

# Socioenvironmental factors and the birthplace effect: An exploration of community “sweet spots” in elite level basketball

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# The Birthplace Effect

- ❧ Contextual factors such as one's birthplace can indirectly influence **talent development** in sport (MacDonald & Baker, 2013)
- ❧ Past research on the birthplace effect have used factors such as city population and density as a proxy measure to determine the likelihood of future sport success (Côté et al., 2006; Hancock, Coutinho, Côté, & Mesquita, 2017; MacDonald et al., 2009)
- ❧ Professional sports had over-representations from **small to medium** sized cities
- ❧ Density has only been studied in European samples, yielding mixed results

# The Birthplace Effect

- ❧ Vierimaa, Hancock, and Budziszewski (2018)
  - ❧ Investigated city size and population density in United States collegiate/professional basketball
    - ❧ City Size: 250,000-999,999 inhabitants
    - ❧ Population Density: 1,000-4,999 inhabitants/km<sup>2</sup>
- ❧ Results show that there is a shift to larger communities relative to past research (Côté et al., 2006)
- ❧ Authors suggested that the next necessary step was to identify cities that fell within this “sweet spot” and better understand what is unique about them:
  - ❧ Socioeconomic factors
  - ❧ Availability of resources
  - ❧ Basketball culture

# Socio-Environmental Factors

- ❧ Previous research has investigated social and environmental factors' that impact sport participation:
  - ❧ Socioeconomic status (White & McTeer, 2012)
  - ❧ Temperature (Cappaert et al., 2008; Coris, Ramirez, & Van Durne, 2004)
  - ❧ Precipitation (Wagner, Keusch, Yan, & Clarke, 2019)
  - ❧ Availability of resources (Niclasen, Petzold, & Schnohr, 2012)
  - ❧ Basketball culture (Dagkas & Stathi, 2007)

# Purpose

- ∞ To explore influential socio-environmental factors of identified “sweet spot” cities

# Method: Data Collection

- ❧ City size and density data was obtained from Vierimaa and colleagues (2018) study to identify “sweet spot” cities
  - ❧ City Size: 250,000-999,999 inhabitants
  - ❧ Population Density: 1,000-4,999 inhabitants/km<sup>2</sup>
- ❧ Socio-environmental factors were retrieved via the United States Census Bureau, the National Oceanic and Atmospheric Administration, official city websites, and the YMCA official website

# Method: Data Analysis

- Over 100 cities fell within the density/size “sweet spot”
- 16 cities were randomly selected based upon an **extreme over-representation**
  - Example City: Charlotte, NC ( $n = 73$ )
- 16 cities were used as a comparison group given an **under-representation**
  - Example City: Lincoln, NE ( $n = 3$ )



# Method: Data Analysis

- ❧ Socio-environmental factors:
  - ❧ Median household income
  - ❧ Number of YMCA and organized recreation leagues
  - ❧ Proximity of professional/collegiate basketball programs
  - ❧ Weather
- ❧ Independent samples  $t$ -tests were used to identify differences between the two groups



# Results

- ∞ YMCA and recreational leagues were significantly higher in over-represented cities: ( $t(31) = 8.86, p < .001, d = 1.97$ )
- ∞ The representation of collegiate or professional teams in the over-represented were significantly higher than those who were under-represented: ( $t(31) = 5.53, p < .001, d = .56$ )
- ∞ Median household income and weather were not statistically different between the two groups

# Discussion

- ∞ Data suggests that over-represented “sweet spot” cities had more available resources (e.g., YMCAs, recreation leagues) to amplify participation (Belza et al., 2014)
- ∞ The presence of professional teams may drive interest in both sport participation and fandom
  - ∞ Psychological Continuum Model (Funk & James, 2001)
  - ∞ Presence of role models (Balish & Côté, 2013)

# Implications

- ❧ The present study identified two socio-environmental factors that are not only statistically significant, but that are also applicable
- ❧ Future directions can look at how practitioners can act upon some of these factors or provide opportunity to increase the likelihood of success in under-represented areas

# Thank you!

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