Parkour – It's all about the landing

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Faculty Disclosure

• In the past 12 months, I have no relevant financial relationships with the manufacturer(s) of any commercial product(s) discussed in this CME activity.

• I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.
Objectives

• Define Parkour
• Discuss Parkour Injuries
• Discuss future of Parkour
What is Parkour?

- Discipline of obstacle course training in which participants, or traceurs, attempt to traverse a course or environment in the most efficient way possible using only their bodies and surroundings.
- Not traditionally a competitive sport but rather a holistic training discipline.
- Growing number of competitions focused on either the esthetic aspects or timed trials through set courses.
Parkour videos

• https://www.youtube.com/watch?feature=player_embedded&v=-BnG_DClfPQ
• https://www.youtube.com/watch?feature=player_embedded&v=EnvbpwBzsre
History

• Classic obstacle courses in military training
• Modern parkour developed in the 1980s in France, primarily by Raymond Belle, and further by his son David Belle and his group of friends, the Yamakasi
• Popularized in the late 1990s and 2000s through films, documentaries, and videos featuring traceurs completing amazing feats of athleticism
• The movie Casino Royale opened with a chase scene involving very technical parkour techniques
George Hebert

- "méthode naturelle" ten fundamental groups: walking, running, jumping, quadrupedal movement, climbing, balancing, throwing, lifting, self-defence, swimming
- "The three main forces": energetic (willpower, courage, coolness, and firmness), moral (benevolence, assistance, honour, and honesty) and physical (muscles and breath). [1]
Raymond and David Belle

• Military orphanage at the age of 7
• He used the military obstacle courses in secret, and created courses of his own.
• David learned his father's way of training called "parcours" - many repetitions in order to find the best way of doing things.
• Training was not a game but something vital which enabled him to survive and to protect the people he cared about.
Yamakasi

- In 1997, David, his brother Jean-Francois and others performed in a firefighter show in Paris calling themselves **Yamakasi**
- Sébastien Foucan invented the term: "l'art du déplacement" (French for "the art of movement").
- A series of television programs in various countries subsequently featured video footage of the group
- David and Sébastien chose to leave the group, and used the name parkour
- The seven remaining members continued to use the term **l'art du déplacement**
Jump City

• The first American championship parkour competition.
• TV series premiere aired in 2011
• The show followed four teams participating in the Pro Parkour League (PPL).
• Several athletes competed in the subsequent season of American Ninja Warrior
World Freerunning Parkour Federation

- Championships April 2016 Las Vegas
  - Divisions - Adults, Parkidz, Young Pros
- Teaching Certification
- Use Gymnastics gyms
- Advertise Ninja training
Significant Injuries

- Case reports of catastrophic injuries and popular media accounts of deaths.
  - 2012, 24-year-old Russian woman fell to her death after attempting a jump between 2 rooftops during her 1st parkour lesson.
  - 2013, popular Russian traceur Pavel Kashin fell to his death doing a back flip on the edge of a 16-story building.
- Media commonly equates daredevil acts with the practice of parkour.
- Most traceurs would not attempt such risky maneuvers.
- Purists believe death-defying feats have nothing to do with the deliberate progressive physical training that is central to parkour practice.
Epidemiology

• Retrospective cross-sectional survey of 266 German traceurs
• 2 injuries/ subject/ year and 5.5 injuries/ 1000 hours
  – 58% upper extremity; 27% lower extremity
  – Head and back injuries were relatively rare.
• Most injuries were minor
  – 70% abrasions, 13% muscle, 6% dislocations, 5% soft tissue.
• 61% occurred during landing.
  – Overestimating (23%) and misjudging (20%)
• 12% used any type of precautionary equipment or measure.

Wanke et al. Parkour--“art of movement” and its injury risk. Sportveritz Sportschaden 2013 Sep;27(3):169-76
Parkour Jump Landing Strategy

• Traceurs land with safer technique when compared to recreationally trained individuals
• Landed predominantly on the forefoot
• Maybe beneficial to incorporate the technique into other sports

Standing RJ, Maulder PS. A Comparison of the Habitual Landing Strategies from Different Drop Heights of Parkour Practitioners (Traceurs) and Recreationally Trained Individuals. JSSE 2015 Nov. 24;14(4):723-31
Performance Characteristics

- Mean age: 19 +/- 4 yrs; 12% women, mean training: 8 hours/ wk
- Greater drop jump performance (65 +/- 1.5cm) vs. gymnasts (61 +/- 1cm)
- Greater counter movement jump (59 +/- 1.5cm) vs. power athletes (53 +/-1.5cm)
- Greater standing long jump (283 +/- 5cm) vs others (274 & 261 +/-7cm)

Perception of Wall Height

- Traceurs perceived the walls as shorter than did novices.
- Perception is scaled by perceivers' ability to act and is consistent with action specific account perception.

Resources
