Virtual Emergency Assistance

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1. Introduction

- There is an ongoing debate in scientific community and society about the effects of violence in video games.

- It is feared that Violent Video Games (VVGs) facilitate violent behavior.

- Most studies are based on so-called **Shooters**.

- Role-Playing Games (RPGs) are nearly as popular as Shooters.

- In RPGs, the player most often represents a **hero.**

1. Introduction

- Situations of violent emergency assistance are typical for RPGs, but in spite of this were not the object of studies.

- **Violent emergency assistance** can be defined as an act of violently defending another person.

- How do these situations of emergency assistance affect the player? Do they increase post-game violent behavior, helping behavior or even both?

- Up to now, there exist no studies or theories about virtual violent emergency assistance.

1. Introduction

- **Violent Behavior**
  - **Social Interactionist Model**
  - General Aggression Model
  - Moral Management Model
  - Catalyst Model
  - Catharsis Model

- **Helping Behavior**
  - **Heckhausen's Model of Motivation To Help**
  - General Learning Model
  - Scheele and Kapp's Theory of Moral Courage (Zivilcourage)

1. Introduction

- Most studies on VVGs are based on the General Aggression Model (GAM), most studies on prosocial games are based on the General Learning Model (GLM).

- According to the **GAM**, VVGs increase violent behavior and reduce prosocial behavior.

- According to the **GLM**, in-game helping increases post-game helping behavior.

- Which predictions can be derived from these findings for violent emergency assistance?

2. Hypotheses

Violent Behavior

- **H$_1$**: Virtual violence increases violent behavior. (GAM)

- **H$_2$**: Virtual emergency assistance increases violent behavior.

- **H$_3$**: Virtual violence increases violent behavior more than virtual emergency assistance does.

Helping Behavior

- **H$_4$**: Virtual helping increases helping behavior. (GLM)

- **H$_5$**: Virtual emergency assistance increases helping behavior.

- **H$_6$**: Virtual helping increases helping behavior more than virtual emergency assistance does.

- Popular RPG „The Elder Scrolls IV: Oblivion".

- Players have to solve a quest; game starts with tutorial to teach controls.

UV A: Virtual Violence

- **Killing**: Bandits have to be killed in order to solve the quest.

- **No Killing**: Bandits cannot be killed.

UV B: Virtual Helping

- **Helping**: Woman in distress has to be helped in order to solve the quest.

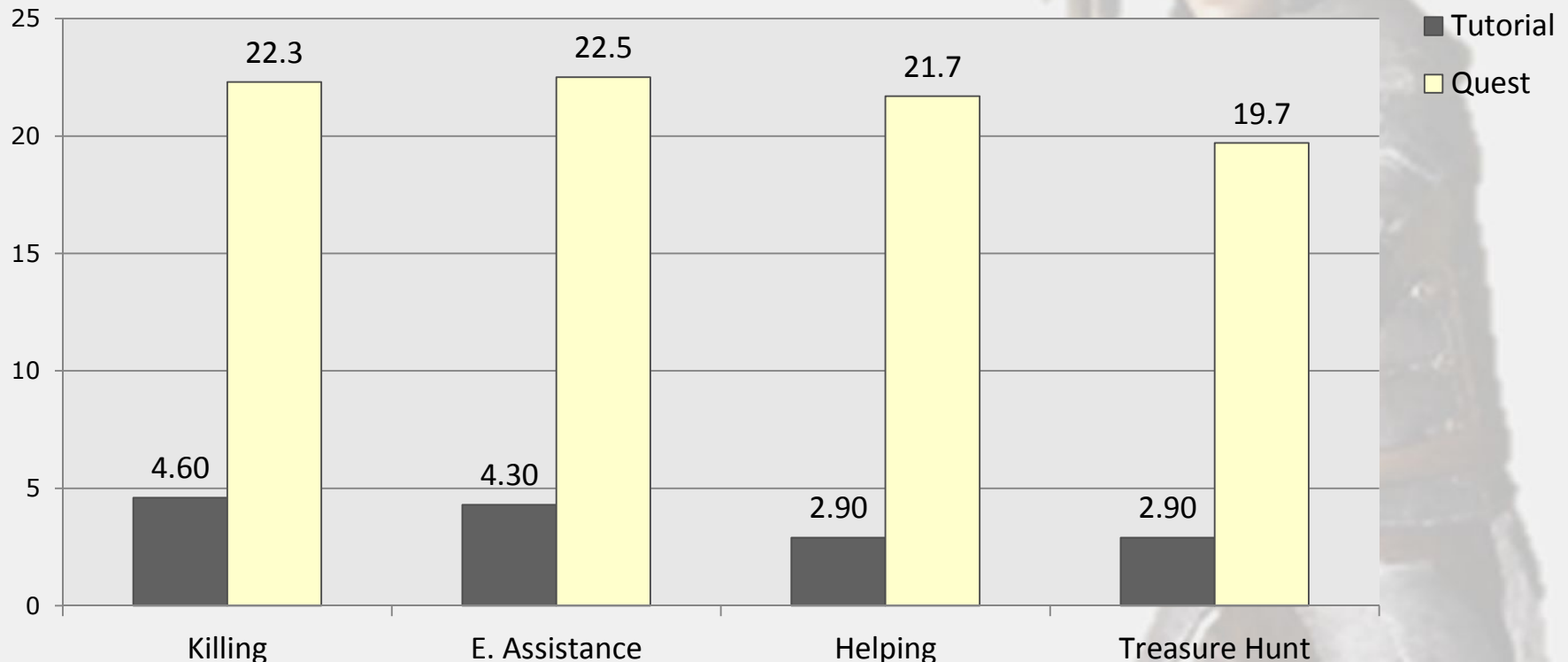- **No Helping**: Woman without distress cannot be helped.
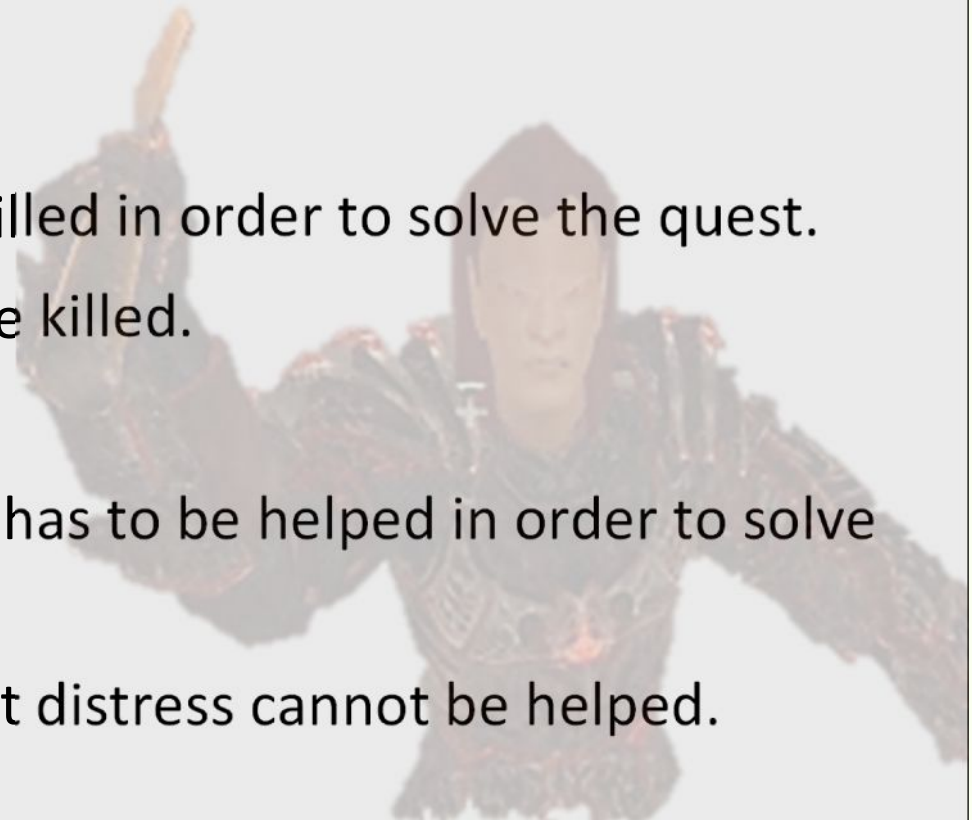
Operationalization   8

- Game ends when quest is solved.

- Average **game-time** comparable to other experiments (usually 20 minutes).

|	Killing	E. Assistance	Helping	Treasure Hunt
Tutorial	4.60	4.30	2.90	2.90
Quest	22.3	22.5	21.7	19.7

- Violent Behavior: **Competitive Reaction Time Task** (CRTT)

- DV: Intensity of the first trial (Bushman & Baumeister, 1998; Giancola & Zeichner, 1995).

- CRTT explained prior to playing Oblivion in order to minimize the interval between treatment and measurement.

- Helping Behavior: **Willingness to assist**

- DV: Number of puzzles solved without getting compensation.
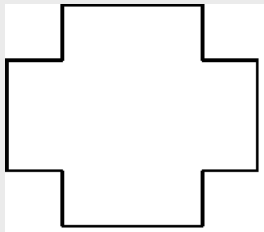
Easy   Medium   Hard
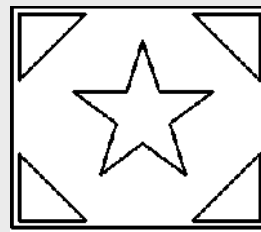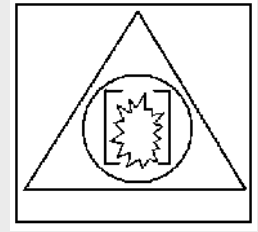
– Students of Osnabrück.

– Have to have experience with WASD-controls.

– A priori calculation of optimal sample size: $N = 180$.

– Factual sample size $N = 186$ ($n = 139$ university, $n = 47$ college).

$N = 186$	Killing	No Killing
Helping	E. Assistance ($n = 45$)	Helping ($n = 48$)
No Helping	Killing ($n = 45$)	Treasure Hunt ($n = 48$)

5. Methods

Deception
Confederate

Anamnesis
Interview

DV Violent B.
CRTT (Trial)

IVs
Oblivion

DV Violent B.
CRTT

Confounders
Questionnaire

DV Helping B.
Willing to assist

Debriefing
Interview
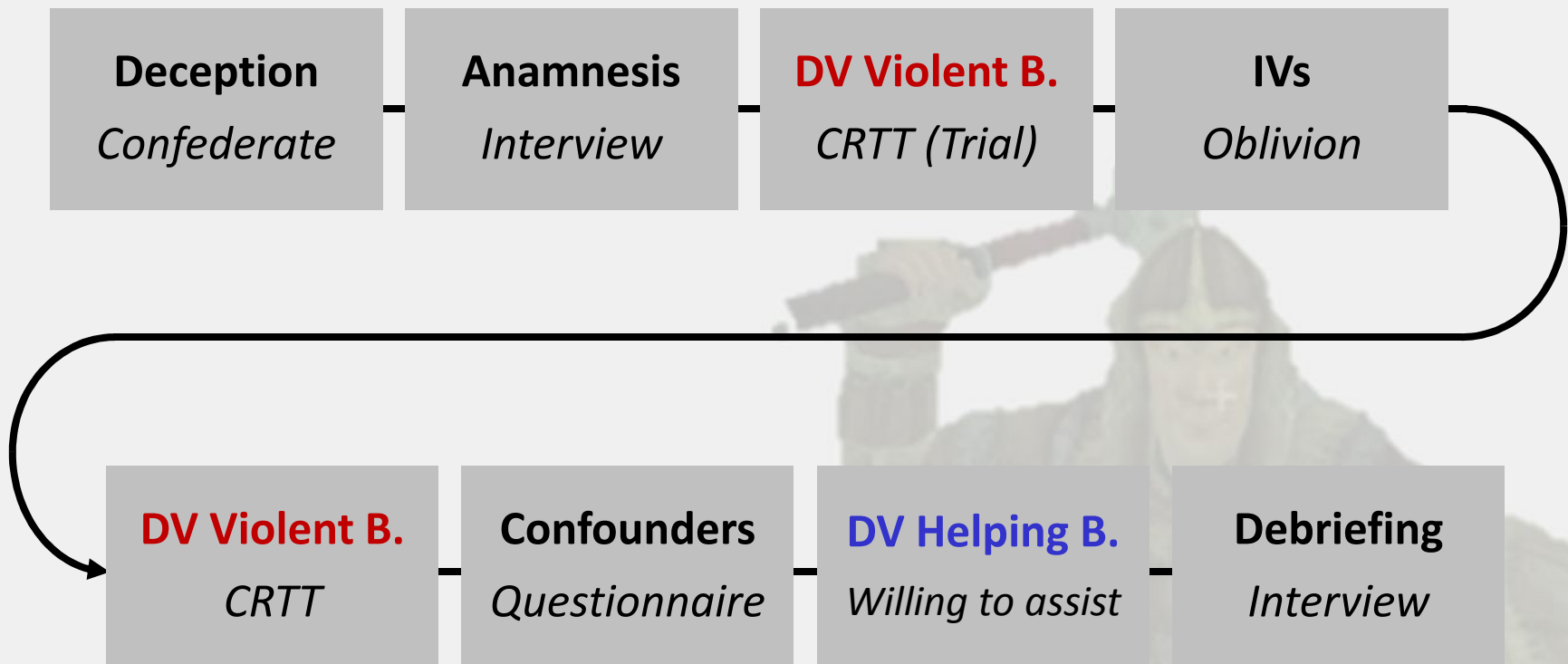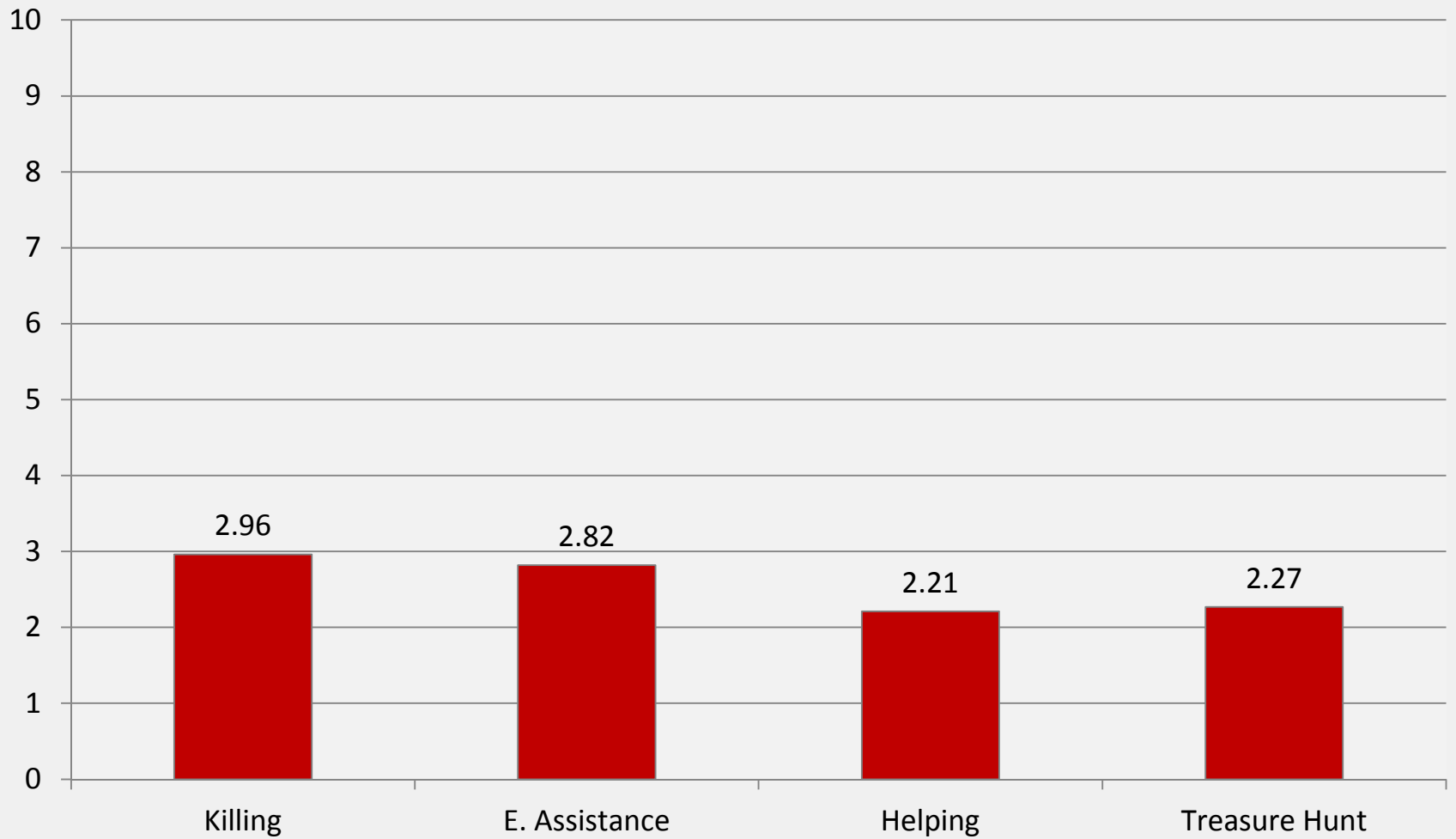
- Violent Content: (M_1=3.79 > M_2=1.79), t (153)=18.58, g=2.76***

- Helping Content: (M_1=3.04 > M_2=2.36), t (184)=4.75, g=0.70***
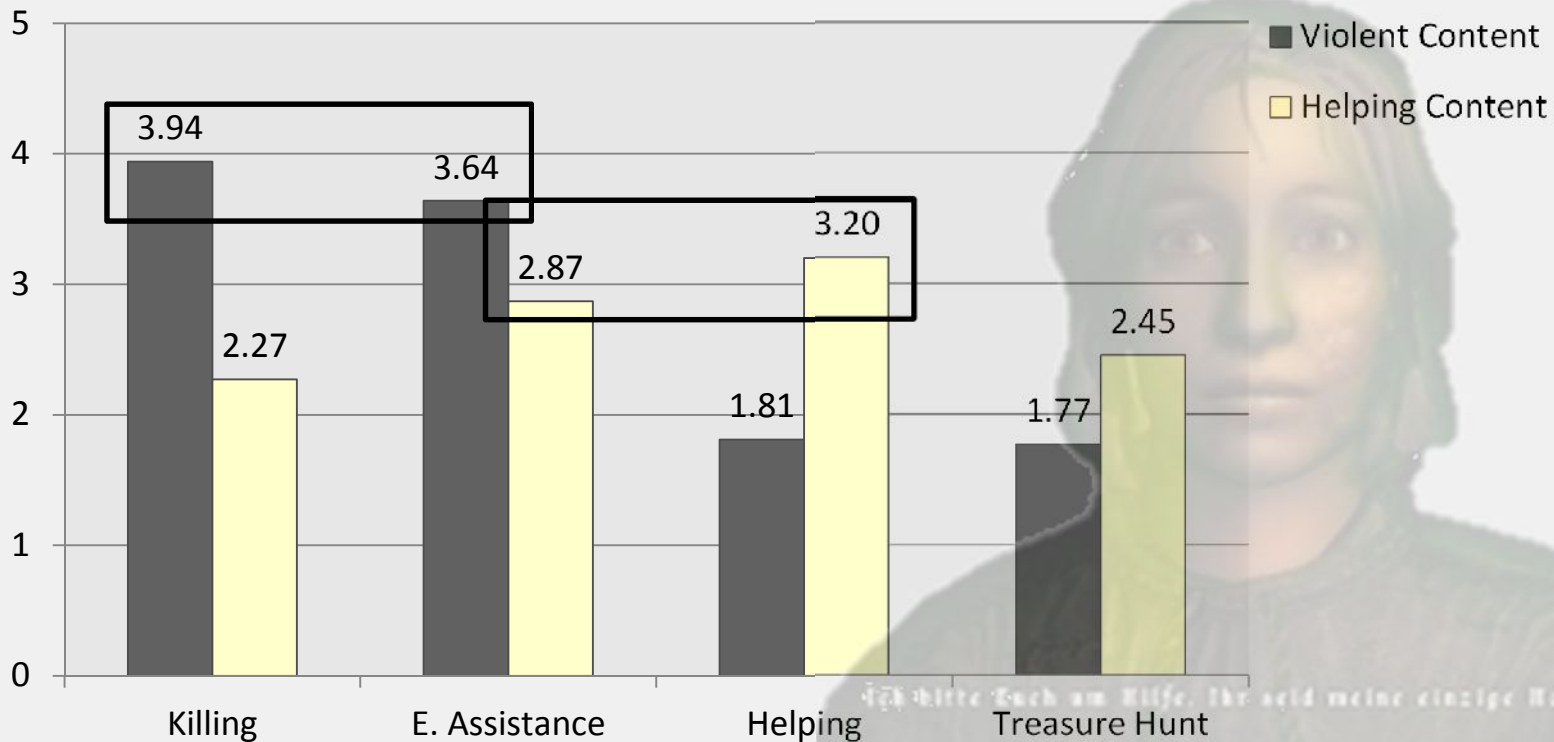
Violent Behavior

	Killing	E. Assistance	Helping	Treasure Hunt
Value	2.96	2.82	2.21	2.27

6. Results

H$_1$: Virtual violence increases violent behavior.

Killing > Helping: (M_1=2.96 > M_2=2.21), t (182)=2.14, g=0.46*

Killing > Treasure H.: (M_1=2.96 > M_2=2.27), t (182)=1.96, g=0.40*

H$_2$: Virtual emergency assistance increases violent behavior.

E.Assistance > Helping: (M_1=2.82 > M_2=2.21), t (182)=1.76, g=0.37*

E.Assistance > Treasure H.: (M_1=2.82 > M_2=2.27), t (182)=1.58, g=0.31

H$_3$: Virtual violence increases violent behavior more than virtual emergency assistance does.

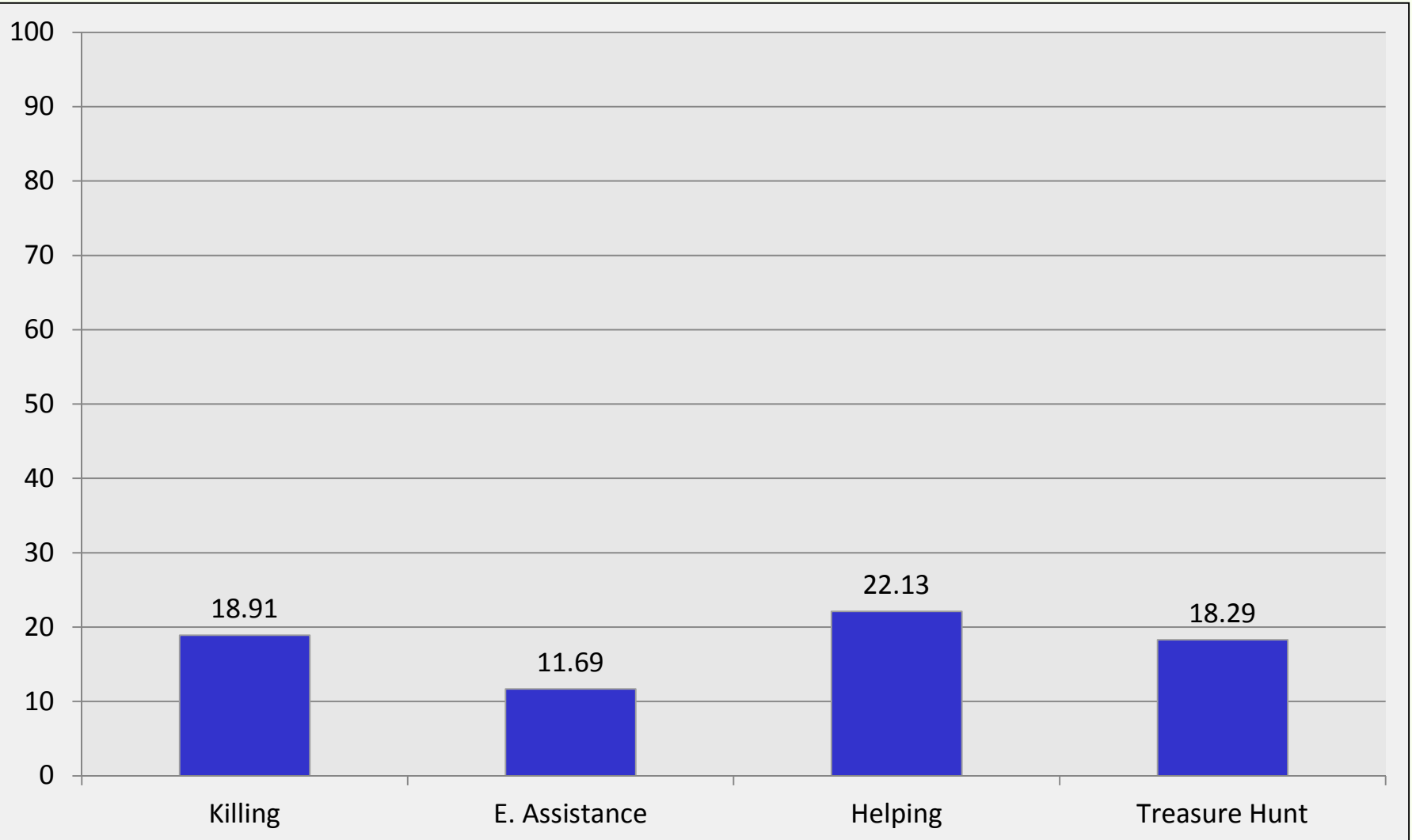Killing > E.Assistance: (M_1=2.96 > M_2=2.82), t (182)=0.38, g=0.07

Hedges g: .20 = small; .36 = meta-analysis; .50 = medium; .80 = large

6. Results

H$_4$: Virtual helping increases helping behavior.

> Helping > Killing: (M_1=22.13 > M_2=18.91), t (182)=0.92, g=0.18

> Helping > Treasure H.: (M_1=22.13 > M_2=18.29), t (182)=1.11, g=0.22

H$_5$: Virtual emergency assistance increases helping behavior.

> E.Assistance > Killing: (M_1=11.69 > M_2=18.91), t (182)=−2.06, g=−0.46*

> E.Ass. > Treasure H.: (M_1=11.69 > M_2=18.29), t (182)=−1.89, g=−0.42*

H$_6$: Virtual helping increases helping behavior more than virtual emergency assistance does.

> Helping > Treasure H.: (M_1=22.13 > M_2=11.69), t (182)=2.98, g=0.62*
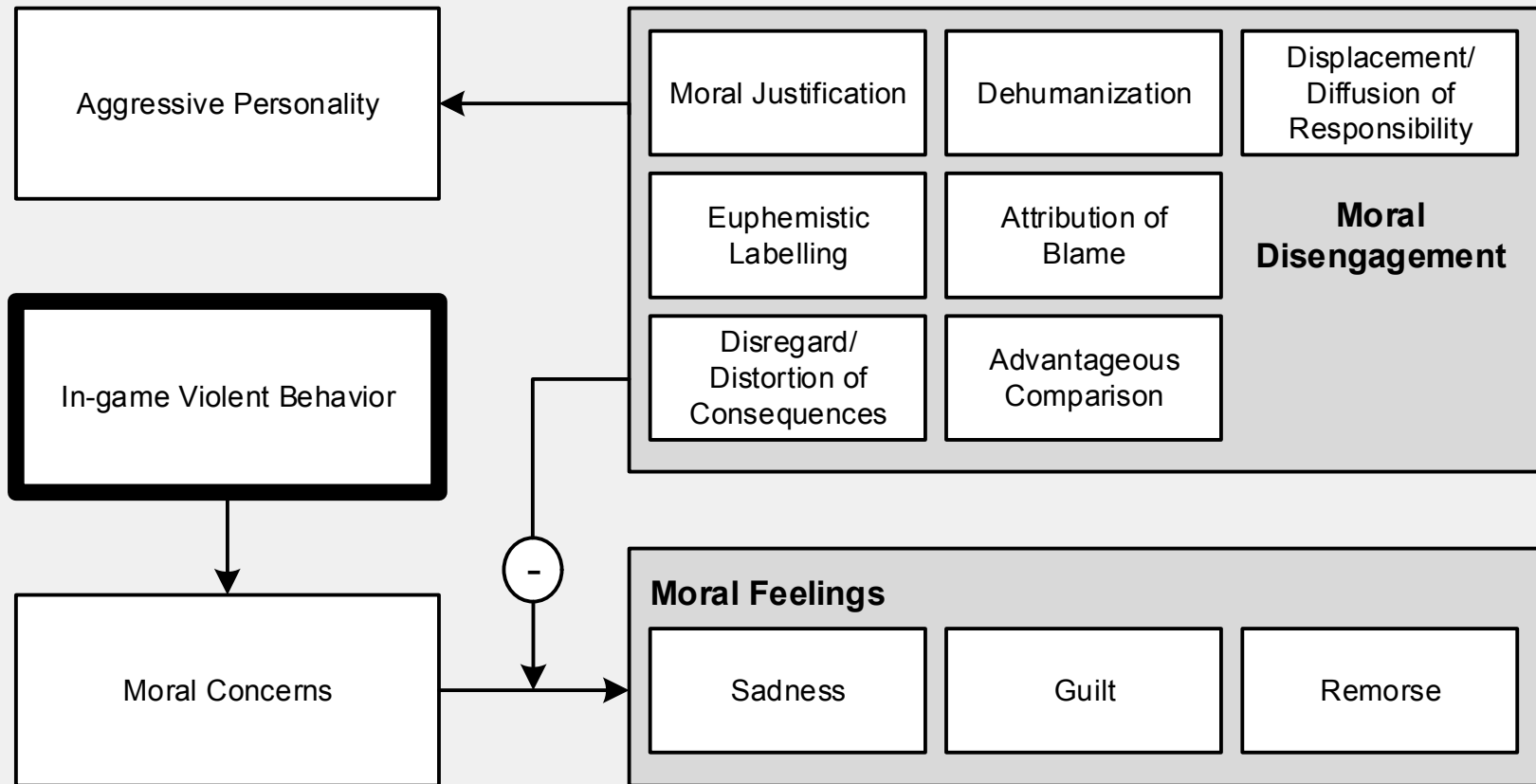

Hedges g: .20 = small; .32 = meta-analysis; .50 = medium; .80 = large

- Results in accordance with **preceding studies**.

- First insights about **emergency assistance**.

7. Discussion

- In video games, assisting a character in an emergency seems to undermine moral thinking (at least for a short amount of time)

- There is a risk that regular use of violent games could permanently reduce moral thinking.

- Do we have to shun from violent entertainment or can we **protect** ourselves from the negative consequences?

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8. Further Information

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8. Further Information

- Title

  - Virtual Emergency Assistance - The Effect of Virtual Helping, Aggression and Emergency Assistance on Helping and Aggressive Behavior

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