

LETTING OFF STEAM



Testing Restorative Effects of Playing Violent Video Games after Frustration



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THEORY

CATHARSIS EFFECT

"A reduction in aggressive arousal brought about through the performance of aggressive acts."
(Geen & Quanty, 1997, p. 5)

Engaging in virtual violence decreases aggression (Lee et al., 2021, Tyack et al., 2020)

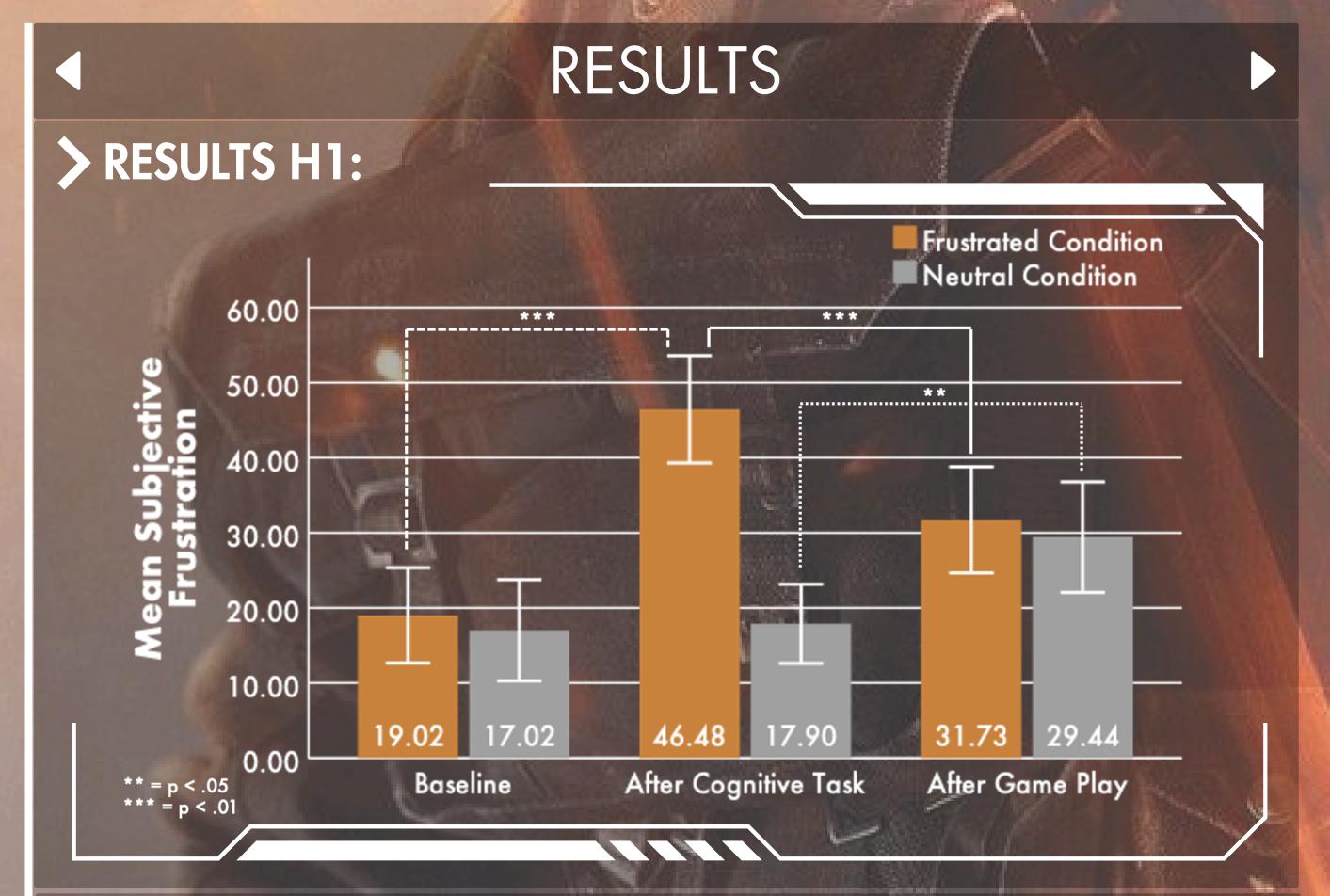
MOOD MANAGEMENT THEORY

Media can alter current mood state; individuals are inclined to choose & interact with media for mood improvement (Reinecke, 2016)

Playing violent video games can induce physiological relaxation (Wagener & Melzer, 2022)

HYPOTHESES

- H1:Playing a violent video game (VVG) leads to a decrease in subjective frustration after a frustration task.
- **H2**: After a frustration task, playing VVG leads to decreased aggressive behavior.
- **H3**: Playing a VVG leads to physiological relaxation.



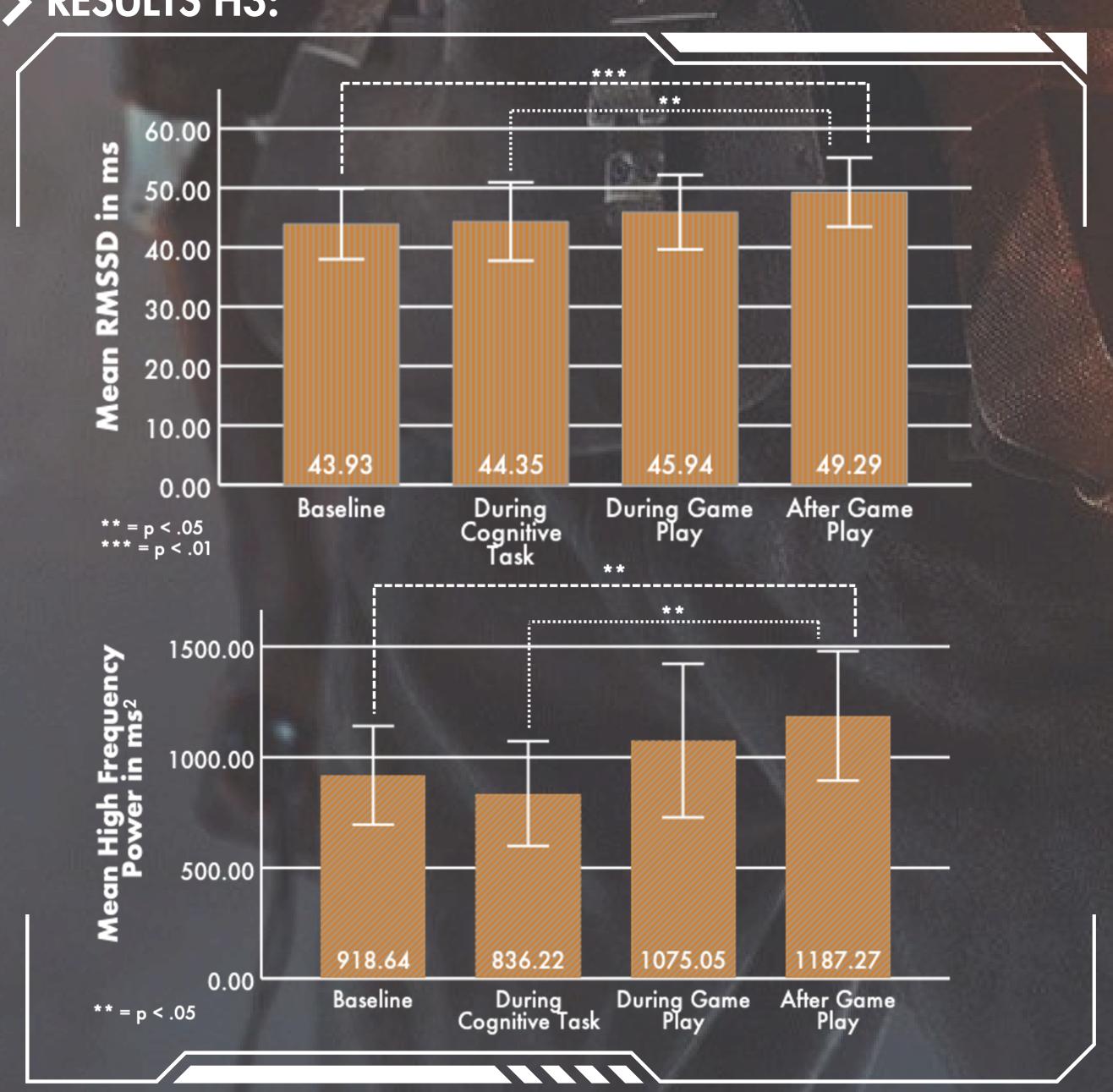
> RESULTS H2:

Frustrated participants displayed more aggression (M = 61.83; SD = 69.86) than neutral participants (M = 35.28; SD = 40.21) after playing the violent game. (Welch's F(1, 66.09) = 4.50, p = .038, η 2 = .05)

> RESULTS H3:

REFERENCES

https://doi.org/10.1037/0022-3514.54.6.1063



METHODS

PARTICIPANTS

N = 85 Age: M = 23.18 years (SD = 4.08; range: 18-39 years)

Gender: 61.2% female (n = 52), 38.8 % male (n = 33)

Gaming Experience: M = 3.33 h/week (SD = 5.65; range: 0–24 hours)

DVs: Subjective aggression, subjective frustration, aggressive behaviour, physiological relaxation

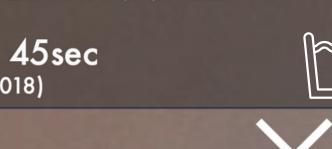
IV: Condition (neutral vs. frustration)

MEASURES AND PROCEDURE

INFORMED CONSENT DEMOGRAPHIC DATA GAMING HABITS



- 1st PANAS Watson et al., 1988
- VAS1 (VAS Williams et al., 2010)
- HRV T1
- PAIN SENSITIVITY QUESTIONNAIRE
- (PSQ Ruschewyh et al., 2009)
 COLD PRESSOR TASK 45sec
- COLD PRESSOR TASK 45sec (CPT Schwabe & Schächlinger, 2018)





- NEUTRAL COGNITIVE TASK
- HRV T2VAS2



EXPERIMENTAL GROUP

- FRUSTRATING COGNITIVE TASK
- HRV T2VAS2



VIOLENT VIDEO GAME (25 MIN.) HRV T3





- 2nd PANAS
- · VAS3
- MANIPULATION CHECK
- GAME PERCEPTION
- AGGRESSIVE BEHAVIOR (CPT time assigned to next participant)
- HRV T4





BATTLEFIE

DISCUSSION

- Playing a VVG after a frustrating task led to a decrease in subjective frustration
 (H1) → Mood repair
- After violent gameplay, frustrated participants were significantly more aggressive (H2)
- Greater levels of physiological relaxation after gameplay compared to baseline and during cognitive task, regardless of condition (H3)

LIMITATIONS

- Broader spectrum of VVG and frustrating tasks needed
- Only short-term effects → Long-term effects?
- Increase in frustration in control group after VVG → Perceived increase in complexity between neutral task and game play?





CONTACT



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