



Tempo Perception of Latin Music is Biased by the Speed of Accompanying Dance, even for Listeners Without Dance Expertise

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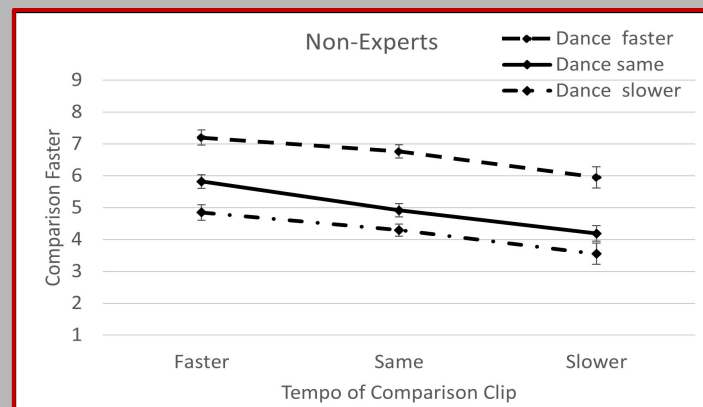
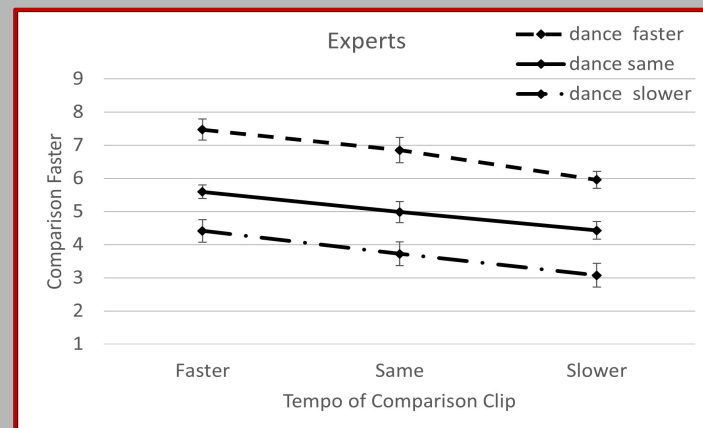
Background

- Music and dance are cross-culturally diverse.
- Individual music perception depends on age, cultural background and musical experience.
- Interaction with music (e.g. dancing) may change the way we perceive music.
- Besides tempo (beats per minute), music might “afford” certain speeds of accompanying dance.
- Is dance expertise necessary for dance movement speed to influence tempo judgments?

Method

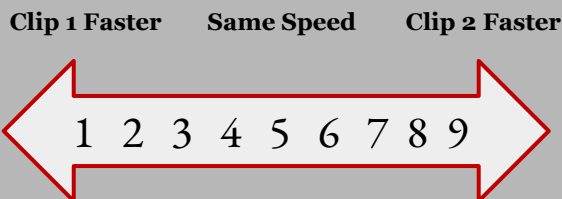
- “Was the comparison clip faster, slower, or the same as the standard clip?”
- Within subjects variables: Tempo in bpm (Faster, Slower, Same) and Dance Speed (Faster, Slower, Same).
- Between subjects: Experts could name accompanying dances, Non-Experts were not familiar with Latin dance music

Results



Stimuli

- Paired clips of Latin dance music (10 s)
- Dance speed Salsa & Merengue > Bachata & Cha Cha
- Questionnaire: demographics, musical, linguistic and cultural background.
- Latin Dance Expertise Measure



Findings

Listeners’ ratings accurately varied by tempo in beats per minute (higher ratings to comparison stimuli with higher bpm). The speed of the accompanying dance also influenced ratings. There were no group differences, despite a trend towards larger effects of dance speed in Experts than Non-Experts.

16 Experts

24 Non-Experts

Participants

Dance

Salsa
Merengue
Bachata
Cha Cha

145 bpm

130 bpm

115 bpm

Tempo