

Cross-Sectional Study of Alopecia in B-Boys and B-Girls

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Introduction

- Breakin'/breaking, often miss labeled as "breakdancing" in the media is a dance that originated in the 1980s
- Dancers of this style are known as breakers, b-boys (male breakers), and b-girls (female breakers).¹
- Although breakin' has been around for over four decades little research has been published regarding the health of this dance population.
- Breakers experience significantly more injuries than dancers of other styles.²
- Due to the dance movements, a dermatological issue unique to this dance population is alopecia (figure. 1).
- This form of hair loss has been labeled "headspin hole" or "breakdancer overuse syndrome" of the scalp
- Breakers may present with a well-demarcated circular area of alopecia on the top of the head, a linear anterior-posterior pattern of hair loss, and/or an occipitoparietal pattern of hair loss³⁻¹⁰
- Alopecia is most likely secondary to chronic pressure and traction on the head that causes inflammation, hair loss, and loss of sensation.
- Dancers may describe this as a chronic palpable lump on the vertex of the head.^{3-6,9}
- The purpose of this study is to investigate if there is a difference in hair loss in breaking compared to other dance styles and the effects that it has on dancers.

Materials & Procedure

- A cross-sectional study was conducted among dancers, both breakers and other dancers, using social media. Facebook, Instagram, and Reddit were used as platforms to disseminate the survey.
- All dancers ages 18 and above qualified to take the survey.
- The survey was comprised of 34 questions that addressed participant demographics, hairstyles, hair types, hair length, hair loss, movements that involve pressure on the head, symptoms associated with hair loss, medical conditions, and the effects of hair loss on the dancers (concern for hair loss, hair loss affecting their dancing, and hair loss affecting them mentally.)

Results

- 141 dancers between the ages of 18-40
- 71 breakers (65 male, 6 female), and 70 dancers of other styles (15 males, 55 female)
- Other dance styles include: ballet, jazz, popping, locking, modern dance, house, ballroom, tap, studio hip-hop, K-pop, shuffle, contemporary, lyrical, Polynesian, bachata, belly dancing, krump, and tutting.
- Any dancers that performed breaking and other styles was classified as a breaker
- Data analysis on the number of dancers experiencing hair loss was performed with a t-test
- Questions: "Do you have any concerns about your hair loss?" (Figure. 2) "Does your concern for hair loss affect your dancing?" (Figure. 3) and "Does your hair loss affect you mentally?" (Figure. 4) analyzed with a chi-square test
- 45% of breakers reported experiencing hair loss compared to 24% in dancers of other styles.
- There was found to be a significant difference in dancers experiencing hair loss when comparing breakers to dancers of other styles (**p=0.0166**)



Figure 1: Breaking commonly involves movements that require standing, moving or rotating on the head.

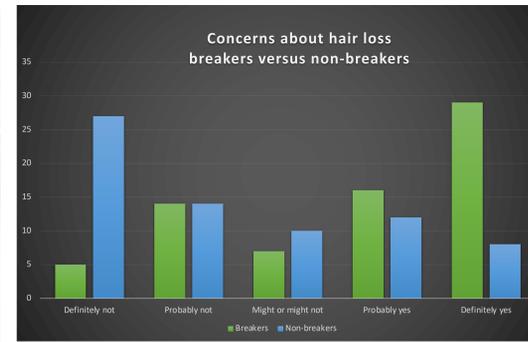


Figure 2: Comparing all breakers to dancers of other styles showed statistical significance in having concern for hair loss (**p=0.00001**)

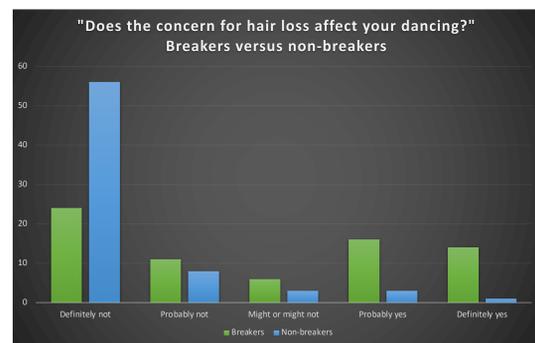


Figure 3: Comparing all breakers to other dancers showed a significant difference when asked if hair loss affected their dancing (**p=0.00001**)

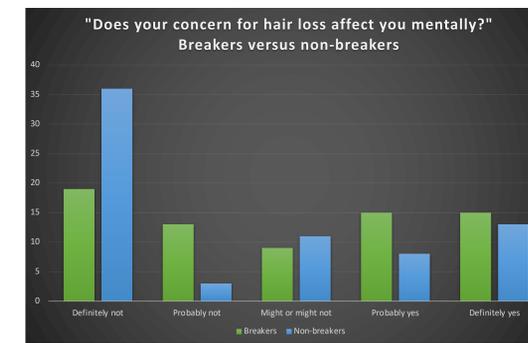


Figure 4: Comparing all breakers to other dancers showed that hair loss had a significant impact on them mentally (**p=0.0477**)

Discussion

- This study shows similar results to Kauther M.D. et al. that found 60.4% of breakers suffered from scalp overuse due to headspins, hair loss was reported in 31.1%, and "headspin hole" was reported in 23.6% of participants.⁴
- It is worth noting that when stratified by sex, there was no statistical significance in hair loss affecting dancers mentally in males (**p=0.589**). Similarly, there was no statistical difference in concern for hair loss (**p=0.107**) or hair loss affecting them mentally among the female dancers (**p=0.215**).
- Effects of stratification may be due to the gender difference based on the dance style. As most of the breakers were male (91%) while dancers of other styles were female(78%).
- Although alopecia is a cosmetic concern, hair loss has been found to have a significant correlation with emotional, mental, and general health.¹¹⁻¹³
- Hair loss may affect dancers physically, mentally, emotionally and financially
- Barriers to treatment may include affording health care may be a barrier to seeing a physician. Other barriers may include lack of desire for treatment or being seen by the doctor, lack of understanding of their disease, stigma, skepticism, and attitudes about healthcare providers.¹⁴

Conclusion

- Alopecia is a significant concern in the breakin' community
- Alopecia disproportionately affects breakers more than other dancers
- Alopecia significantly affects the mental health and dancing of b-boys and b-girls
- Further research is needed to prevent, treat and support these dancers to preserve their physical and mental health.

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