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The Interaction of Passion and Sport Type on Injury Among Collegiate Athletes

Allie Ostrander
Boise State University

Eric Martin
Boise State University

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The Interaction of Passion and Sport Type on Injury Among Collegiate Athletes

Abstract

Injuries disrupt an athlete's training, causing a regression in skill and fitness acquisition. Injuries can be acute (sudden) or chronic (due to overuse), and the causes of injury can be biomechanical, physiological, or psychological. One psychological aspect, sport passion, could have implications for athletic injuries. There are two types of passion, obsessive and harmonious, each with a different characterization and outcome. Obsessive passion is characterized by over-identification with the activity and an impulsive desire to participate, leading to maladaptive behaviors. Harmonious passion is characterized by a strong but controllable desire to participate, leading to positive outcomes. This study examined the relationship between injury prevalence and type, sport type (individual or team), and sport passion. The results showed that no significant differences existed between the type of injury and levels of passion. However, injured athletes had significantly higher levels of harmonious passion than non-injured athletes. Additionally, sport type was found to influence passion as team sport athletes had significantly higher levels of obsessive passion compared to individual sport athletes. These results suggest that the influence of passion is individualized and coaches must adapt training to fit each athlete.



The Interaction of Passion and Sport Type with Injury among Collegiate Athletes

Allie Ostrander & Eric Martin, Ph.D.

BOISE STATE UNIVERSITY

I. Introduction

Success in sport is in large part dictated by the amount of time and effort that athletes dedicate to development

- Athletic injury can derail an athlete's development by taking time away from sport
- Injuries can be acute or chronic
 - Acute: Sudden trauma with symptoms presenting almost immediately
 - Chronic: Repetitive trauma with symptoms slowly manifesting
- Predictors of injury include physiological, biomechanical, and psychological factors including sport passion and perfectionism
- Passion is defined as a strong inclination toward an activity; there are two types:
 - Obsessive Passion: Athlete feels compelled to participate regardless of safety or current condition due to over-identification with the sport
 - Harmonious Passion: Athlete enjoys participation, but is in control of this desire
- Perfectionism can manifest in multiple ways with some being positive and some negative
 - Adaptive perfectionism: Organization, personal standards
 - Maladaptive perfectionism: Perceived parent pressure, doubts about actions, concern over mistakes, and perceived coach pressure
- RQ1: Do athletes' levels of obsessive and harmonious passion influence rates of acute and chronic injuries in student-athletes?
- RQ2: How does sport type (individual or team) influence the rates of acute and chronic injuries?

II. Methods

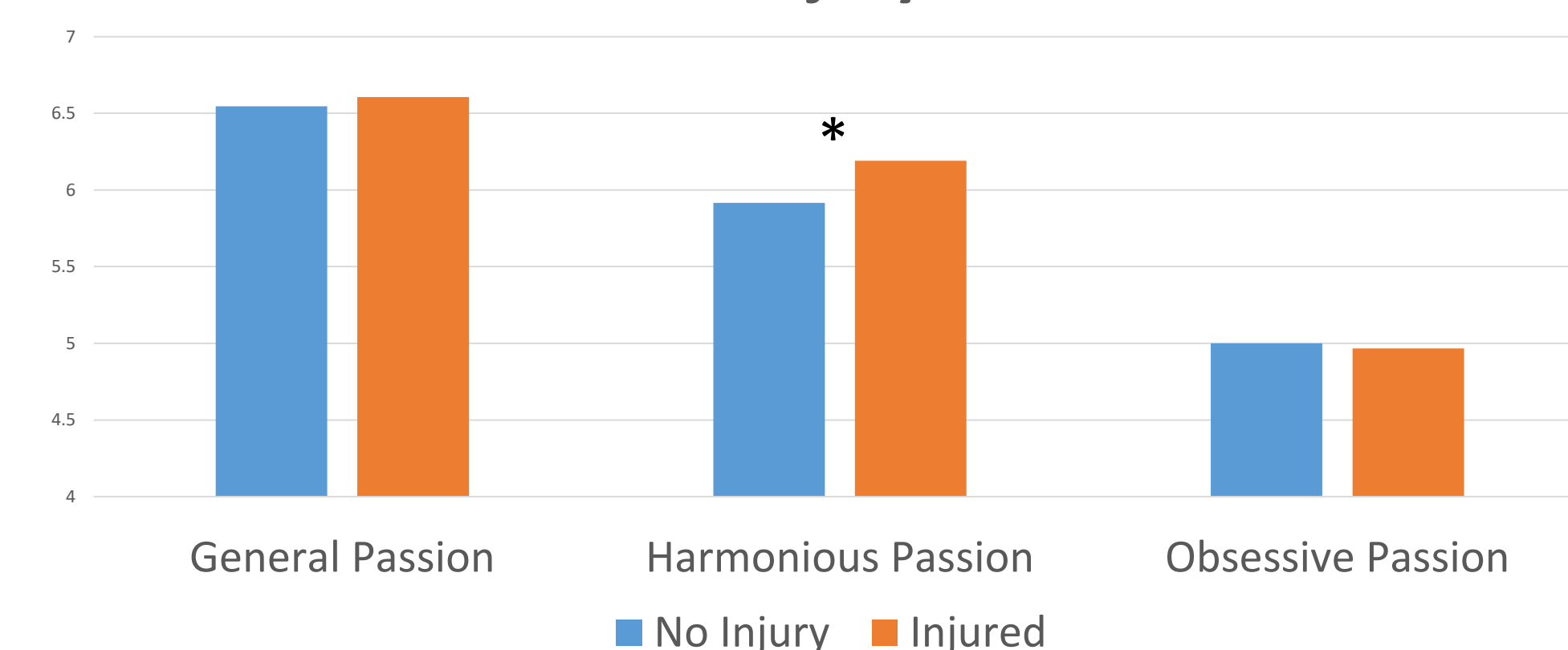
Self-report questionnaires distributed during compliance meetings

- Measurement:
- Passion Scale: Assesses general, obsessive, and harmonious passion.
 - Perfectionism: Assesses adaptive and maladaptive perfectionism
 - Injury: type of injury, duration, and treatment adherence
- Who: 264 Boise State varsity athletes
- 189 female and 73 male
 - 90 with full scholarship, 97 with partial, and 45 with none
 - Variety of sports

Site	Acute injuries	Overuse injuries
Bone	Fracture Periosteal contusion	Stress fracture 'Bone strain,' 'stress reaction' Osteitis, periostitis Apophysitis
Articular cartilage	Osteochondral/chondral fractures Minor osteochondral injury	Chondropathy (e.g. softening, fibrillation, fissuring, chondromalacia)
Joint	Dislocation Subluxation	Synovitis Osteoarthritis
Ligament	Sprain/tear (grades I-III)	Inflammation
Muscle	Strain/tear (grades I-III) Contusion Cramp Acute compartment syndrome	Chronic compartment syndrome Delayed onset muscle soreness Focal tissue thickening/fibrosis
Tendon	Tear (complete or partial)	Tendinopathy (includes paratenonitis, tenosynovitis, tendinosis, tendinitis)
Bursa	Traumatic bursitis	Bursitis
Nerve	Neuropraxia	Entrapment Minor nerve injury/irritation Adverse neural tension

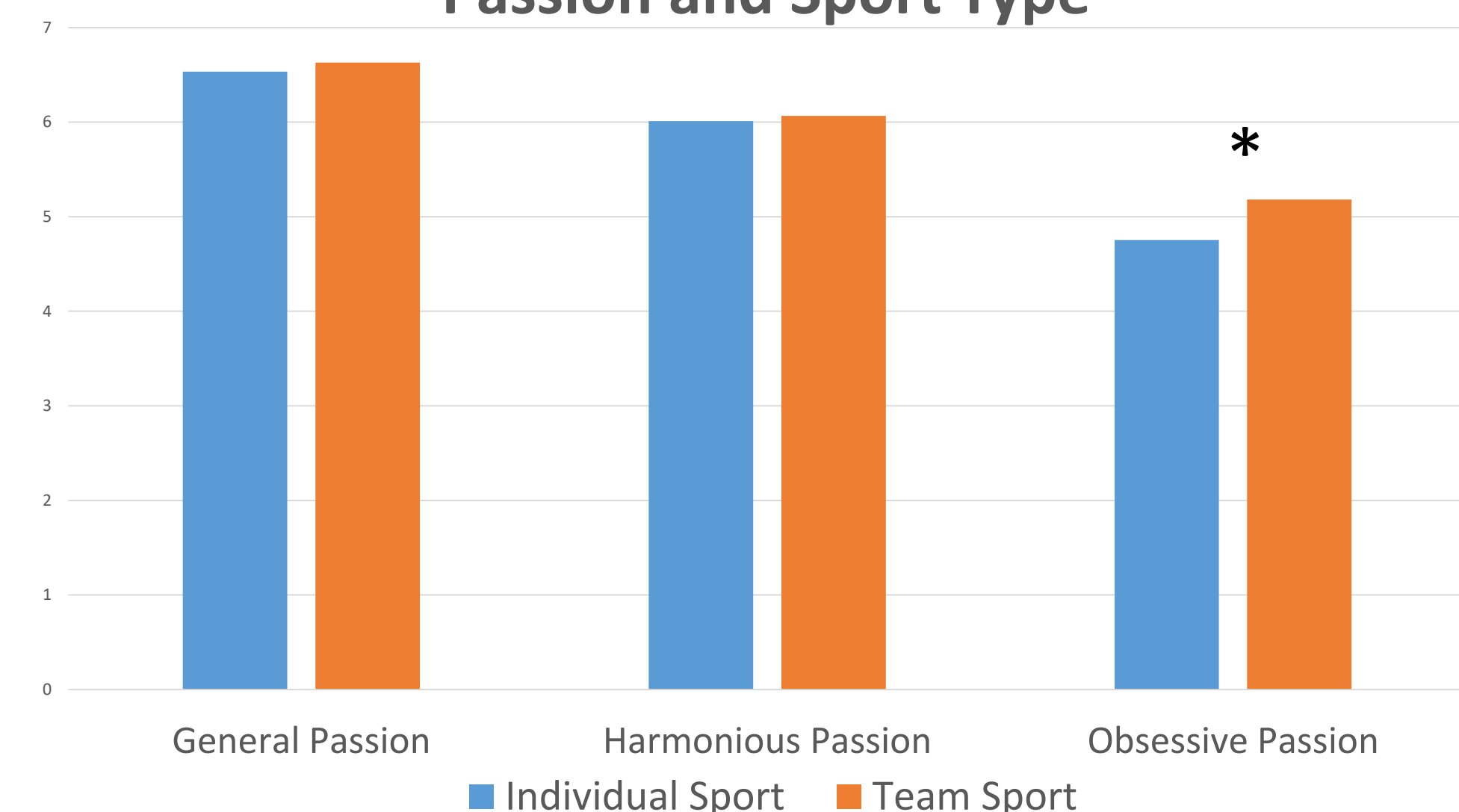
III. Results

Passion and Injury Prevalence



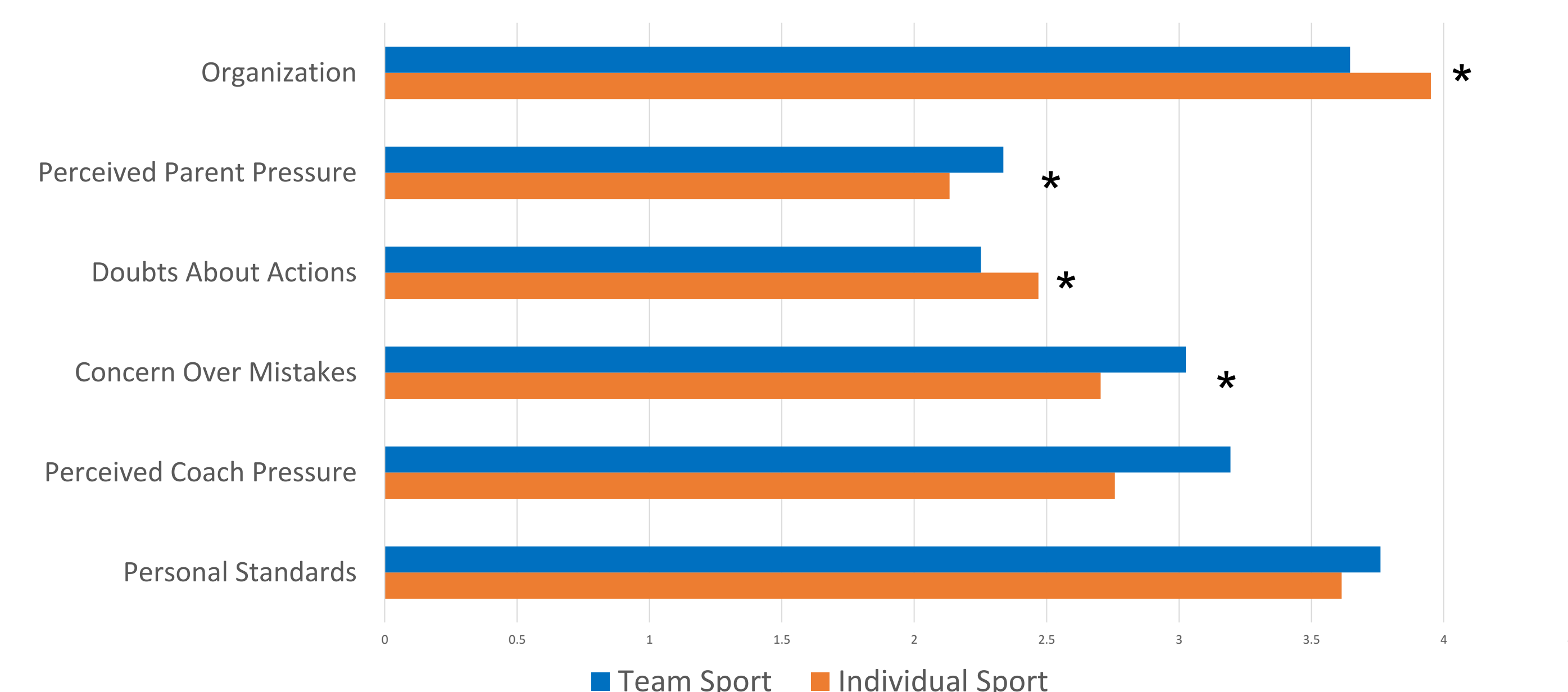
- Athletes with injuries were found to have significantly higher harmonious passion than non-injured athletes.
- There were not significant differences in obsessive or general passion between injured and non-injured athletes

Passion and Sport Type



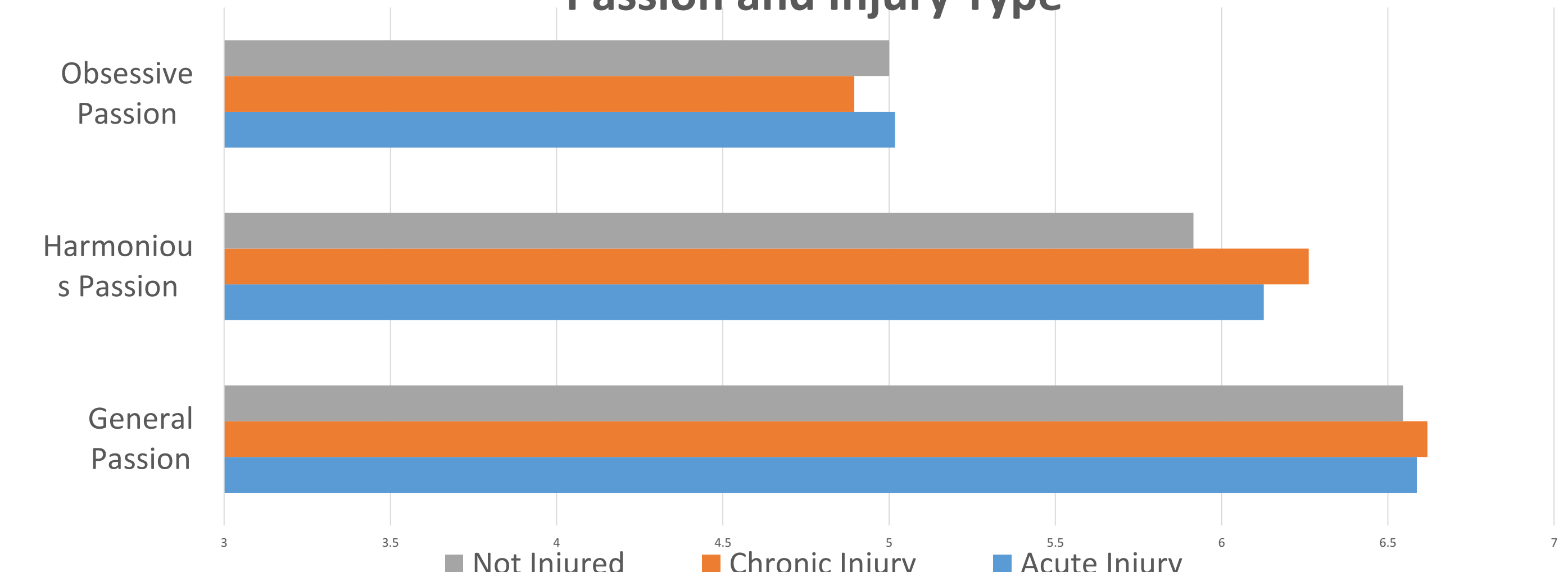
- Team sport athletes had significantly higher obsessive passion than individual sport athletes.
- There were no significant differences between individual and team sport athletes in other levels of passion.

Perfectionism and Sport Type



- Team sport athletes show significantly higher levels of perfectionism in perceived parent pressure and concern over mistakes.
- Individual sport athletes demonstrate significantly higher perfectionism in organization and doubts about actions.

Passion and Injury Type



- There were no significant differences in passion between injured and non-injured athletes.

IV. Conclusion

•Rip and colleagues (2006) found a relationship between obsessive passion and chronic injuries among competitive dancers.

- This study did not support this finding, indicating a relationship between harmonious passion and injuries instead.
- This suggests that the effects of passion differ depending on the specific sport and competition level.

•The results of a 2014 study by Akehurst and Oliver suggest a relationship between obsessive passion and risky behaviors, such as practicing through pain or in dangerous conditions.

- This result implies that the risk of injury would increase as levels of obsessive passion increase
- According to the present study, levels of harmonious passion, not obsessive passion, were elevated in those that were injured.

• Harmonious passion may be just as powerful as obsessive passion in predicting injury, especially in certain sports.

- Coaches can use this information to personalize training for athletes.
- Due to the individualized impacts of passion on injuries rates, it is important for coaches to spend time getting to know an athlete and assessing passion rates
- Athletes high in passion should be systematically evaluated for injury precursors such as tiredness, fatigue, aches, and muscle tightness, with training modified accordingly
- Collegiate athletes are highly passionate and driven in their sport. The coach's job is to reign in this passion and direct it toward successful competition instead of allowing it to lead to injury.

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