Effects of a Paralympic Sports Camp for Service Members and Veterans with Disabilities

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Special Thanks!

• US Paralympics
  – Data collection
  – Conference

• Study participants
Outline

• History of Project
• Background
• Rationale
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History of Project

• 2008 US Paralympic Military Sport Camp
  – San Diego & Chula Vista, CA

• Technical report for US Paralympics

• Published in *Therapeutic Recreation Journal*
Background

- **Global War on Terrorism**
  - Operation Enduring Freedom (OEF)
  - Operation Iraqi Freedom (OIF)
    - Operation New Dawn (OND)

- **54,213 Casualties**
  - 17,514 (32.3%) OEF
  - 36,332 (67.0%) OIF
  - 367 (.6%) OND

Data: October 7, 2001-April 9, 2012
Source: Department of Defense
Background

- **Survival Rate**
  - 88.2% OIF, OEF, OND
  - 72.4% Vietnam
  - 62.3% WWII
  - 63.6% WWI

- **Why has rate increased?**

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**Top 5 Reasons for Casualty**

- **Explosive Device**: 63.3%
- **Unknown/Misc**: 11.9%
- **Gunshot**: 10.9%
- **Artillery/mortar/rocket**: 7.1%
- **Rocket propelled grenade**: 3.7%
Rationale

• Injuries include:
  – Brain injury
  – Spinal cord injury
  – Sensory impairment
  – Burns
  – Limb loss
  – PTSD
  – Depression
  – Many others...

• Typically injured service members are:
  – Young (75-80% < 30 years)
  – Males (96-100%)
  – Physically fit & active
  – Competitive

Source: PVA
Rationale

• Many recreation and sports programs:
  – US Olympics
    • US Paralympic Military Program
  – Non-profit organizations
    • Lakeshore Foundation (Homewood, AL)
  – Warrior Transition Battalions/Units
    • Brooke Army Medical Center (Fort Sam Houston, TX)
    • Wounded Warrior Battalion East (Camp Lejeune, NC) and West (Camp Pendleton, CA)
Rationale

• LIMITED research on effects of programs
  – Civilian
  – Service members

• Purpose: To examine the effects of a 3-day US Paralympic Military Sports Camp through the voices of injured service member participants to increase understanding about community-based sport, recreation, and physical activity (RS) for service members with physical disabilities.
Theoretical Base

• Self-Determination Theory (SDT)
  – “experience of freedom in initiating one’s behavior” (Deci & Ryan, 1985, p. 31)
  – Competence, autonomy, relatedness

• SDT and sports
  – Sports as experience, not the activity
    • Intrisically motivated, internally informational, internally controlling

• Phenomenology
  – Describing individual experience and meaning
Previous Studies
-Injured Civilians

- **Increased mobility, social integration, QOL, and self-esteem** after competitive w/c sport and winter sports clinic (Sporner et al, 2009)

- **Social support** is crucial in different life phases among men with SCI (Rees, Smith, & Sparkes, 2003)

- **Social context of adapted sport camp is transformative** (Ashton-Shaeffer, Gibson, Autry, & Hanson, 2001)
Previous Studies
- Injured Service Members

• Increased self-concept, specifically self-satisfaction among injured veterans (non-GWOT) after participation in a sports clinic (Cordova et al, 1998)

• Increased perceived competence and vigor and reduced negative mood (depression, tension, anger) among injured veterans who participated in an adapted sport and recreation program (Lundberg, Bennett, & Smith, 2011)
Methods

• Setting
  – US Paralympic Military Sports Camp
    • San Diego and Chula Vista, CA
    • 3 days
  – Sports offered
    • 25 events- Cycling, strength & conditioning, archery, volleyball, swimming, track and field, rowing
  – Approx. 35 military and non-military Paralympians and Paralympic coaches
Methods

• Participants
  – 10 of 50 injured service member participants
  – All injured during GWOT
  – 9 male, 1 female
  – 9 between 20-30 years, 1 between 30-40 years
  – 6 with amputations, 2 with brain injury, 3 with SCI, 1 with gun shot wound (non-specified), 1 with burns, 3 with multiple injuries
  – Time since injury: 3 months - 3 years
  – Time in RS since injury: 1st time - 1 year
Methods

Semi-structured, in-depth interviews

- How long have you been involved in sports and recreation since your injury?
- How has your involvement in sport and recreation affected your life since your injury?
- How did you find out about the camp, sport, and recreation or how did you get involved?
- What aspects of your life are better or worse since you have been participating in sport and recreation?
- What sports and recreation have you played before or what is your previous involvement?
- How has participation in sport and recreation influenced relationships in your life?
- How has participation influenced your motivation for other things?
- What is the most valuable aspect regarding your participation in sport and recreation since your injury?
- What are some things that help you participate in sport and recreation (e.g., accessibility, transportation, equipment, attitudes/knowledge of staff)?
- What could be improved at the camp?
- If you could speak with newly injured service members who are just entering rehabilitation, what would you tell them about participation in sports and recreation?
- Is there anything else you would like to add or anything you think it is important for us to know about changes in your life since your injury?
Methods

• Analysis
  – Peer review and examination (Merriam, 2009)

  Audio recorded & transcribed
  Researchers read transcripts independently
  Identified common themes
  Themes compared between researchers
  Linked to theories to provide insight
Results

• 7 Themes:
  1) Perceptions of disability and normalization
  2) Finding motivation
  3) Experiencing relatedness and social connection
  4) Establishing connection with previous interests
  5) Improved health, fitness, and general well-being
  6) Improved sense of competence
  7) Increase autonomy
Results

- Perceptions of Disability and Normalization

• It has actually made me a better person. It has opened my mind, you know, I can look above my injuries. I’ll never get over what I have, but, it makes me not think about my injuries as much when I’m out here doing these things. I think it is mostly a change in myself. It is the way I perceive myself. I’m not negative about myself anymore, so I don’t have to be negative towards everyone around me, which just makes things so much easier. ~Adam, TBI/SCI, 1 year in RS

• Well there definitely are some dramatic changes, but no I’m still the same person just I get around a little differently. That is the only difference I can really think of. ~Luke, Bilateral AKA, 11 months in RS
Results

-Finding Motivation

• Motivation through participation
  – Motivation is better knowing you can still strive to be perfect at something...it does not matter what your condition is, there is a way that you can still carry on with yourself in that sport. Now I see my potential in so many other things that I never thought that I would ever have the chance to even do. Because of these sports, it is just very motivating, if nobody is motivated out of it then they need to be kicked in the butt...you need to wake the hell up, you know, this is here for you, nobody else but for you.  ~Sam, Bilateral BKA/Burns, 3 weeks in RS

• Motivation through social comparison
  – I’m not that motivated when I’m at home. When I’m around other people that have worse injuries than I have, you know, there’s nothing but motivation.  ~John, TBI/SCI, 2nd time in RS
Results

- Relatedness and Social Connections

• Relatedness
  – Making friends was definitely one thing....its people that you would like to keep in touch with, see how they are progressing and you know, there are times that a lot of us are gonna be down or depressed. Everybody goes through it. But you keep in touch with them and help push them along and...give them motivation. It means a lot coming from people who are just like them than someone who does not understand. So this is one great organization, just to get all of us to become friends like a big family. And everyone feels more comfortable with each other ‘cause we have all been there in the same situations’. ~Sam, Bilateral BKA/Burns, 3 weeks in RS

• Social connections
  – My relationship with my wife and my kids has been outstanding ever since I started doing something productive with myself. I wake up in the morning feeling a hundred times better...it has brought my family so much closer than we were. ~Adam, TBI/SCI, 1 year in RS
Results

Connection with Previous Interests

• You know, it’s a great thing, it puts you out there in the world again, it puts you out there to do sports that you loved to do when you were so called “normal,” you know, when you had legs or when you had arms or whatever. You can still do these things. You know there is no reason to give up just because you got injured. ~Sam, Bilateral BKA/Burns, 3 weeks in RS

• So you just want to work towards doing as much as you can it’s like, “So what, it has to be adaptive?” It’s not a big deal, you’re still doing it. Skiing is skiing, snowboarding is snowboarding, surfing is surfing. Whatever, if it’s adaptive or not, it’s all the same. ~Chris, AKA, 4 months in RS
Results

- Improved health, fitness, & general well-being

• Just in the last few months, it’s been a very positive change. Becoming healthy is probably the most important thing... quitting smoking, which I did in July and just getting the cardio fitness back up. Getting my heart and lungs and everything back to where they need to be so that I don’t have to leave my kids stuck young. ~Chris, AKA, 4 months in RS

• It is a great way to exercise, of course, sports is. Some good can come out of it or ends up to be a good way to stay in shape. ~Sandra, Bilateral BKA, 3 days in RS

• Most valuable... is just bettering myself, attitude, and physical wise in recreation. ~Adam, TBI/SCI, 1 year in RS
Results
-Improved sense of competence

• We find something, we try it, we find out we can do it and then we like it….You get more active and you want to do what you can do. ~Chris, AKA, 4 months in RS

• Just knowing that I am able to do the same things that I use to do before, it’s always a good thing, A good feeling. Well for me…I guess it is the whole, just knowing that I can. ~Eric, BKA, 1 year in RS
Results

-Increased autonomy

• I ran for PT (physical training) tests because I had to. But now that I can’t, I really want to….It’s something you want to do as opposed to something that you have to do. ~Chris, AKA, 4 months in RS
Discussion

• Self-Determination Theory (SDT)
  ✓ Relatedness more evident than competence & autonomy
    • Limited choice by commanding officer
    • Limited opportunity for RS prior to camp

• SDT and sport
  ✓ Intrinsic motivation: enjoyment & continuity
  ✓ Internally informational: challenges & continuity
  ✓ Internally controlling: compare skills & adjust motivation
Discussion

• Social Comparison Theory  (Festinger, 1954)
  – Unexpected explanatory theory
  – Evaluation of abilities or opinions through comparison of other’s abilities or opinions
    • Participants evaluated personal abilities to those with:
      – Similar injuries
        » Increased competition
      – More severe injuries
        » Perceived themselves as more competent and fortunate
  – Motivation to continue RS
Implications

• Positive aspects of camp
  – Provide opportunities for social interactions during and after program
  – Staff and coach characteristics:
    ✓ Knowledge and expertise
    ✓ Shared competitive drive
    ✓ Pushed to overcome challenges
    ✓ Paralympians
    ✓ Injured service member Paralympians
Implications

• In addition to consistent menu of activities, consider weekend clinics or one-day introductory events
  – Increased exposure to RS seemed to peak interests and realize their potential

• Other ideas???
References


References


Thank you!

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