Point	Evidence	Explanation	Link	
Strengths				
standardised procedure	-standardised 45-minute waiting period for all participants after oxytocin administration;  -experiment 1 - CID paradigm - each stimulus appeared for the same duration (1 second), followed by a fixed gaze point (0.5 seconds), then the animation with consistent presentation times (up to 3 seconds)	-ensures consistent experiences for all participants, meaning the results are more likely due to the manipulation of oxytocin rather than other varying factors  -enables reproduction of study by precisely specifying durations of tasks	increases reliability and thereby replicability of findings for verification by other researchers	
several controls	-participants were randomly assigned either oxytocin or a saline solution (placebo) with neither the participant nor the researcher knowing which solution was administered. This controls for potential bias from both participants and researchers regarding the expected effects of oxytocin  -participants received both oxytocin and placebo across the two lab visits, with the order switched between participants - counterbalancing. This controls for order effects, meaning any influence from the order in which the conditions were experienced (e.g., fatigue on the second visit)	ensures that any observed differences in preferred interpersonal distance can be attributed to the manipulation of oxytocin levels, rather than extraneous variables.	increases internal validity of results, establishing a clear cause-effect relationship	

Point	Evidence	Explanation	Link	
Weaknesses				
tasks lacked mundane realism	experiment 1 - CID paradigm - unlike real-world interactions where people consider various social cues, navigate dynamic environments, and have a history with the person they are interacting with  experiment 2 - room layout selection - in the real world, people interact in pre-existing environments that are not specifically chosen for a particular conversation. Additionally, people might adjust their posture and distance throughout a conversation based on the flow of the interaction, which was not possible in this fixed-choice task	limits the ability to conclude how oxytocin affects interpersonal distance in everyday social situations	reduces ecological validity of findings	
use of self-report to measure empathy	Interpersonal Reactivity Index (IRI) questionnaire used as a measure of empathy  -participants have answered in a way that they believed made them appear more empathetic, owing to social desirability bias  -further, the questionnaire focuses on cognitive aspects of empathy (perspective-taking) rather than emotional or behavioral components	could affect the study's conclusions about the interaction between oxytocin and empathy on interpersonal distance  -if empathy is not accurately measured, it's difficult to determine how it interacts with oxytocin	potentially reduces <b>internal</b> <b>validity</b> of findings	

## Lesson prepared by:

Jyotika Varmani (M.A. Psychology Honours, NET, SET, PGDHE)

CIE A-levels Psychology Teacher - Modern College, Mauritius

CIE A-levels Psychology Subject Expert - Podar International, Mumbai

8+ years experience in private tutoring for CIE, IB, AQA, Edexcel Psychology

Owner of 'Excelling Psychology' online

Visit Jyotika Varmani's complete profile at 
<a href="https://www.teacheron.com/tutor-profile/1KH">https://www.teacheron.com/tutor-profile/1KH</a>

