



Lighten Up - Postural Frame Instructions Affect Connection, Confidence, and Enjoyment in Partner Dancing

DEPARTMENT OF PSYCHOLOGY AND COMMUNICATION

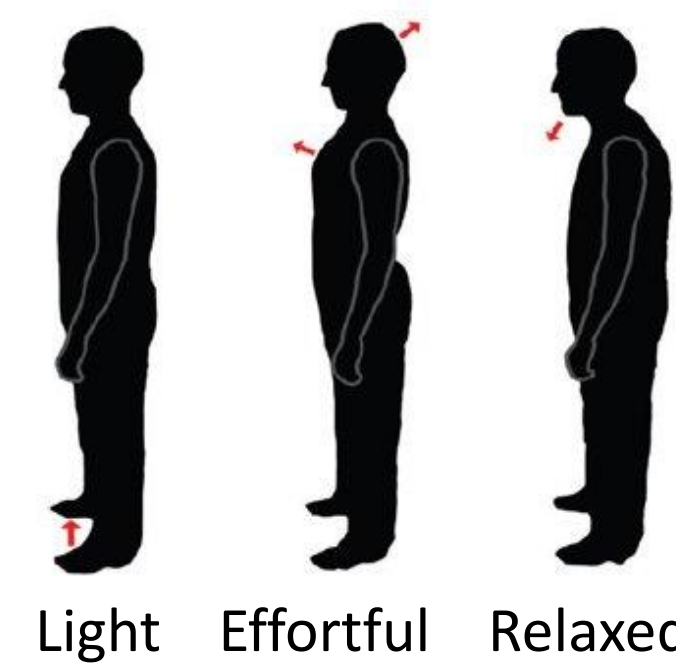
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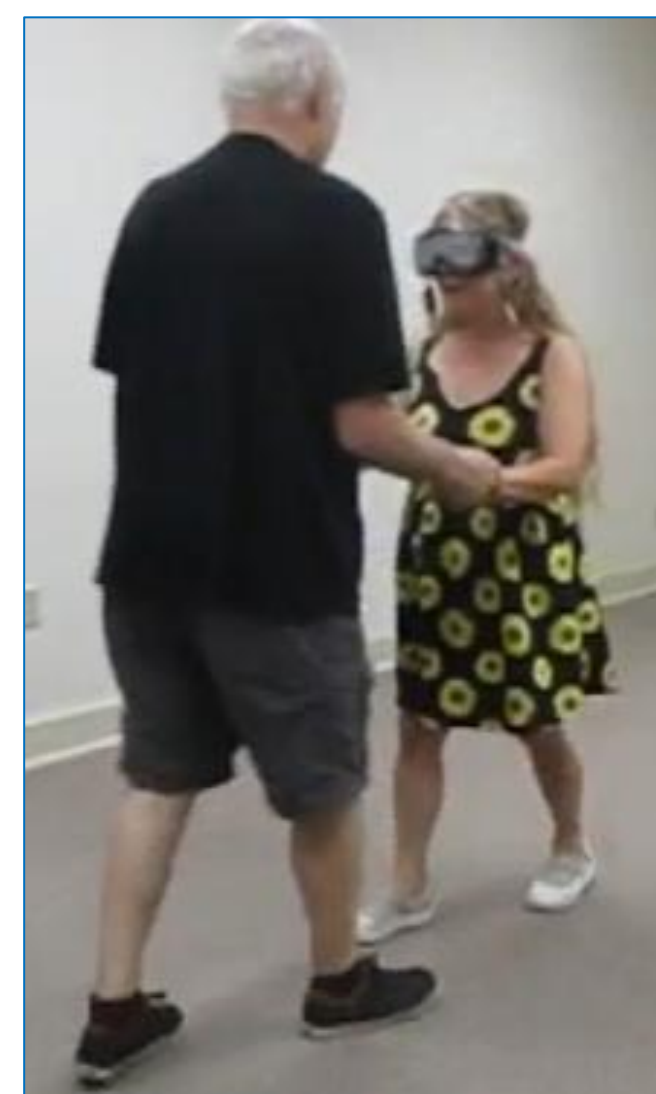
BACKGROUND & PURPOSE

- Social dancing provides older adults with opportunities for socialization and physical activity, reducing risks of loneliness, depression, anxiety, dementia, and premature death. [1-2]
- Posture is emphasized in social dance instruction, but research regarding the effects of postural instruction on dance is limited. Previous studies with older adults found that postural instructions emphasizing lightness improved balance, whereas instructions emphasizing effort interfered with balance. [3-4]
- Does a dancer's poise – their state of balanced muscular tension and readiness – translate through touch, affecting the coordination and emotional state of their dance partner?
- **Goal:** To investigate the impact of instructing dance Leads to embody different postural intentions on the experience and performance of both Leads and Follows.



METHOD

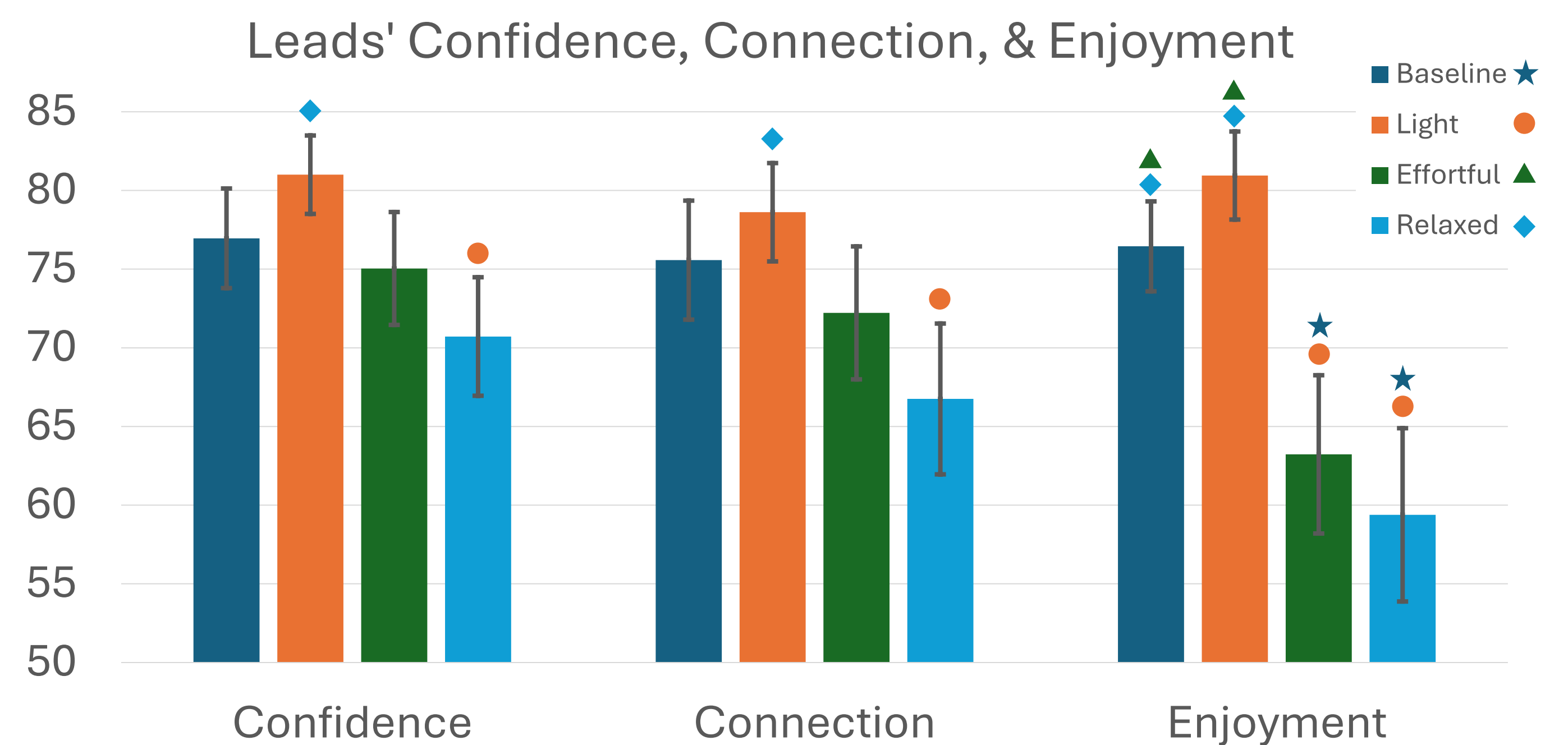
- **Design:** This study used a repeated measures design with a baseline and 3 experimental conditions counterbalanced with a Latin Square.
- **Participants:** We tested 29 dyads of healthy older adults (aged 60+) who had little to no partner dance experience. In each dyad, one participant was assigned as a Lead and one as a Follow.
- **Postural instructions:**
 - **Light:** Have the idea that you WANT to go up, but you are not going to do it with muscular effort. Let your bones send you up from the ground effortlessly so that your head floats up on top of your spine. Now notice that at the same time as you are going up, you can also expand into width. Your back widens and your arms extend out from your body in a fluid, springy way. You are a bird spreading your wings.
 - **Effortful:** Use muscular effort to pull yourself up to your greatest height. Pull your head up, lift your chest, and tighten all the core muscles in your torso. Tighten in the scapulas to bring your shoulder blades inwards and hold your arms steady and firmly in place, like your body is made of steel. You can think of holding a military posture, which looks really strong. Really work at it!
 - **Relaxed:** Soften in your collar bone area and stand as you would if you were feeling tired and you wanted to let yourself rest. Let your head and chest feel heavy and let everything settle a bit downward. Let gravity take over your arms, like your body is honey.
- **Protocol:** The study comprised training and testing.



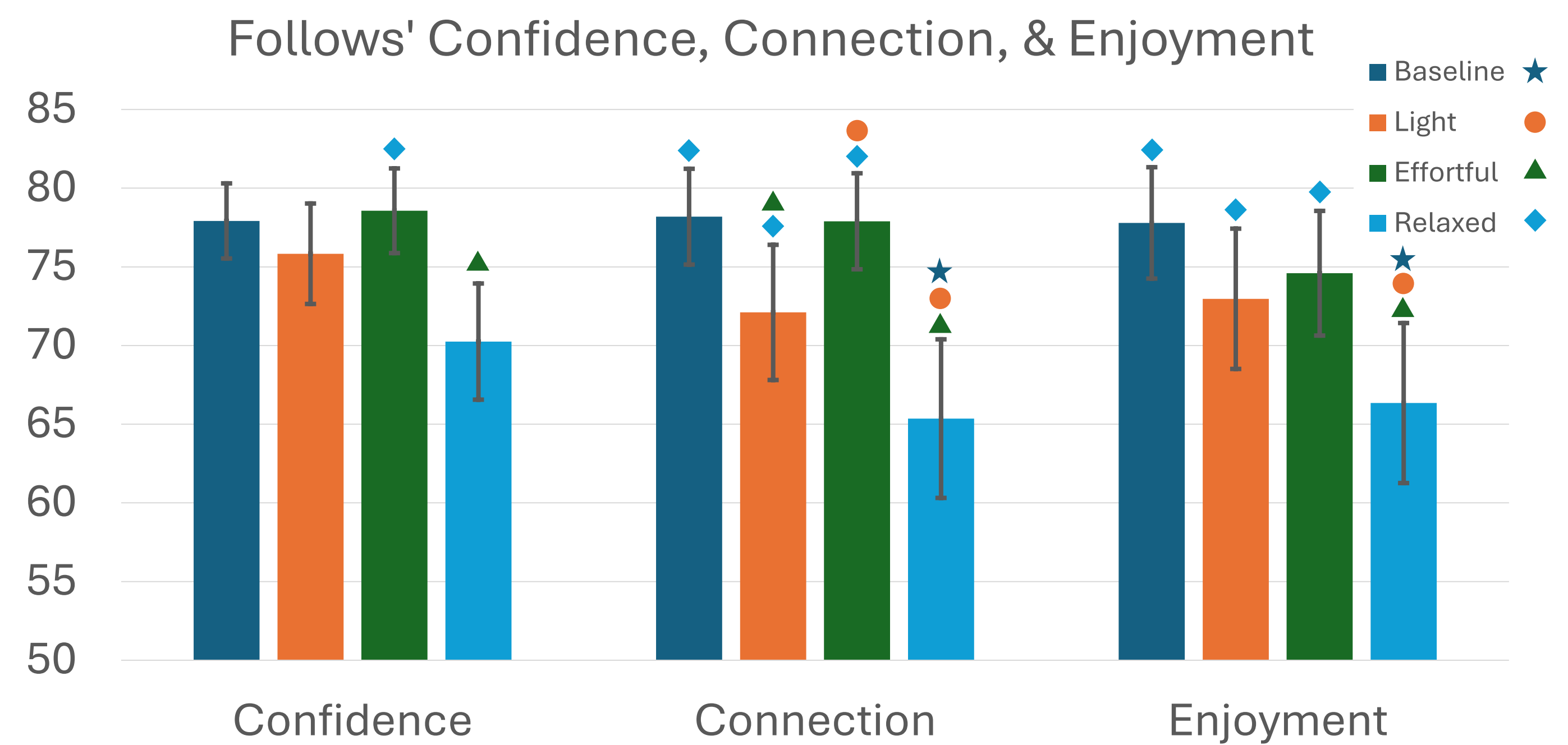
- **Training:** Participants learned a basic dance handhold and how to move with a partner across the floor, forward and backward. Leads were then taught to embody Light, Effortful, and Relaxed postural states while Follows practiced balancing and stepping.
- **Testing:** Each baseline trial (no postural instructions) was followed by counterbalanced trials using Light, Effortful, and Relaxed postural instructions. Trials lasted 30 seconds each. There were four trials in each condition. Follows wore vision-obscuring goggles.

- **Outcomes:** Participants filled out surveys to evaluate their connection, confidence, and enjoyment after each trial. Sessions were videotaped. Raters assessed the extent to which leads and follows were mirroring each others steps accurately. We analyzed using repeated measures ANOVAs with Bonferroni correction ($\alpha = .0083$).

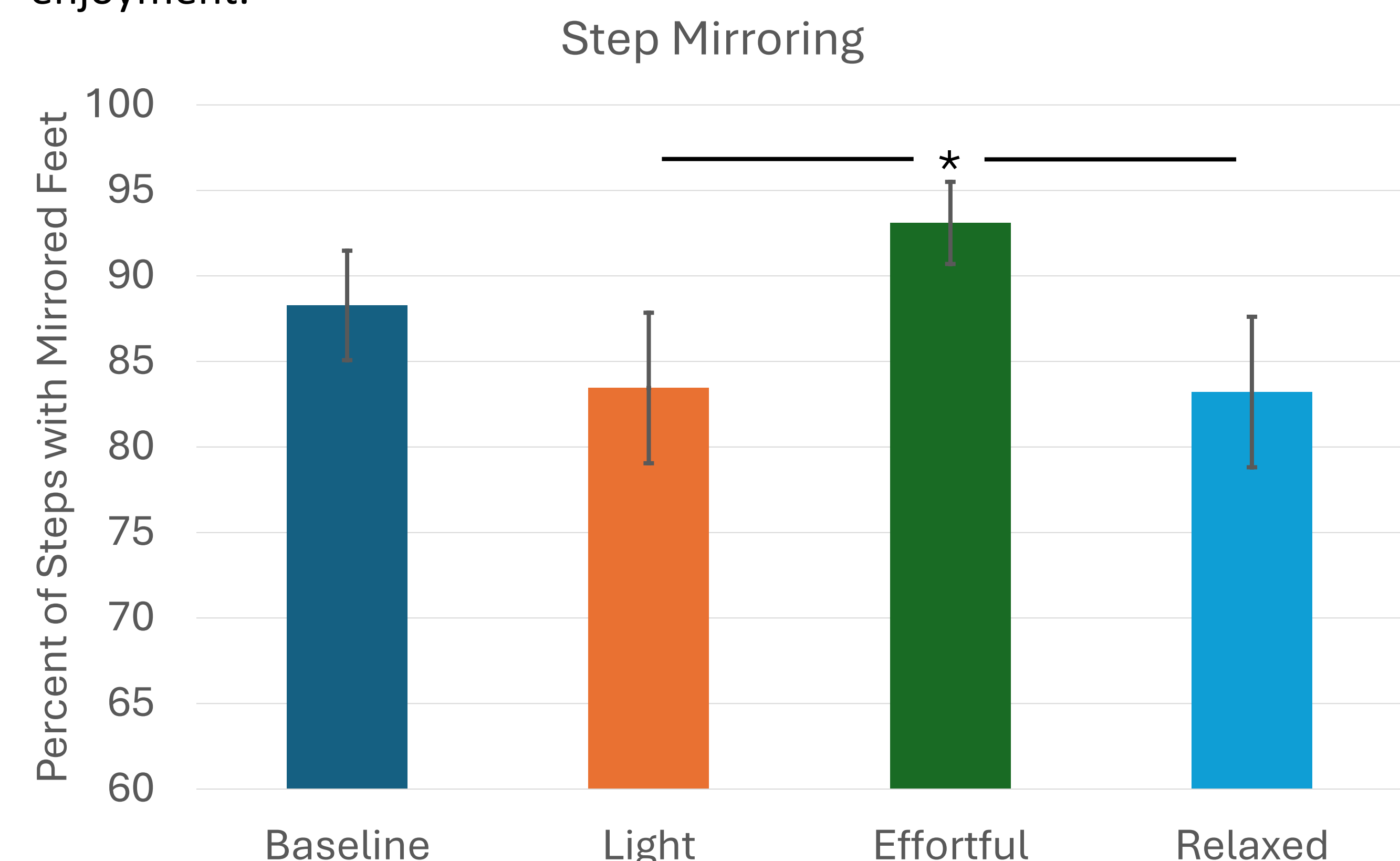
RESULTS



Leads, who received the posture instructions, rated the Light condition highest and the Relaxed condition lowest for connection, confidence, and enjoyment.



Follows, who were blindfolded and did not receive posture instructions, rated the Relaxed condition lowest for confidence, connection, and enjoyment.



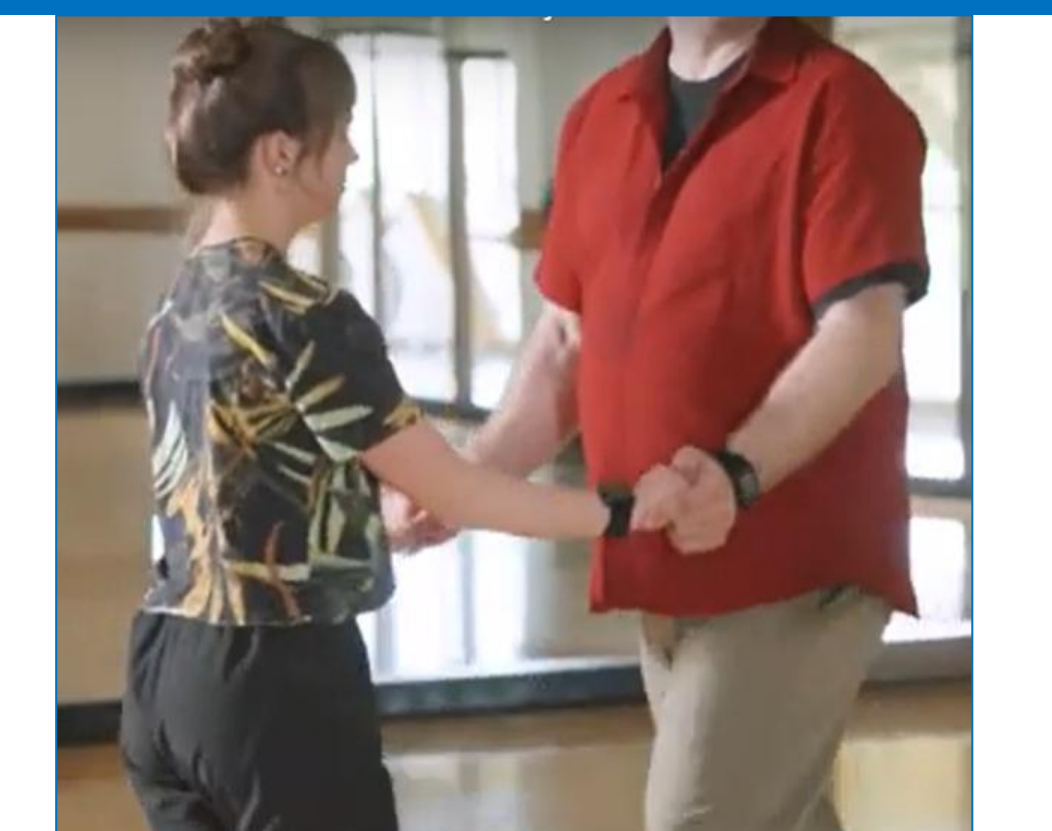
Participants matched steps the best during the Effortful condition. Inter-rater reliability exceeded 98.8%

DISCUSSION

- To our knowledge, this is the first scientific study investigating the effects of postural instructions on dance experience.
- Our main interest was how the postural intentions of Leads would affect the experience of Follows.
- Follows experienced the least connection, confidence, and enjoyment when the Lead used an intentionally relaxed approach, while Leads experienced the most connection, confidence, and enjoyment while embodying the Light condition.
- Follows were best able to mirror the steps of the Leads in the Effortful condition, which is also the condition they felt most confident in.
- The benefits from this line of work may extend to every interaction that involves touch, from parenting to coaching to medical care.

FUTURE DIRECTIONS

- Future studies will include accelerometers to evaluate the effects of postural intentions on rhythmicity and synchronicity in experienced social dancers.



REFERENCES

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- Colby Hillend, Audrey Covill, Marissa Bershaw, and Sarah Collette coded the videos for step mirroring.
- Colby Hillend and Dr. Rajal Cohen designed the study, analyzed the data, and prepared the poster.