe in the WW programs and keep them coming back to participate. In Fairfax, VA a mentoring program was established between local veterans from the American Legion and Fairfax County employees. In order for the mentoring program to be created, the community had to become aware of the WW programs need (O'Brien, 2010). This study revealed that community knowledge of a program will lead to potential new partnerships.

In order to increase community awareness, it is important for the recreation departments to promote and have a visual presence in the community. When recreation departments advertise and promote their WW programs the knowledge of WW programs will increase. With an

increase in knowledge of WW programs in the community by service agency CEOs one would believe that the opportunities for WW partnership formation would also increase.

Hypothesis Eight:

Hypothesis Eight (H<sub>08</sub>) stated that there would be no significant relationship between IOR and Shared Philosophical Orientation scores. The hypothesis was rejected. There were significant relationships indicating that when organizations share similar philosophy, vision, and mission (PVM) statements the more likely IOR will occur. This study only used two measures for this independent variable; therefore there may have been a lack of precision. For future research more measures of perceived PVM are recommended.

Organizations that exhibit shared philosophical orientation similar to the WW program are also communities where IOR is high. From the review of literature, in order for partnerships to occur a need for trust and cooperation have to be initiated between the involved parties (Dent & Krefft, 2004). A strong way for trust and cooperation to be built is through shared and/or similar philosophical orientations. Organizations with “like” PVM’s will be more likely to succeed in partnership endeavors. Moreover, organizations that share similar PVM’s with that of the WW would be a logical part of future WW partnerships. Future research should add measures of PVM after reviewing service organizations PVM through performing “word clouds”, a form of data meta-analysis, before the survey process begins. This can be done by going and obtaining PVM from potential member sites online. This will help allow a better understanding of how to match park and recreation department with service organizations and thus, increase the likelihood of WW partnerships being formed. These suggestions support past research, in order for inter-organizational relations to occur each organization must meet their

organizational goals in Chapter II and the partnerships must exist within the bounds of their organizational philosophy, vision, and mission (PVM) (Parent & Harvey, 2009).

Hypothesis Nine:

Hypothesis Nine ( $H_09$ ) stated that there would be no significant relationship between IOR and cooperation barrier scores. The hypothesis was accepted. Organizations that exhibited higher cooperation barrier scores were within communities where IOR was lower.

Therefore, organizations that are known as not having barriers or limitations will have the greater opportunity to form WW partnerships. The perceived cooperation barriers revealed in this study included organization ability to provide capital for starting a WW program as well as budget constraints that would prohibit WW program support. The lack of a consistent US economy may have influenced the way the CEOs of the service organizations and park and recreation departments answered this section of the survey. Another perceived barrier to cooperation was the lack of human resources to support WW programs. Human resources were the most valuable measure of IOR between service organizations and park and recreation departments. The answer may be found in organizations that can provide human resources to support the WW programs. Volunteers are critical for future WW partnerships to exist. They help reduce the financial burden that park and recreation departments face when trying to start new WW programs.

#### Hypothesis Ten:

Hypothesis Ten ( $H_{010}$ ) stated that there would be no significant relationship between IOR and Organizational Goal Congruence scores. The hypothesis was rejected. There were significant differences indicating that organizations that share similar goals and objectives are more likely to have high IOR. This study only used two measures for this independent variable; therefore there may have been a lack of precision.

When organizations goals and objectives are similar, WW partnerships are more likely to occur. From the review of literature, organizations that share like goals and objectives are able to form strong partnerships through collaboration (Dent and Krefft, 2004). It is important that any future partnership that may be formed to support WW programs includes the most important goal and objective for each partner involved. In order for similar goals to exist between two partners, both sides must trust the one another (Dent and Krefft, 2004). Moreover, to establish similar goals with potential partners it is critical to seek organizations that have an invested interest with the type of program that is being created.

#### Hypothesis Eleven:

The eleventh hypothesis states that there will be no significant difference in IOR scores between large communities (over 100,000) and small communities (under 100,000) that host WW programs. Based on the results from the independent samples t-test, the null hypothesis was accepted; there were no significant differences in IOR scores between large communities (over 100,000) and small communities (under 100,000) that host WW programs. Due to these findings, population and community size are not significantly related to higher IOR. But in the Multiple Linear Regression (MLR) models community size did predict higher IOR. The results



of the t-test can be attributed to the study being limited in scope. Only 26 participants stated that their population was under 100,000 compared to 157 stating that their population was over 100,000. The results of this study have determined that population does not affect IOR but it did reveal that having a small town feel was very important in forming WW partnerships. As discussed previously, community size is different than having a small town feel. The results of the MLR are logical in that the larger the community population, the more opportunity for partnerships to occur.

#### Sub-Objective One:

The first sub-objective of the study was to identify IOR factors that best predict future partnerships between park and recreation departments and service organizations. MLR determined that one or more independent variables accounted for 34.7% of the variance represented in the data set. There were ten factors placed into the regression. ANOVA revealed that the factors or independent variables used for this research were statistically significant for predicting IOR. This may indicate that the scales used to measure the independent variables posited for this research was better than average at predicting IOR. The coefficient Table 33 illuminates the significance of each of the independent variable factors predictive quality on the dependent variable (IOR). The only factor that significantly predicted ( $p \leq 0.05$ ) that IOR would occur was the ability to care for medical injuries or conditions that WW soldiers experience. This result is supported by earlier findings that medical personnel able to treat medical conditions within a community were most important to forming WW partnerships between park and recreation agencies and service agencies. Using the foregoing conclusion and the predictive ability of high IOR and treatment of medical conditions it is concluded that this is the most important finding of this study.

Further MLR showed community suggested that community size was most important. The larger the community is the more opportunities for IOR to occur especially with the ability to find future partnerships within the specialty medical fields, specifically therapeutic recreational specialists and physical therapists. Park and recreation directors should seek out service agencies that employ, support, or partner with medical personnel that can assist in programming recreation for WW programs. Moreover, the partnerships that have formed may become stronger if they add partners such as rehabilitation clinics, therapy providers, hospital outpatient programs, and agencies that train and update these professionals. This may include universities and privately owned businesses that feature therapy education and/or practice. From the review of literature, Penn State University is currently leading the way in providing therapy education for recreation professional's nationwide working for the Morale, Welfare, and Recreation on active duty army bases.

Using a Cluster analysis (Wards Method) participants were placed into groups to further explore the findings. A three-group cluster emerged that appears to best segment the park and recreation and service agencies into identifiable groups with similar qualities.

Group 1, or Medium IOR was the largest group represented by the three cluster solution, their strongest characteristics of IOR indicate an extremely patriotic ( $\bar{x}$ =5.02) belief system and with communities that exhibit relatively high livability ( $\bar{x}$ =4.47). The medium IOR group had consistently higher IOR than those of group 2 discussed below but lower overall IOR than group 3. The main difference between this group and the strong IOR group was the ability to provide the medical assistance support.

Group 2, or the Low IOR group, characteristic scores were low in just about every characteristic. The only two characteristics in this group that scored high was patriotism ( $\bar{x}$ =4.54) and community livability ( $\bar{x}$ =3.96). They were extremely low in all other factors especially in medical injuries ( $\bar{x}$ =1.27), medical assistance ( $\bar{x}$ =1.50), and financial resources ( $\bar{x}$ =1.72). Further analysis indicates the low IOR group were primarily the service organizations that have little in common with the WW program or IOR to support working with the WW population. This study surveyed service organizations that were affiliated with the United Ways in each host city. Many of these organizations did not have shared goals with the WW program. This study was able to identify service organizations that are least compatible with the WW and hopefully this will help WW partners in identifying potential members. Some examples of the organizations that participated in the study that had little in common with the study came from Anchorage, Alaska and Kids Corp Inc., Abused Women's Aid in Crisis, and the Food Bank of Alaska.

Group 3 or the High IOR group characteristic scores were high in the ability to share human resources ( $\bar{x}$ =5.95), extremely patriotic ( $\bar{x}$ =5.37), high on ability to work with medical injuries ( $\bar{x}$ =4.77), high in medical assistance ( $\bar{x}$ =4.19), and high in organizational goal congruence ( $\bar{x}$ =5.18). Group 3 has the highest potential to form WW partnerships. This group represented 24% of the participants in the study. The group has the human resources to support the programs, they are patriotic and want to help soldiers with injuries, they can treat and evaluate the soldiers during rehabilitation, and they share similar organizational goals and objectives. This is the group that parks and recreation directors need to target to form partnerships in support of WW programs. These organizations include certified therapeutic recreational specialists, physical therapists, occupational therapists, specialty doctors, and

surgeons. Not for profit service organizations that may provide IOR for WW programs include the American Chronic Pain Association, American Council of the Blind, American Heart Association, American Meditation Institute, American Pain Foundation, Better Hearing Institute, Brain and Behavior Research Foundation, Disabled American Veterans, Disabled Sports USA, and Easter Seals Inc. These organizations all work with injuries and conditions specific to the WW population and may be future partners.

When observing the means of the factors and IOR displayed in the graph located in Appendix G, Figure 2, there were significant breaks in the data where opposing peaks occurred. The opposing peaks were most recognizable at the ability of organizations to provide resources for medical conditions, the community's number of medical personnel, and barriers to form partnerships. Therefore, it is suggested that communities that can support partnerships with good medical facilities and personnel should encounter fewer barriers to building a WW partnership.

Another discussion point from the 3 group cluster was cooperation barriers that may prohibit partnerships. On the graph found in Appendix G, Figure 2 the only time that group 3, the strong partnership group, crosses below the mean of the other two groups is at cooperation barriers or limitations. The strong group falls below the other two groups because they are less likely to encounter barriers when exploring WW partnership opportunities. Therefore, communities that exhibit the traits of Group 3 should be more willing to form WW partnerships regardless of barriers that exist. The other two groups have barriers and the study suggests these are 1.) Lower levels of medical personnel and 2.) Lack of knowledge to treat wounded warriors. These are the two barriers that stand in their way when attempting to partner with WW.

Sub-Objective Two:

The second sub-objective of the study was to develop and validate the scale used to measure IOR between park and recreation directors and not-for-profit service organization CEOs. The PCA reduced the twenty four measures of IOR that measured the original independent variable data into five new factors which retained some, but not all questions used to measure IOR for this study. These five new factors can be used to explore future IOR. The five new factors were named appropriately by the researcher as Sponsorship, Donation, and Cost Partners (SDCP), Recreational Facility and Equipment Partners (RFEP), Indoor Facilities Partners (IFP), Program Operation Partners (POP), and Specialized Assistance and Credentialed Partners (SACP).

The first factor was Sponsorship, Donations, and Cost Partners (SDCP) and accounted for 46% of the total reduced factors. This type of partner may specialize in the financial operations of a community-based WW program partnership. These partners would provide the following types of financial contributions to the WW program; Facility and Administration costs, Operational Funding, In-Kind Support, Joint Sponsorships, Direct financial support, and donations. Of the types of financial contributions suggested, park and recreation departments may concentrate on sponsorship and donations. For example, businesses and restaurants may want to get involved with supporting the Army and its injured soldiers. It allows owners a chance to give back to the men and women who fight for the United States. There are numerous restaurants within communities nationwide that support the armed services on a daily basis. Chick-Fila and Chili's both provide benefits and discounted meals to soldiers. To support this premise research shows the following businesses were recognized for their support of the United States Army over the past year, Coca-Cola, General Electric, Ford, Anheuser-Busch, Sears, Mass Mutual, Best Buy, Hertz, New York Life, and State Farm (Economou, 2008). These

would be great businesses to begin searching for WW sponsorships, donations, and financial support.

The second factor accounting for 10% of the influence this new IOR measure has was Recreational Facility and Equipment Partners (RFEP). These partners would share recreational facilities and equipment and include; open spaces, recreation and leisure equipment, support facilities, specialized vehicles, field equipment, parking spaces, and information kiosks. Moreover, these partners would provide directly to a WW partnership by providing recreational opportunities. Of the above resources, open spaces such as fields, lakes, and green space are very beneficial to the rehabilitation of soldiers. Soldiers love being outdoors and participating in adventure type activities (O'Brien, 2010). This group suggests that it includes community recreation departments as the primary partner supplying recreation opportunity, facility, personnel, and limited funding. Park and Recreation agencies, private recreation providers and service agencies that support recreation such as Boys and Girls Clubs, YMCAs, Boy Scouts of America, and others may also be targeted to become members of WW programs.

The third factor which emerged was Indoor Facilities Partners (IFP) accounting for 7% of the total factors present in the study. This type of partner is crucial for the programming aspect of the WW program. This factor can contribute to a WW partnership specifically through centrally located indoor facilities, including indoor recreation facilities. These are needed within a partnership and IFP can provide this resource. From actually offering indoor WW programs, to supporting WW partnerships by providing meeting spaces, IFP can positively support a WW partnership. Specific resources IFP can provide include; indoor facilities, meeting spaces, activity spaces, and shared office space. IFP may include businesses,

corporations, and recreation departments similar to the SDCP partner, such as these large corporations located throughout the United States in Coca-Cola, Ford, General Electric, etc. All of those entities have indoor facilities where WW programming and planning could take place in the community.

The fourth factor revealed was Program Operation Partners (POP) accounting for 6% of the total factors present in this study. This factor can contribute directly to a WW partnership specifically by providing experts (financial or programming), non-certified or licensed professionals, programmers, supervisors, support staff, and administration. These POP partners would help support WW programs on a daily, weekly, or monthly schedule. They may be in charge of programming, supervising, organizing, and operating the WW programs. POP partners may be located throughout the community, but most of the program operation partners will come from the park and recreation departments in the WW host community.

Park and recreation departments have the operations staff in place to run WW programs. But the goal is to make the WW program the best it can be, for the largest amount of people, at an affordable costs. Park and recreation departments cannot fund WW programs without help nor can they provide operational staff to assure quality programs.

The fifth factor was Specialized Assistance and Credentialed Partners (SACP) accounting for 5% of the total factors in this study. SACPs are crucial to form successful WW partnerships and contribute specifically by providing certified and/or licensed professionals in their field such as doctors, surgeons, physical therapists, occupational therapists, nurses, teachers, lawyers, and certified therapeutic recreational professionals. Based on the only predictor of this study, the MLR results showed that the ability for an organization to provide IOR in support of medical

injuries suffered by soldiers in the community was the only significant predictor of IOR. Certified and licensed professionals are important support staff necessary to program and rehabilitate WW's. SCAPs may be more likely to volunteer to support WW programs. There are many reasons why medical personnel choose to volunteer and they include the following; unsatisfying current position or employment, moral or ethical satisfaction in helping those who are less fortunate, religious convictions, adventure and the ability to have new experiences, to give back to others who are less well off, to involve family and friends with worthwhile redeeming projects involving volunteerism, to get back to the reason of why they entered the field of medicine to serve and aid the ill regardless of financial remuneration (International Health Volunteers, 2008).

The Principal Component Analysis revealed that of the twenty-eight measures of IOR in this study, joint sponsorships, fund-raising, volunteers, and shared advisory board members were most important for establishing a WW partnership determined by the responses from the park and recreation participants. Park and recreations departments need assistance through sponsorships and fund-raising to keep WW programs going as well as starting new WW programs nationwide. They also need help in the form of volunteers that include certified and licensed professionals in the communities. Those professional's also may sit on multiple advisory boards in support as well.

The Factor Analysis technique reduced the data into "like" partners and linked traits on the service organization CEO's responses and revealed that parking lots and spaces were most important for establishing and operating WW partnerships. This is logical in that if service



organizations don't have the money or manpower to contribute to a WW partnership, at least most are willing to share their parking lots and spaces to host WW program events.

The reliability of the dependent variable scale was determined using Cronbach's Alpha. The internal consistencies of the scale measurements were all very strong. By convention, an alpha of .65 to .70 is considered an "adequate" scale in park, recreation, and human dimension research. This research used .80 or above as the cut-off for a good-scale. The dependent variables of IOR were shared resources ( $\alpha=.916$ ), human resources ( $\alpha=.901$ ), and financial resources ( $\alpha=.897$ ). When all three IOR measures were combined ( $\alpha=.952$ ). The measures of IOR used for this study were above adequate. The revisions that should be made to the scales would be to reduce the length of the survey. After the pilot study was conducted, the instructions were reduced to make the survey more inviting based on the responses from the participants. This can be done by creating more precise measures for each of the independent variables. There were over 15 complaints about the amount of time that it took for the participant to complete the survey. The survey took between 30 and 40 minutes to complete, future research should try to limit participant response time to 20 minutes. This study should be followed by implementing the five new types of IOR partners that were discovered in the study which were SDCP, REFP, IFP, POP, and SACP. By targeting the new specific IOR, future research measures can explore IOR further to generate new WW partnerships.

The independent variables were military connectedness ( $\alpha=.887$ ), patriotism ( $\alpha=.878$ ), medical assistance ( $\alpha=.915$ ), quality of life ( $\alpha=.870$ ), cooperation barriers ( $\alpha=.914$ ), and organizational goal congruence and shared PVM ( $\alpha=.949$ ). The independent variable measures used for this study were adequate for the research. Independent variables were all highly reliable

based on the results of Cronbach's Alpha. Future research should make sure that at least three measures are used for each independent variable. In this research, shared philosophical orientation and organizational goal congruence only had two measures. The other independent variables all had over six measures. To follow up this study, the variables that include the ability to treat medical conditions specific to WW's and the overall community size should be explored further to discover potential high IOR based on the results from the Multiple Linear Regression.

### **Limitations of the study**

There were four limitations placed on this research. This section will discuss these limitations and how they affected the study and results.

The first limitation of the study was the use of an internet survey technique that reduced the ability to collect responses. It was most difficult to communicate with the CEOs from the United Way's in the communities that participated. Future research should allow more time to properly communicate through letters, emails, and phone conversations to ensure that both parties understand their roles and responsibilities. Lack of time influenced the responses that were received in the study.

The second limitation of the study, it was limited to the 23 agencies funded by the NRPA. The criterion used by NRPA for selecting the communities was not released to the public. If the criterion for selecting the communities was known, more communities could have been identified throughout the country and included in the research. This study only used the 23 communities recognized by the NRPA for hosting WW programs and providing services to injured servicemen and women. Originally, all 23 communities were scheduled to participate in the study, but only 19 United Way CEOs actually dispersed the survey to their service

organizations. This affected the results of the study because three of the four communities that failed to distribute the survey had a large number of service organization partners that could have participated. They also had large community populations. Those communities included Austin, TX, Phoenix, AZ, and Washington DC.

The third limitation of the study, it was limited by the lack of control and random participant selection process. This research attempted to survey all United Way partnering service organizations in the 23 communities selected. Future research should attempt to eliminate the organizations that have less in common with the WW goals and objectives. By targeting the organizations with potential high IOR the results of the study will be enhanced.

The final limitation placed on this study, it was limited by reliance on United Way CEOs to disseminate the survey to their service organization partners. As mentioned previously in this section, initially all 23 communities were scheduled to participate in the study. But from lack of communication by the researcher or the extremely busy daily schedule of the United Way CEOs, only 19 communities actually forwarded out the survey to their partnering organizations. Of the four that did not participate, three of the communities were major cities which would have affected the results of the study significantly. MLR revealed that community size was a predictor of IOR for WW programs and with cities such as Washington DC, Phoenix AZ, and Austin TX not participating results were not as strong as they could have been.

## **Implications**

The purpose of this study was to determine the human resources, shared resources, and financial resources as well as other factors that support partnerships between park and recreation agencies that currently provide Wounded Warrior programs and the service organizations within

the host community. This research was also conducted to bring awareness to the United States Army and their WW program. There is a need for community-based recreation programs designed specifically for this growing population of wounded soldiers and veterans especially with the Army down-sizing the number of soldiers that they are allowing to return to active duty status after suffering combat related injuries.

The results of this research could be used by communities across the country interested in implementing new Wounded Warrior programs. The study found that park and recreation agencies are significantly more interested in finding partners to assist and support WW programs. They need assistance to make the programs more effective. In order to make the WW programs more effective, recreation departments need partners that can provide the following; human resources such as volunteers, certified and licensed professionals with the ability to treat specific medical injuries like blindness, PTSD, TBI, severe burns, paralysis, and loss of limbs, and communities with large populations to increase the likelihood of partnerships being formed in support of WW programs. Park and recreation directors should seek out service organizations that employ, support, or partner with medical personnel that can assist in programming recreation for WW programs. Moreover, the partnerships that have been formed may become stronger if they add partners such as rehabilitation clinics, therapy providers, hospital outpatient programs, and agencies that train and update these professionals. These are the organizations that can enhance the recreation and rehabilitation experience of the WW's who choose to participate in the programs.

The High IOR group characteristic scores were high in the ability, on a 6 point scale, to share human resources ( $\bar{x}$ =5.95), extremely patriotic ( $\bar{x}$ =5.37), high on ability to work with medical injuries ( $\bar{x}$ =4.77), high in medical assistance ( $\bar{x}$ =4.19), and high in organizational goal

congruence ( $r=5.18$ ). The High IOR group has the highest potential to form WW partnerships. This group has human resources to support the programs, they are patriotic and want to help soldiers with injuries, they can treat and evaluate the soldiers during rehabilitation, and they share similar organizational goals and objectives. These are the characteristics that park and recreation directors should focus their partnership initiatives upon and may support building cooperative WW programs. Park and recreation directors can begin their WW partnership formation by contacting the CEOs of organizations that employ certified therapeutic recreational specialists, physical therapists, occupational therapists, specialty doctors, and surgeons. Not for profit service organizations that may provide IOR for WW programs include the American Chronic Pain Association, American Council of the Blind, American Heart Association, American Meditation Institute, American Pain Foundation, Better Hearing Institute, Brain and Behavior Research Foundation, Disabled American Veterans, Disabled Sports USA, and Easter Seals Inc. These organizations all work with injuries and conditions specific to the WW population and are strong candidates for inclusion into WW partnerships.

From the review of literature, cooperation and collaboration is occurring between the United States Army and outside entities such as Dr. Mary Wykle's Aquatic Therapy program at Fort Lewis in Seattle, Washington and collaboration between the United States Army and Penn State University to provide quality and effective classroom and laboratory instruction to train and educate recreation professionals in order to rehabilitate WW soldiers on active duty bases. As the literature suggested, the answer to providing support within the communities for WW programs comes from Therapeutic Recreation based organizations that have the manpower and specific skills that can be used to rehabilitate and provide quality recreational experiences for wounded soldiers and veterans. The recreation directors can seek future partnerships with

therapeutic recreation agencies and they should use their ability to provide recreation facilities, supplies, and professionals as a basis for discussing partnership needs.

Several independent variables used in this study are useful for predicting WW partnerships. For example, military connectedness was strongly correlated with IOR. Therefore, park and recreation agencies should locate service organizations that have affiliations with the military. A good place for recreation agencies to begin their search for WW partnerships is at the local Veterans of Foreign Wars (VFW) and the American Legion. These organizations are represented in most communities and are directly connected with the military and veterans. Military presence in the community is also important to form partnerships. Army, Navy, Marine Corps, Air Force, and Coast Guard active duty bases, National Guard Reserves, and Armed Forces Recruiting Centers all may be helpful when searching for potential partners. Military based organizations are not only a great place to search for partnerships but to also locate potential participants in the programs.

The second independent variable that was significantly correlated to IOR was patriotism. Some patriotic service organizations located in communities that may be potential WW partners are the American Red Cross, Boy Scouts of America, American Legion, and Veterans of Foreign Wars. Future research may focus on more specific measures of patriotism to help reveal new ways to discover how park and recreation professionals can locate patriotic businesses and corporations in their community. Investigations should explore how patriotism is manifested and may include type parades, flag raising, reciting the pledge of allegiance in schools, and through organizations that count patriotism as one of their core beliefs. Park and recreation directors and CEOs may consider yearly events such as the 4<sup>th</sup> of July parade, Memorial Day, Veterans Day,

and September 11 Memorial Days as excellent times to offer WW programs that result from a coordinated partnership.

The other significantly independent variables related to IOR included quality of life and medical assistance. Communities which have a higher quality of life will also be more likely to have medical facilities and support for people who suffer from the six major injuries suffered by WWs. Quality of life is also represented by open spaces, lakes, walking trails, and parks where recreational opportunities can occur. Over half of the participants in this research stated that their organization was located in a Metropolitan area. These areas have large populations with numerous resources available. Quality of life, open spaces, and small town feel are all qualities that describe the best communities in the country to target for future WW programs and partnerships. It is reasonable to assume those communities with these positive livability indicators would also have good medical care, quality recreation departments, and active service agencies; all needed for WW partnerships.

In order to eliminate cooperation barriers that may affect future partnerships, finding organizations with large volunteer bases may be the answer. This is where the service clubs may influence and assist with the WW programming by providing volunteers with expertise or experiences needed by WW programs. These include veterans, retirees with special abilities; e.g., therapists, doctors, nurses, exercise specialists, aquatic professionals, budgeting and finance, fund raising, and administrators. The following service clubs are located throughout the United States and could be potential future WW partners willing to share their volunteers and employees; Rotary Club, Kiwanis Internationals, Lions Club, Optimist Club, and Ruritan Club. Many of the clubs include veterans and are excellent places to find human resources in support of WW programming.

## **Recommendations for Future Research**

The following recommendations are based on the results of the study. All recommendations illuminate how the measures of IOR and the effects of the independent variables add to the knowledge related to partnership formation within the park, recreation, tourism, fields.

The first recommendation for future study is to specifically explore how and which medical service organizations can provide for injured WWs as well as identify the specific groups of medical professionals with ability to rehabilitate and provide the specialized programming necessary to conduct quality WW programs. In this research, no attempt was made to separate or delimit the service organizations included for the study. The entire population of service organizations in the nineteen communities with established WW programs was used. Moreover, many service organizations did not respond or choose to participate because they determined that they did not have goals congruent with the WW program or this specific population. The types of organizations that may have not responded include those helping young children, battered women, or homeless people.

Future research should attempt to focus on communities that may include the qualities revealed within the High IOR group created by the Cluster Analysis; e.g., patriotic, adequate medical personnel, and evidence of partnerships formed. Research should also delimit the partnership selection to include businesses or companies that may support WW partnerships.

The second recommendation is to target therapeutic recreation professionals as results of this study revealed this group would be major partners in WW programs. This study had a limited number of therapeutic recreation professionals that responded either from the park and



recreation departments or service agencies which employ this group of medical professionals. By gathering data from this specific population, the field of parks and recreation will be able to discover new ways to help the WW population and create advanced ancillary programs by implementing new partnerships within the community. Specifically how to treat or rehabilitate wounded soldiers, how to adapt facilities to be used for recreation programming, how to train volunteers to work with WWs, establish treatment modalities and assessments.

The third recommendation for future research would be to conduct this study again in more than just 19 communities across the country that provide WW programs. Expanding the criteria for inclusion in WW research may provide information on WW programs that are being conducted now. This study was limited to those communities which are currently supported by NRPA funding. There are many communities that are conducting WW programs that do not receive funding from the NRPA. This increased scope will also allow communities that do not currently have WW programs to become familiar with the program goals and objectives. By increasing the population size of the study and delimiting the type of service organizations, the results of this study may be enhanced and further explained.

The fourth recommendation for future research would be to explore the five factors that emerged after PCA analysis. These five factors discovered in this research from the results of the Principal Component Analysis include 1) Sponsorship, Donations, and Cost Partners (SDCP), 2) Recreational Facility and Equipment Partners (RFEP), 3) Indoor Facilities Partners (IFP), 4) Program Operation Partners (POP), and 5) Specialized Assistance and Credentialed Partners (SACP). These five types of IOR measures, named as “partners”, may enhance future exploration of partnership formation as they may be more precise measures of IOR than the three measures used in this study. In the past, Park and recreation has used the ability to share

resources, manpower, and financial support as IOR. Now measures of specific types of “partners” can be targeted. This will allow for further analysis finding new community partnerships in support of WW programs.

The fifth recommendation for future research would be to increase the precision of measures in three of the independent variables used in this study. Organizational goal congruence, shared philosophical orientation, and knowledge of WW programs all used 1 or 2 questions to measure the effect and future research, if exploring these three variables, should have at least three measures in the variable.

The sixth recommendation for future research and the most relevant to operationalizing the results of this study is to explore how size of the community relates to IOR focused on WW partnerships. There may be a “critical mass” necessary for viable WW partnerships but this study did not explore this factor. The results did suggest that larger communities may support greater numbers of medical professionals needed for WW programs and include open spaces, facilities, and resources capable of sustaining the partnerships. Moreover, larger communities probably include larger numbers of WWs. This study indicated that communities with medical professionals were the strongest predictor of IOR support WW partnerships. It is reasonable to believe that larger communities would support greater numbers of these professionals with wider skill and expertise abilities.

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## LIST OF APPENDICES

## APENDIX: A

APPENDIX: B

APPENDIX: C

## **Survey Collector Letter**

Dear Tampa Florida Respondents,

We would appreciate your help and willingness to contribute in this ground-breaking and comprehensive study.

In an effort to provide outreach for Wounded Warrior Programs and services for injured American soldiers/veterans currently being provided in your community by the parks and recreation department, Mr. Morgan McCreary, graduate student and Dr. Kim Beason, Associate Professor at the University of Mississippi, are conducting a detailed research study with CEOs of community-based park and recreation programs and community service organizations partnered with the United Way in 23 different communities/cities. You have been identified as one of the above entities and selected for an opportunity to participate in this study.

This study may have a direct benefit to your organization. Finding successful partners within the community to share manpower, money, and other resource burdens is difficult, especially in today's tough economy. Your input could reveal like-minded partners in your community and determine the level of support for programs aimed at injured service members/veterans.

We estimate that it will take you approximately 25 minutes to complete the survey. It is very thorough. However, the information is essential to understanding the issue and you possess the knowledge and expertise to provide the best data possible. You may leave and come back to finish the survey as long as you complete the last question on any page. Your identity will be kept strictly confidential (used only for the purposes of research for this project). When the study results are presented and published, they will be made anonymous and/or disguised so that identification cannot be made.

This study has been reviewed by the University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protection obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact IRB at (662) 915-7482.

At the conclusion of the study you will have the option to receive a synopsis of the conclusions reached. Please complete the contact page at the end of the questionnaire if you desire a synopsis.

If you have any questions please contact me @ Morgan A. McCreary (828) 773-7920 or email [mmccrear@olemiss.edu](mailto:mmccrear@olemiss.edu). You can also contact the University of Mississippi and Dr. Kim Beason, committee advisor for the research at [hpbeason@olemiss.edu](mailto:hpbeason@olemiss.edu) or (662) 915-5555.

We would appreciate your response by March 5, 2012. After March 5th I will re-email all participants once to remind them to please participate.

Simply click on the link below, or cut and paste the entire URL into your browser to access the survey:

[https://www.surveymonkey.com/s/Tampa\\_Florida](https://www.surveymonkey.com/s/Tampa_Florida)

If you experience technical difficulties accessing or submitting the survey please contact me. I will get back with you within the week to provide assistance.

Sincerely,

Morgan A. McCreary, Graduate Student

M.A.P.R.M Candidate

University of Mississippi

## **Survey Collector Reminder Letter**

Dear Tampa Florida Respondents,

About a week ago you received an e-mail message asking you to assist us in a comprehensive study focused on Wounded Warrior Programs and services for injured soldiers/veterans provided in your community by the parks and recreation department. If you have filled out the survey, thank you for your participation!

If you have not had a chance to take the survey yet, I would appreciate your consideration in completing the survey. You can provide information necessary to revealing successful partnership opportunities in your community. If you do not have anything in common with this population or feel that you do not want to participate in the research please complete the first two pages so that you can be accounted for in the sample as receiving the survey. You have the opportunity to opt out of the survey after the second page.

This study has been reviewed by the University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protection obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact IRB at (662) 915-7482.

\* To take the web-based survey, click or paste into your browser:

[https://www.surveymonkey.com/s/Tampa\\_Florida](https://www.surveymonkey.com/s/Tampa_Florida)

Thank you for your help,

Morgan A. McCreary

M.A.P.R.M Candidate

University of Mississippi



## APPENDIX: D

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Demographic Category		N	%
Sex	Male	58	30
	Female	134	70
Age	Prefer not to answer	2	1.1
	Under 25	3	1.6
	25-29	6	3.2
	30-34	11	5.9
	35-39	9	4.8
	40-44	26	13.8
	45-49	24	12.8
	50-54	30	16
	55-59	31	16.5
	60-64	34	18.1
	65 or over	12	6.4
Ethnicity	Black/African decent	12	6.3
	Middle Eastern	0	0
	White/Caucasian	162	85.7
	Asian	0	0
	Latino/Hispanic	9	4.8
	Native American	1	.5
	East Indian	0	0

	Islander	1	.5
	Other	4	2.1
Physical Location	Rural	8	4.2
	County	8	4.2
	Small Town	13	6.9
	Suburban	31	16.4
	Metropolitan	99	52.4
	Inner-City	30	15.9
Geographic Location	New England	11	6.1
	Middle Atlantic	0	0
	East North Central	36	20.1
	West North Central	13	7.3
	South Atlantic	42	23.5
	East South Central	2	1.1
	Mountain	44	24.6
	Pacific	31	17.3
	U.S Territories	0	0

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APPENDIX: E

## Background Information

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Demographic Category		N	%
Official Job Title	CEO	60	23.5
	Director	33	12.9
	Program Director	63	24.7
	Associate Director	9	3.5
	President	11	4.3
	General Manager	10	3.9
	Chief Operations Officer	9	3.5
	Executive Director	60	23.5
Management Level	Direct/Service Practitioner	21	8.4
	Middle Management Level (Supervisor)	88	35.1
	Chief Executive Officer (CEO)	142	56.6

APPENDIX: F

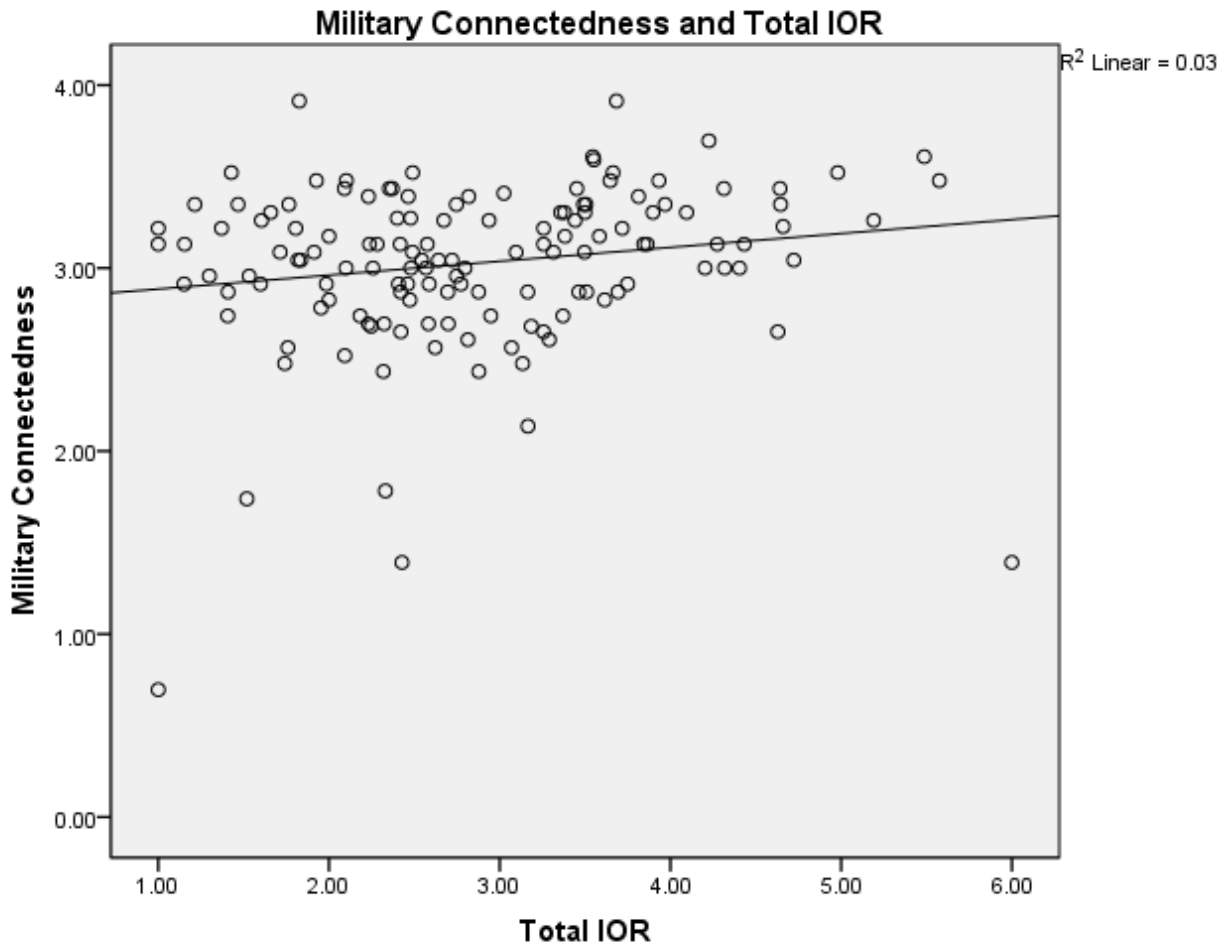


Figure 1. Military Connectedness Views and Total IOR

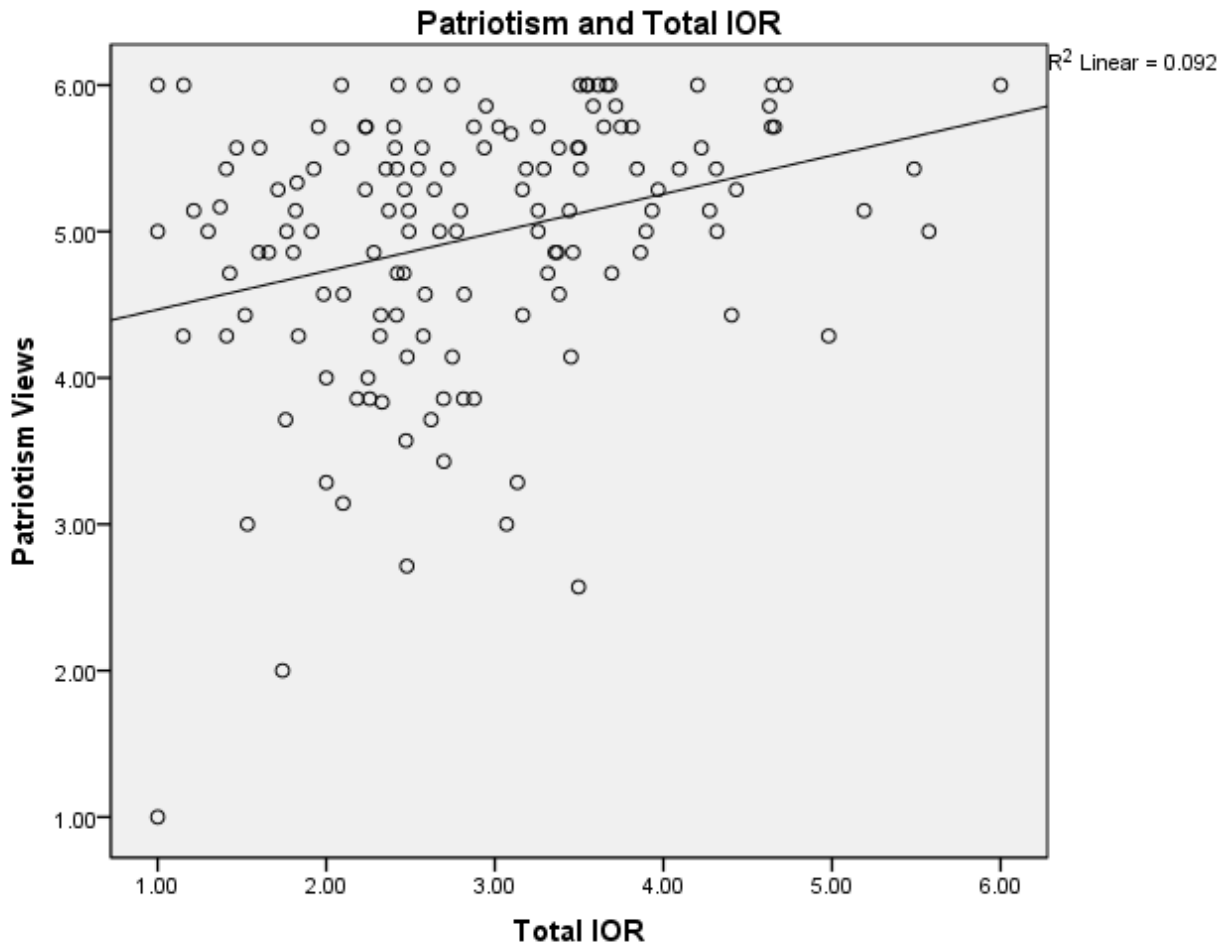


Figure 2. Patriotism Views and Total IOR



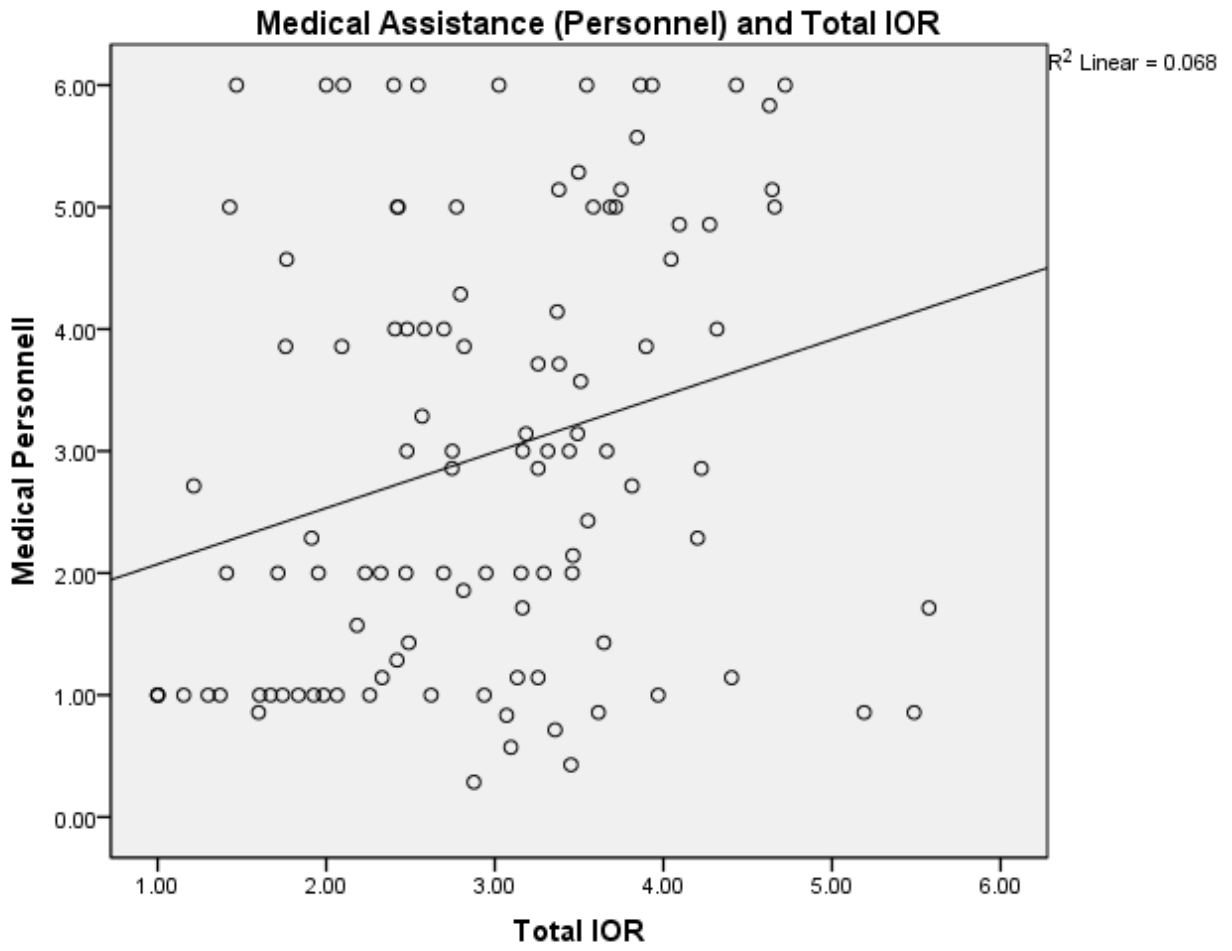


Figure 3. Medical Personnel and Total IOR

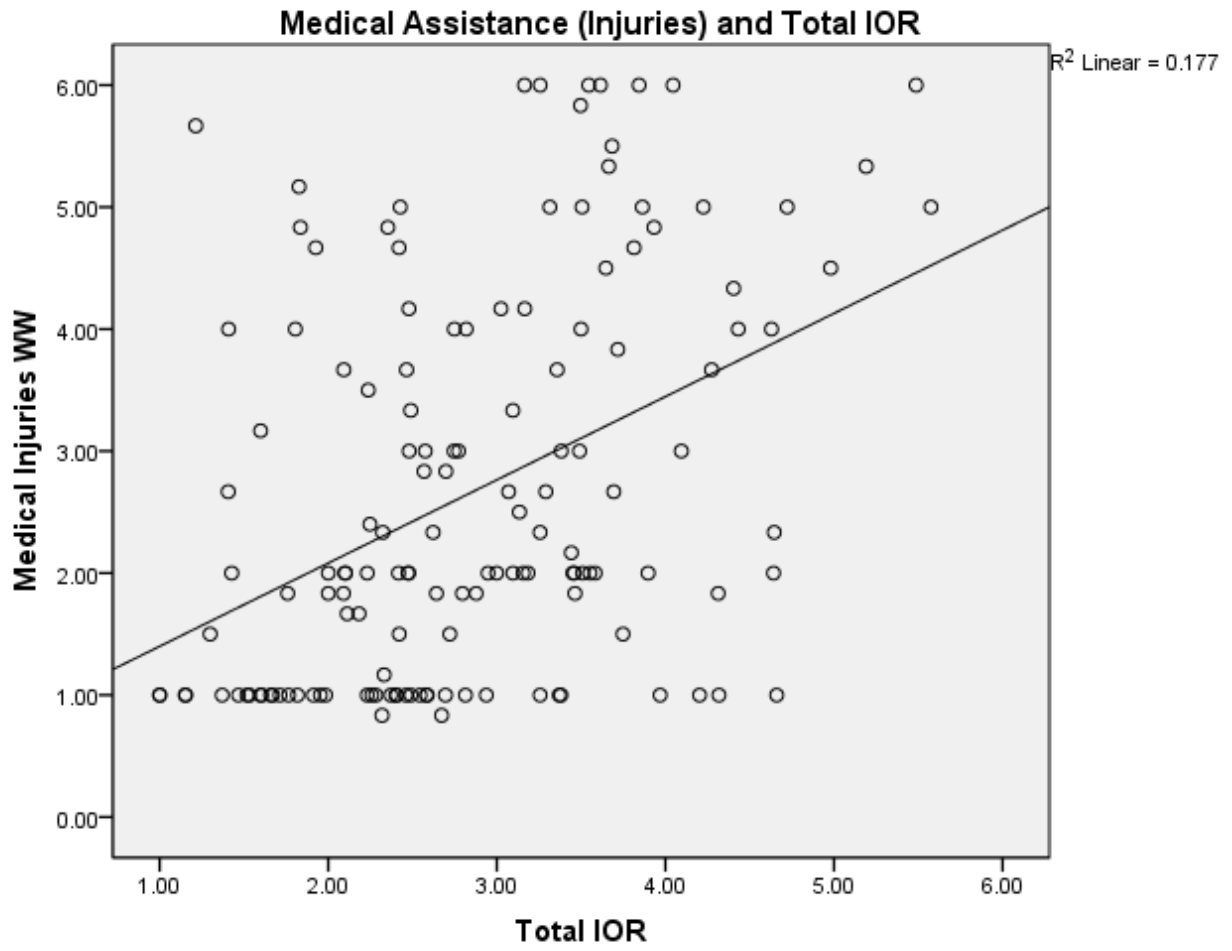


Figure 4. Medical Condition and Total IOR

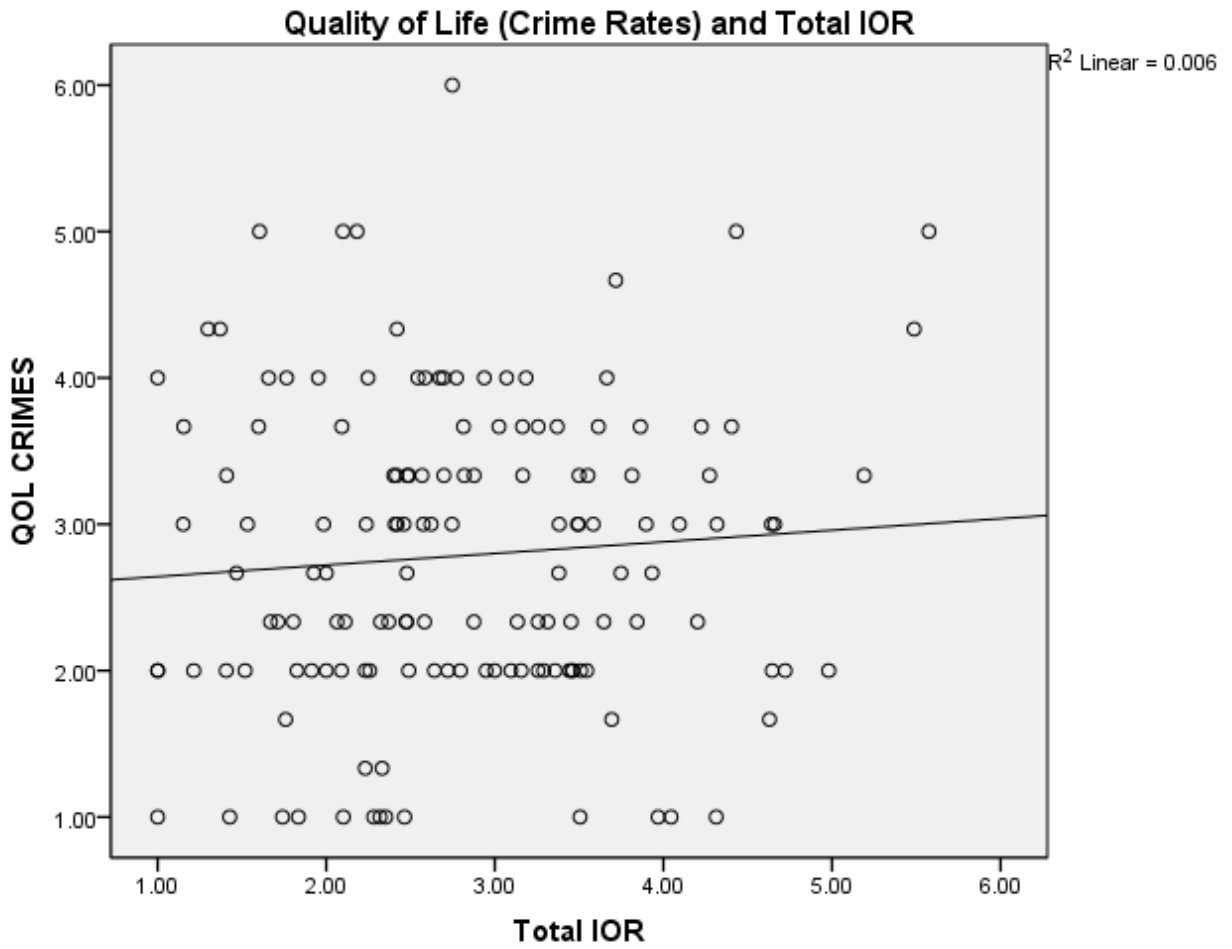


Figure 5. Quality of Life Crime Rate Views and Total IOR



Figure 6. Quality of Life Livability and Total IOR

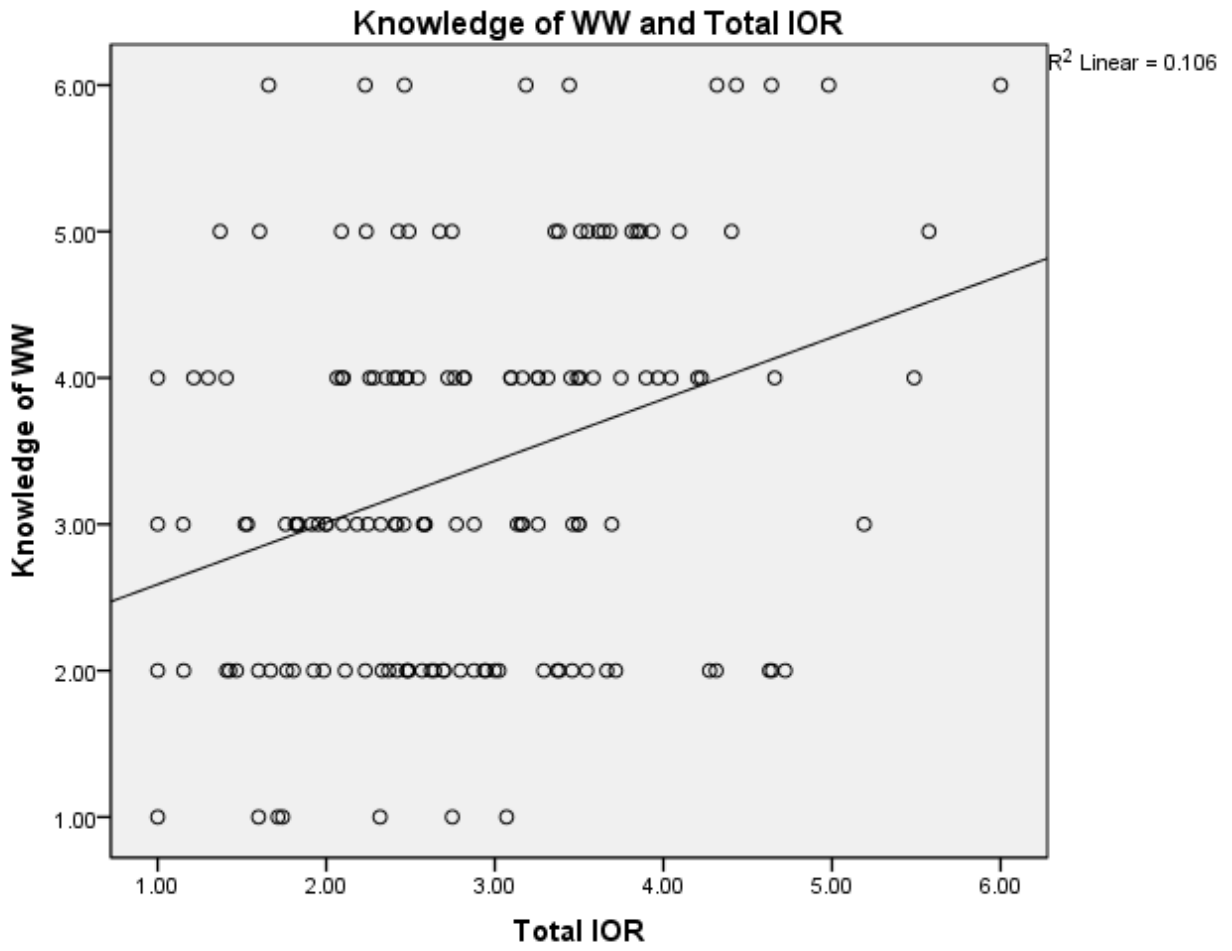


Figure 7. Knowledge of WW Program and Total IOR

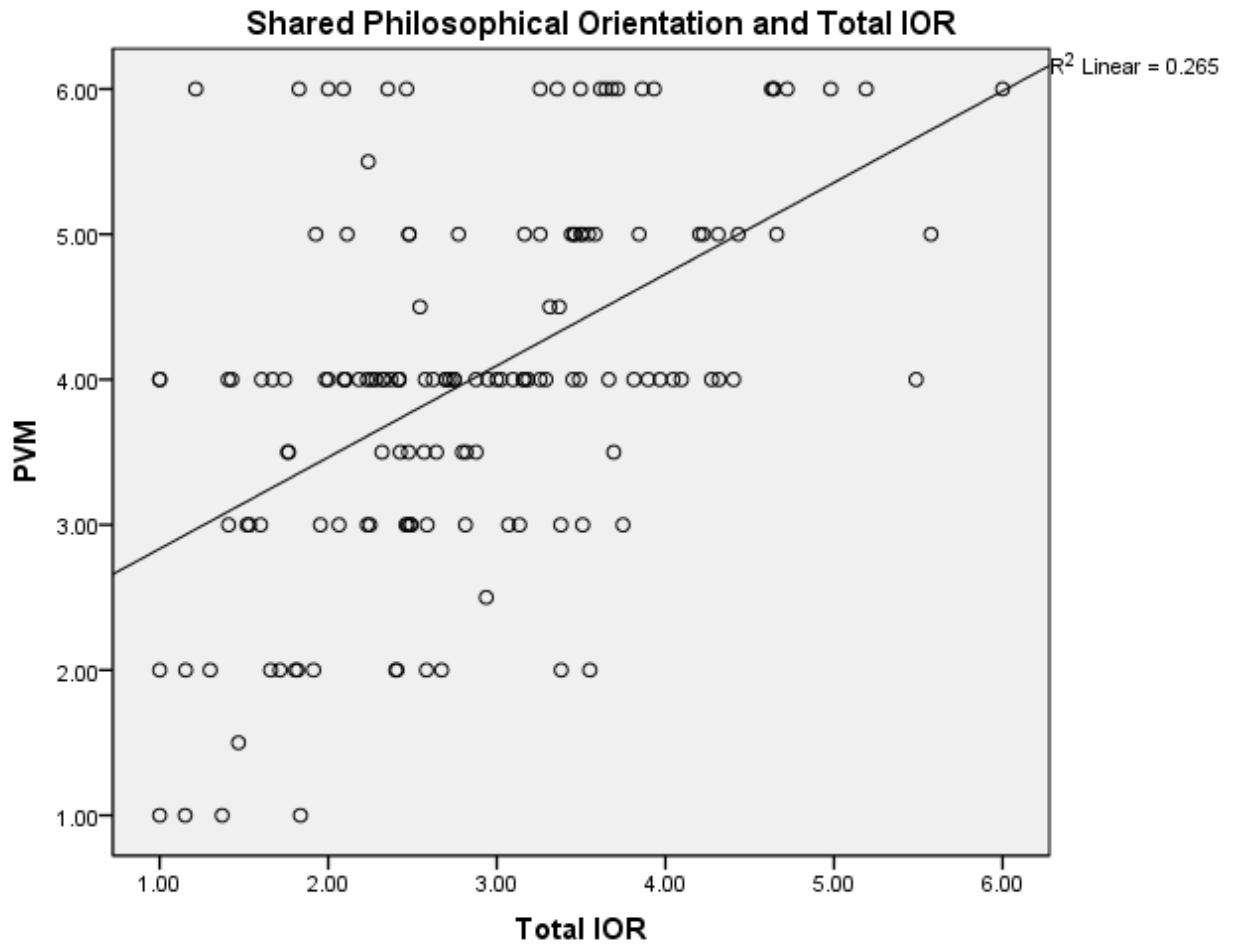


Figure 8. Shared Philosophical Orientation and Total IOR

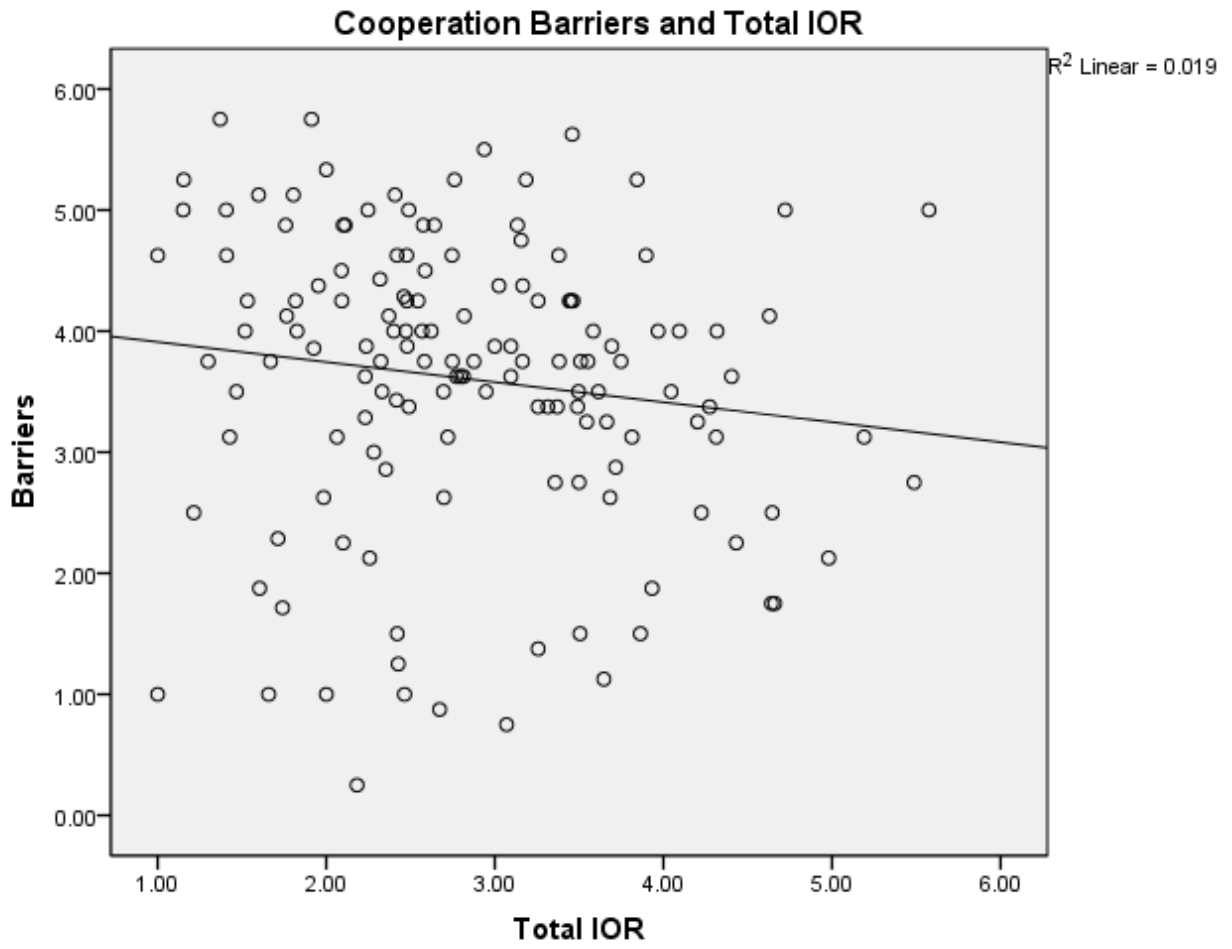


Figure 9. Cooperation Barriers and Total IOR

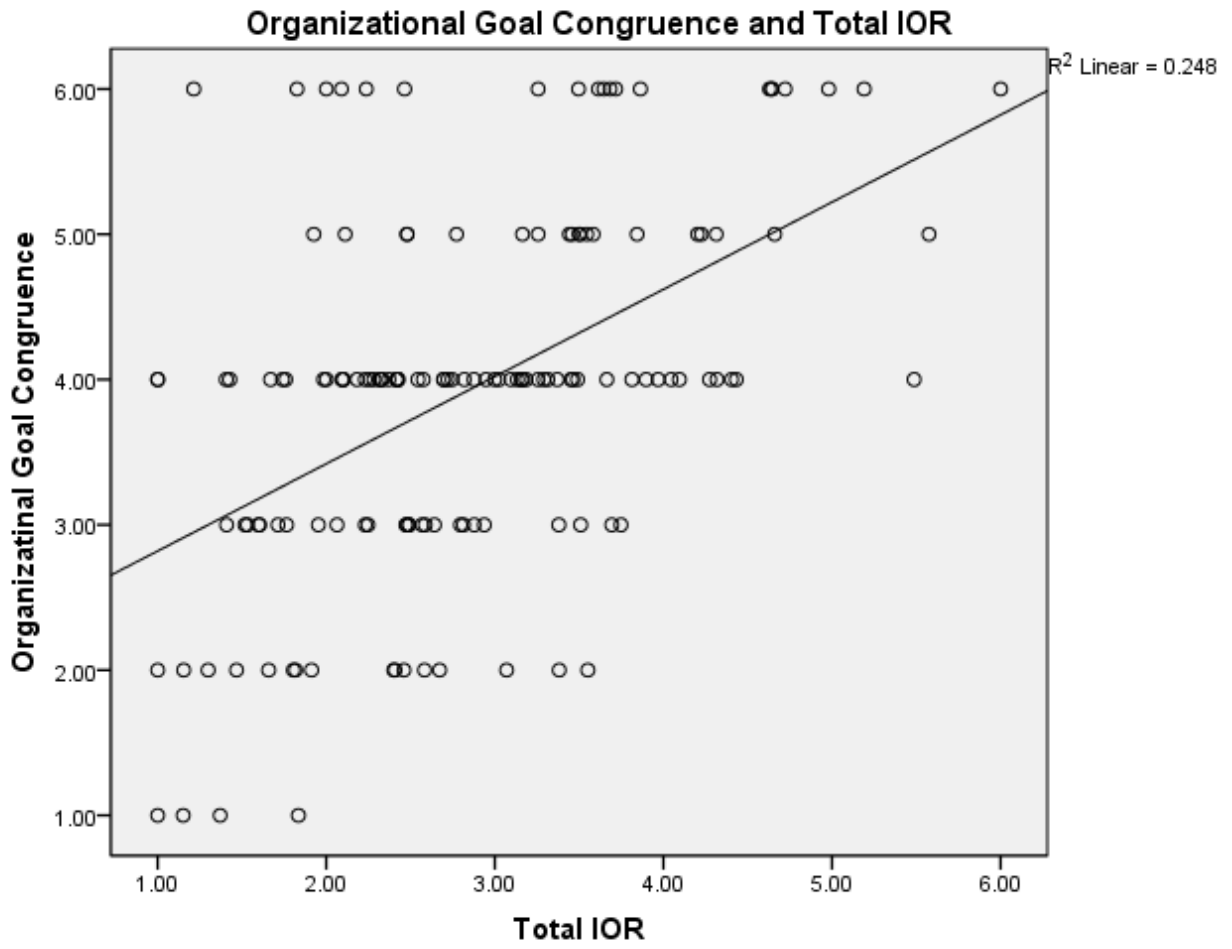


Figure 10. Organizational Goal Congruence and Total IOR



APPENDIX: G

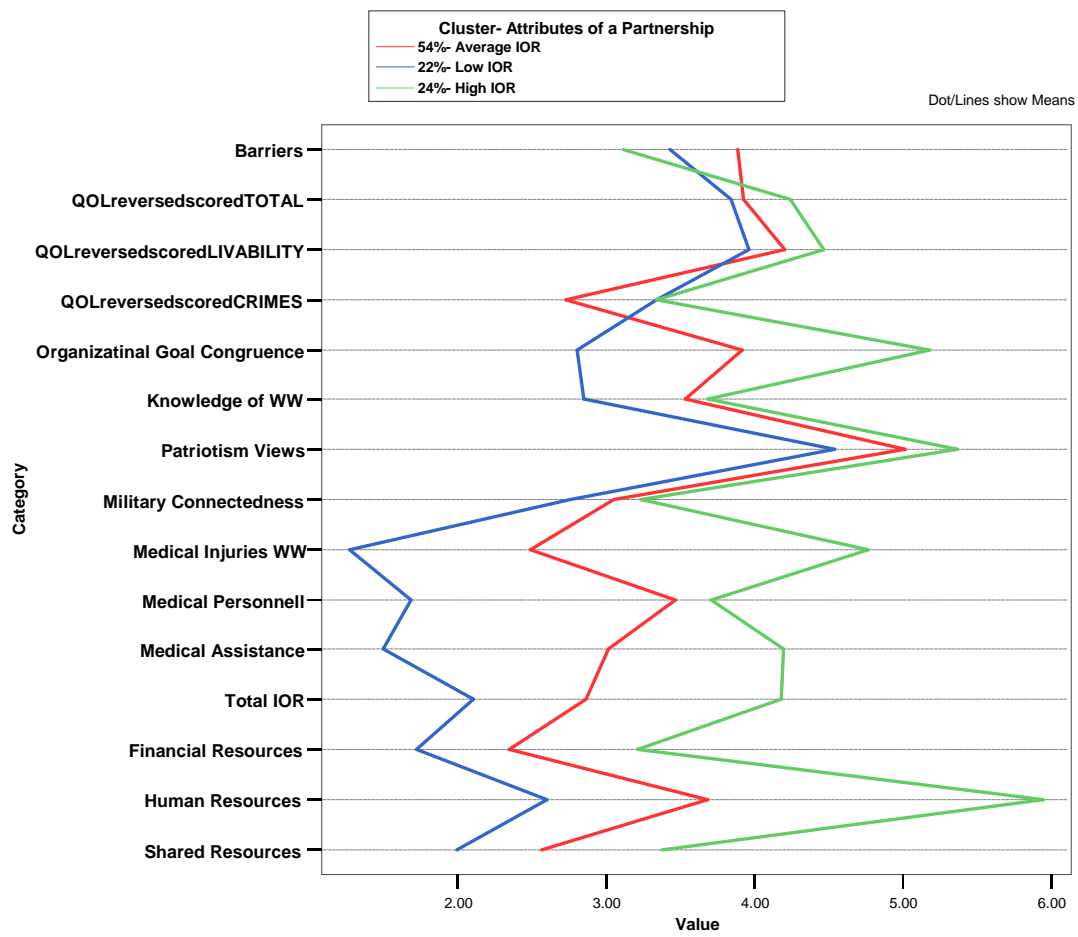


Figure 1. 3 Group Cluster Graph – Means

APPENDIX: H

Table 1

*Park and Recreation CEO IOR Principal Component Analysis Extraction Results***Total Variance Explained<sup>b</sup>**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of	Cumulative	Total	% of	Cumulative	Total
		Variance	%		Variance	%	
1	19.753	70.547	70.547	19.753	70.547	70.547	16.998
2	3.281	11.717	82.264	3.281	11.717	82.264	13.672
3	1.849	6.604	88.868	1.849	6.604	88.868	8.233
4	1.270	4.536	93.404	1.270	4.536	93.404	1.407

Table 2

*CEO of Service Agency IOR Principal Component Analysis Extraction Results***Total Variance Explained<sup>b</sup>**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of	Cumulative	Total	% of	Cumulative	Total
		Variance	%		Variance	%	
1	8.909	31.817	31.817	8.909	31.817	31.817	5.819
2	3.423	12.225	44.042	3.423	12.225	44.042	4.417
3	2.809	10.032	54.074	2.809	10.032	54.074	3.058
4	1.969	7.033	61.107	1.969	7.033	61.107	2.827
5	1.776	6.342	67.449	1.776	6.342	67.449	5.788
6	1.313	4.688	72.137	1.313	4.688	72.137	3.345

Extraction Method: Principal Component Analysis.

Table 3

*Overall IOR Principal Component Analysis Extraction Results***Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of	Cumulative	Total	% of	Cumulative	Total
		Variance	%		Variance	%	
1	12.968	46.313	46.313	12.968	46.313	46.313	8.879
2	2.874	10.265	56.578	2.874	10.265	56.578	8.514
3	1.969	7.034	63.612	1.969	7.034	63.612	4.619
4	1.687	6.026	69.638	1.687	6.026	69.638	7.684
5	1.277	4.559	74.198	1.277	4.559	74.198	3.504

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Table 4

*Component Loading of the 4 group PCA***Pattern Matrix<sup>a,b</sup>**

	Component			
	1	2	3	4
Parking spaces and lots.	1.016			
Recreation and leisure equipment.	1.016			
Administrative staff (CEO, Director, Assistant Directors)	.980			
Non-certified/non-licensed experts	.961			
Supervisors	.949			
Support staff (Maintenance, office staff, etc.)	.949			
Programmers	.942			
Meeting and activity space	.735			
Open spaces (fields, industrial park, parks, etc.)	.735			
Indoor facilities (offices, meeting spaces, activity space, etc.)	.735			
Field equipment (turf management, lawn equipment, etc.)	.709			
Fund-raising and/or charitable events	.671	.511		
Advisory board members	.670		.482	
Technology (computers, TV's, etc.)	.571			
Share our vehicles.	.471			
Joint sponsorship	.442		.417	.408
Operational funding		.967		
Direct support through financial obligations		.950		
Donations- tax exempted gifts		.908		
Share our office spaces.		.899		
Support facilities (garages, repair/maintenance) for WW programs.		.883		
Facility and administration costs		.821		
Area professionals that are certified and licensed (lawyers, doctors, teachers, CPA's, Nurses, etc)		.739		
Experts (financial, programming, management, technological, etc)		.702		
Share information kiosks			.866	
Volunteers		.670	.684	
Outdoor facilities (storage areas, developed recreation areas, etc.)	.462		.616	
In-kind financial support	.447		.512	

Table 5

*Component Loading of the 6 group CEO of Service Agency PCA***Pattern Matrix<sup>a,b</sup>**

	Component					
	1	2	3	4	5	6
Supervisors	.785					
Support staff (Maintenance, office staff, etc.)	.752					
Technology (computers, TV's, etc.)	.733					
Share our office spaces.	.697					
Programmers	.514					
Open spaces (fields, industrial park, parks, etc.)		.930				
Outdoor facilities (storage areas, developed recreation areas, etc.)		.904				
Recreation and leisure equipment.		.843				
Support facilities (garages, repair/maintenance) for WW programs.		.643				
Indoor facilities (offices, meeting spaces, activity space, etc.)			.817			
Meeting and activity space			.797			
Parking spaces and lots.	.435	.481	.484			
Area professionals that are certified and licensed (lawyers, doctors, teachers, CPA's, Nurses, etc)				.783		
Volunteers				.619		
Advisory board members				.552		
Field equipment (turf management, lawn equipment, etc.)				-		
				.550		
Operational funding					.810	
Direct support through financial obligations					.782	
Joint sponsorship					.781	
Facility and administration costs					.736	
In-kind financial support					.690	
Fund-raising and/or charitable events					.623	
Donations- tax exempted gifts					.622	
Non-certified/non-licensed experts						.878
Experts (financial, programming, management, technological, etc)						.796
Administrative staff (CEO, Director, Assistant Directors)						
Share our vehicles.		.414				
Share information kiosks						

Table 6  
*Overall IOR Component Loading of the 5 group PCA*

	<b>Pattern Matrix<sup>a</sup></b>				
	Component				
	1	2	3	4	5
Facility and administration costs	.825				
Operational funding	.794				
In-kind financial support	.774				
Joint sponsorship	.720				
Direct support through financial obligations	.710				
Fund-raising and/or charitable events	.655				
Donations- tax exempted gifts	.617				
Technology (computers, TV's, etc.)					
Open spaces (fields, industrial park, parks, etc.)		-			
		.947			
Outdoor facilities (storage areas, developed recreation areas, etc.)		-			
		.942			
Recreation and leisure equipment.		-			
		.925			
Support facilities (garages, repair/maintenance) for WW programs.		-			
		.777			
Share our vehicles.		-			
		.741			
Field equipment (turf management, lawn equipment, etc.)		-			
		.600			
Parking spaces and lots.		-			
		.478			
Share information kiosks		-	.438		
		.454			
Indoor facilities (offices, meeting spaces, activity space, etc.)			.807		
Meeting and activity space			.676		
Share our office spaces.	.460		.471		
Experts (financial, programming, management, technological, etc)				-	
				.763	
Non-certified/non-licensed experts				-	
				.738	



Programmers	-
	.705
Supervisors	-
	.700
Support staff (Maintenance, office staff, etc.)	-
	.692
Administrative staff (CEO, Director, Assistant Directors)	-
	.520
Area professionals that are certified and licensed (lawyers, doctors, teachers, CPA's, Nurses, etc)	.759
Volunteers	.660
Advisory board members	.653

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Extraction Method: Principal Component Analysis.  
 Rotation Method: Oblimin with Kaiser Normalization.  
 a. Rotation converged in 18 iterations.

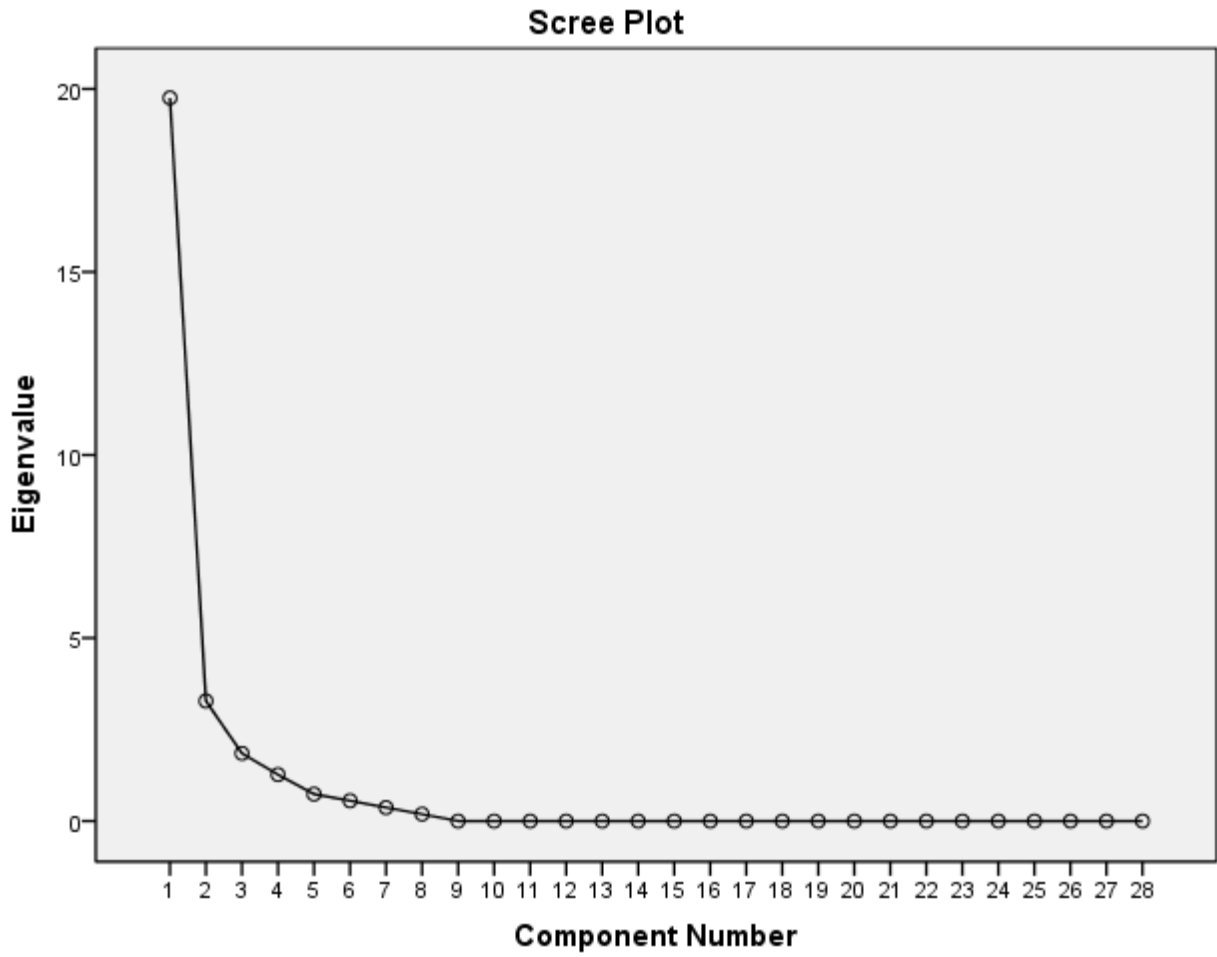


Figure 1. Park and Recreation CEOs PCA scree plot

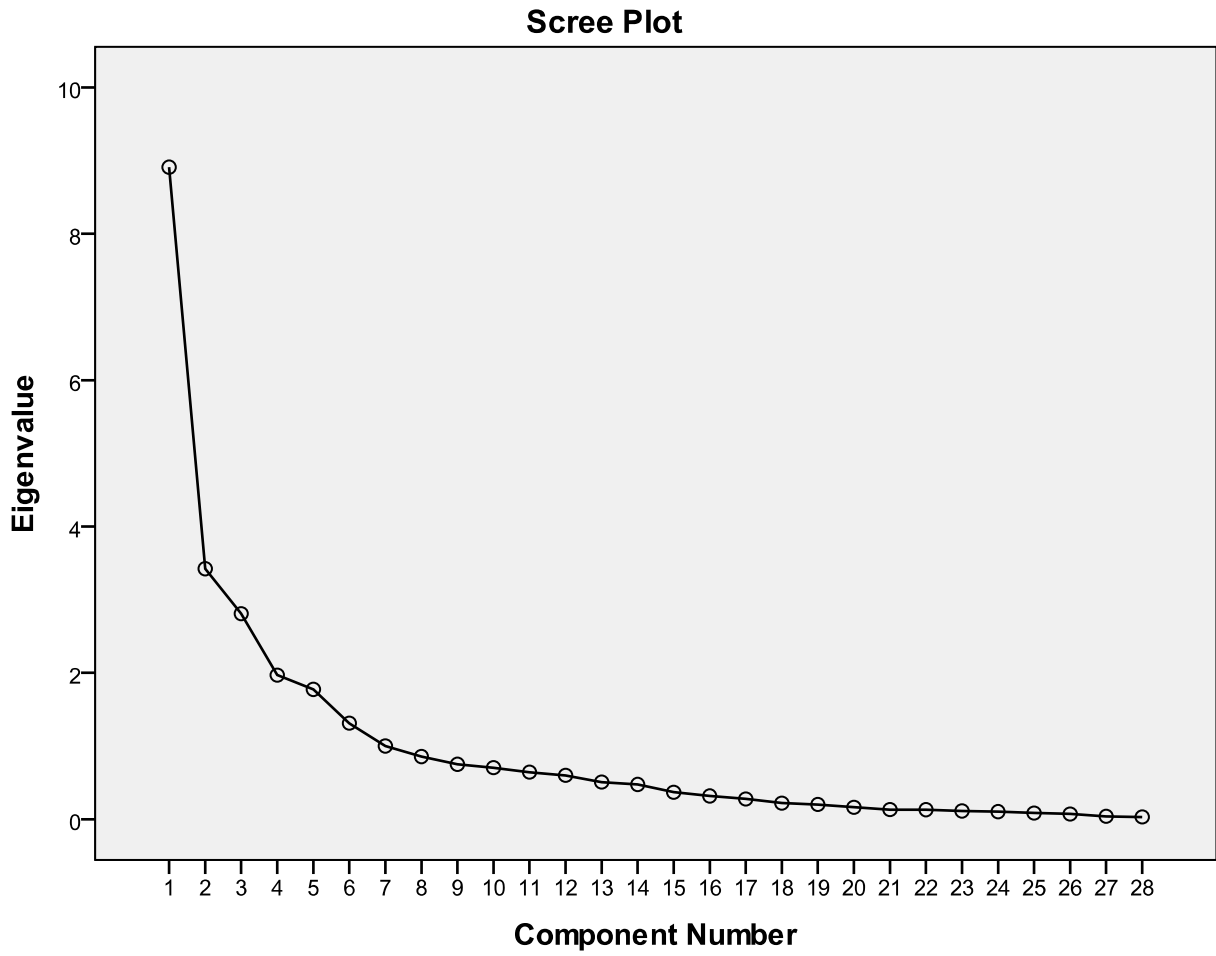


Figure 2. Service Agency CEOs PCA scree plot

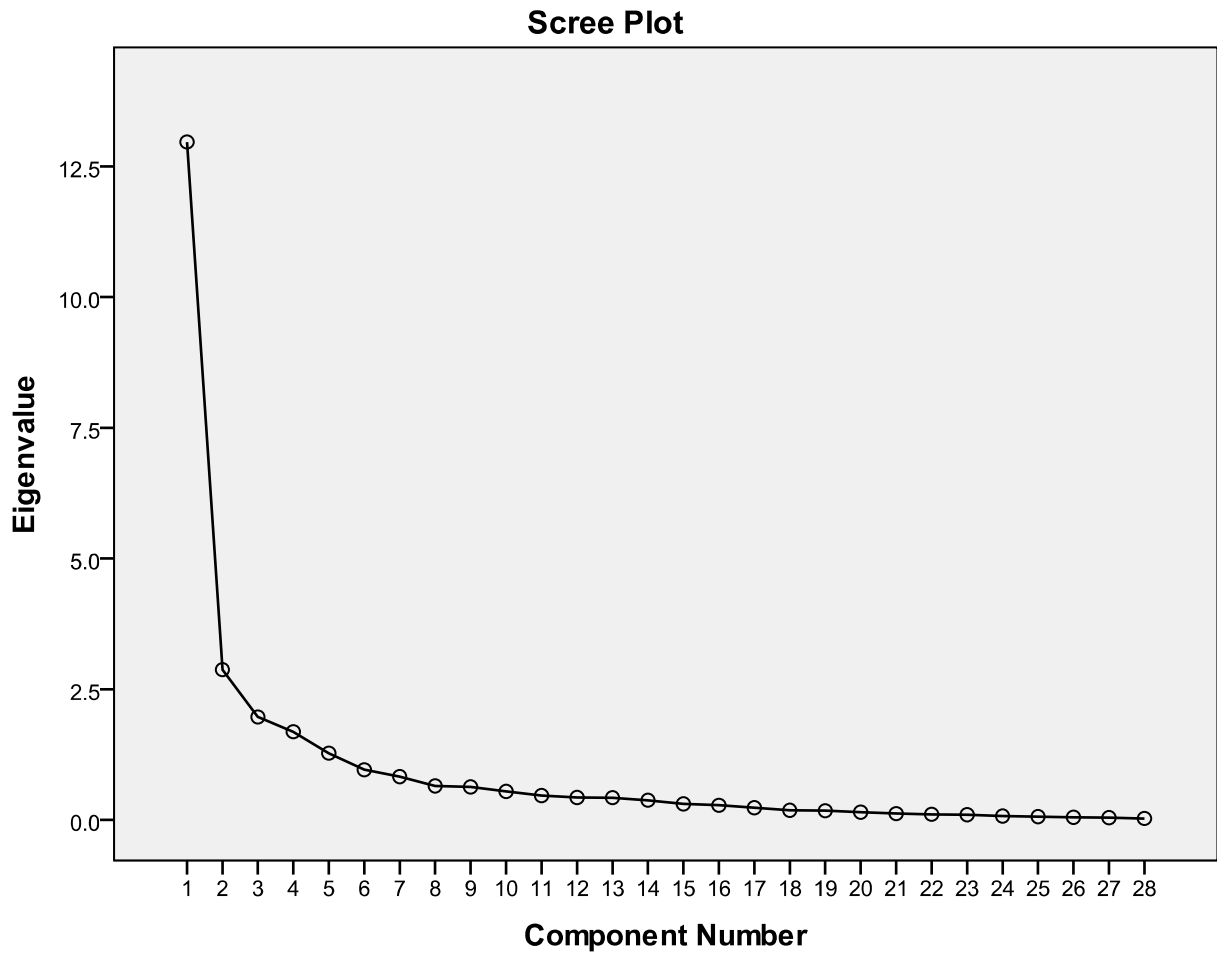


Figure 3. Overall IOR PCA scree plot

## VITA

Morgan Alexander McCreary

### Education

2010-2012, Master of Arts, Park and Recreation Management

University of Mississippi, Oxford, MS.

2004-2007, Bachelor of Science, Physical Education Teacher Education (K-12),

Appalachian State University, Boone, NC

2002-2004, Undergraduate courses

Lenoir-Rhyne University, Hickory, NC

### Certifications

- North Carolina Class A, Physical Education (K-12) Teaching

### Leadership and Involvement:

- United States Army Leadership Training Course, Fort Knox, KY, Summer 2010
- United States Army Leadership Development Advanced Course, Fort Lewis, Seattle, WA Summer 2011
- United States Army CTLT Officer Internship, Fort Jackson, Columbia SC Summer 2011
- Army ROTC, University of Mississippi, 2010-Present
- AAHPERD member, 2004-2008
- ASU Physical Education Majors Club, 2004-2007

- College basketball player, Lenoir-Rhyne University, Hickory, NC, 2002-2004

### Job Experience

United States Army Officer, Second Lieutenant Finance Corps, May 2012

43<sup>rd</sup> Sustainment Brigade, Fort Carson CO

Manager and Associate Director of Operations, 2002-2010

Pro-Am Sports and Memorabilia, Boone, NC

### Awards and Scholarships

- US Army Leadership Training Course ROTC Academic Scholarship, Ole Miss, 2010-Present
- North Carolina Veteran Scholarship, Appalachian State University, 2004-2007
- NCAA College Basketball Scholarship — Lenoir-Rhyne University, 2002-2004
- Two-Time South Atlantic Conference Champion, 2002-2004
- Two NCAA Division II Regional Tournament Appearances, 2002-2004
- Eagle Scout Award, Boy Scouts of America, Troop 109, Spring 2002
- Eagle Scout Project: “Athletic Equipment Swap” to benefit Watauga Parks & Recreation.