



## Injury Occurrence in Street and Break Dance

Reina Teh, August 2020

Hip-hop is a culture and a lifestyle that is recognised internationally in the 21<sup>st</sup> century. Dance plays a very large part in the culture and in this article we will refer to them as street dancers/street dance (funk, old school Hip-hop and new school Hip-hop) and b-boys/b-girls or breaking. As the popularity of street and break dance increases, there is also a gradual increase in research that is made available for dancers part of this community (research papers available can be found in the reference list).

### Injury rates and cause of injury amongst street dance and breaking.

Studies showed that both street dancers and b-boys/b-girls sustained more injuries as compared to other dance styles with statistics showing 3.4 times the rate for modern dancers

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and almost twice as much as professional ballet dancers<sup>13,17</sup>. However, between street dance and breaking, individuals who practiced breaking showed to have experienced injuries at twice the rate as compared to other street dancers. The high injury rate identified in both street dancers and b-boys/b-girls can be associated with multiple factors:

## 1. Flooring

Street dancers and b-boys/b-girls often practice and compete on concrete flooring rather than sprung flooring<sup>12</sup> which is commonly used by other dance styles, such as ballet and contemporary. Sprung flooring absorbs and reduces the impact on the joints during dynamic movements.



Sufian / Flurry

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## 2. Lack of warm up, cool down and fatigue

Studies showed that the fatigue and lack of warm up<sup>13,17</sup> were the primary causes of injury occurrence in both street dancers and b-boys/b-girls. In addition to that, a study has shown the dance battle structure that can be found in both street dance and breaking is not conducive for dancers to remain warm throughout the session<sup>13</sup>. The reason behind it is due to the fact that dance battles consist of multiple rounds with alternating individuals. This opens up a window where dancers are merely spectating and not actively moving, when called upon their round these dancers bodies would have cooled down which may be susceptible to injuries. Read more about warm up in our previous article [here](#).

## 3. Physical requirements of dance genre.

Both street dance and breaking are very different from each other in terms of physicality, muscular strength required and technique<sup>12,13</sup>. For example, poppers have to contract their muscles repeatedly to show the “popping effect” which requires a lot of muscular control. On the other hand, b-boys/b-girls are commonly associated with acrobatic and power moves which requires a lot more muscular strength as compared to poppers. Street dancers are also often required to execute fast and complex footwork, deep squats, twists and quick change in direction in unnatural body positions<sup>2,11,17</sup>.

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#### 4. Chronic (overused) and/or acute (sudden injury, results of clashing or falling) injuries.

Chronic injuries are one of the most commonly reported injuries<sup>12,13,15</sup> across multiple dance genres, especially contemporary and ballet dancers. However, studies tell us that 84.6% of injury occurrence in street dancers and b-boys/b-girls are due to acute injuries.

Chronic and acute injuries identified among street dance and breaking are likely related to the lack of medical attention and dancing through injury. Dance injuries are also likely to be connected to poor dance technique, the lack of strength and balance<sup>17</sup>. Other contribution to chronic and/or acute injuries can also be the result of environmental and/or physical requirement of the dance genre as mentioned earlier in points 1 and 3.

## Common injury occurrence identified in Hip-hop dancers.

The studies available tells us that injuries in the lower extremities (from hips and below) are the most common across all street dancers<sup>12,15,17,18</sup> while b-boys/b-girls seem to experience more injuries in the upper extremity (area from hips and above)<sup>15</sup>.

Common injuries identified in the lower extremity<sup>12,13,17</sup> (identified in street dance and breaking)

- Knee (meniscal injury and patellofemoral pain)
- Hips (lumbar pelvic injuries)
- Foot (muscle / tendon injuries)
- Ankle (muscle / tendon injuries)



Sufian / Flurry

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Common injuries identified in the upper extremity<sup>5,12,13,17</sup> (most commonly identified in breaking)

- Spine (lumbar disc injury L5 / S1)
- Forearm (muscle / tendon injuries)
- Wrist (muscle / tendon injuries)
- Shoulder (muscle / tendon injuries)

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- Elbow

## Considerations to reduce injury risk

Attention to injuries often serve as a burden towards dancers of any form of dance genres, as it often equates to time away from practice and rehearsals. It is also about time for dancers to start thinking about taking care of their bodies as an instrument in order to prolong the longevity of their career in dance.

In order to reduce injuries, we must first have an understanding and knowledge of the type and cause of injury. This allows identification of injury prevention strategies for the dancers.

Here are some measures that Hip-hop dancers can look into:

- Practicing in a dance studio that is equipped with a sprung floor when possible, alternatively equip oneself with proper footwear.



Sufian / Flurry

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Studies tell us that dance floors are a causative effect of dance injuries<sup>8,14</sup>. The type of dance floor plays an important role for dancers across genres due to the repetitive force and loading of the joints while performing dynamic movements such as jumps. Sprung flooring can help the absorption of shock from the repeated dynamic movements on an individual's joints, reducing injuries. If proper floorings are not easily available to the dancers, one might consider investing in a better cushioned footwear to help reduce the load enforced onto the joints.

- Performing a proper warm up and cool down before and after practice

Warm up and cool down was one of the major factors that contributed to the injury occurrence in street dance and breaking. By performing a proper warm up, we are preparing our bodies for the upcoming activities hence, preventing acute injuries from happening. Read more about how to warm up and cool down [here](#). Alternatively, you can watch how to design a proper warm up [here](#).

- Look into cross training

Studies have shown that street dancers and b-boys/b-girls perform/practice more than one dance style and that in itself is part of cross training (to train in another form of sport

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or another type of exercise regimen). However, street dancers and b-boys/b-girls can look into other forms of cross training such as Pilates, Weight Training or High Intensity Cardio. The benefits of cross training can help with muscle imbalance, activating less used muscles, enhancing agility and preventing injuries. Read more about the importance of cross training [here](#).

End



Graduated with a MSc in Dance Science from Trinity Laban Conservatoire of Music and Dance, Reina is currently volunteering to write for the programme \*SCAPEdance Science as she hopes to share the knowledge and concept of dance science in Singapore. Reina is also a graduate from LASALLE College of the Arts, Diploma in Dance and has experience in teaching adolescents, youth as well as adult in ballet and creative movement.

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