Are Humans Inherently Good or Evil?

Through the study of virtual simulations and games

Ethics, Morals & Empathy

- Ethics:
  - Set of personal/private standards
- Morals:
  - A more universal set of guidelines
- Empathy is key to defining a player's ethics
  - The way a player relates to others affects behaviour

General Player Behaviour

- Experimental studies have shown that violent video games:
  - Increase aggressive behaviours
  - Increase hostile expectations for others' behaviours
  - Decrease helping behaviour

Cognitive Process

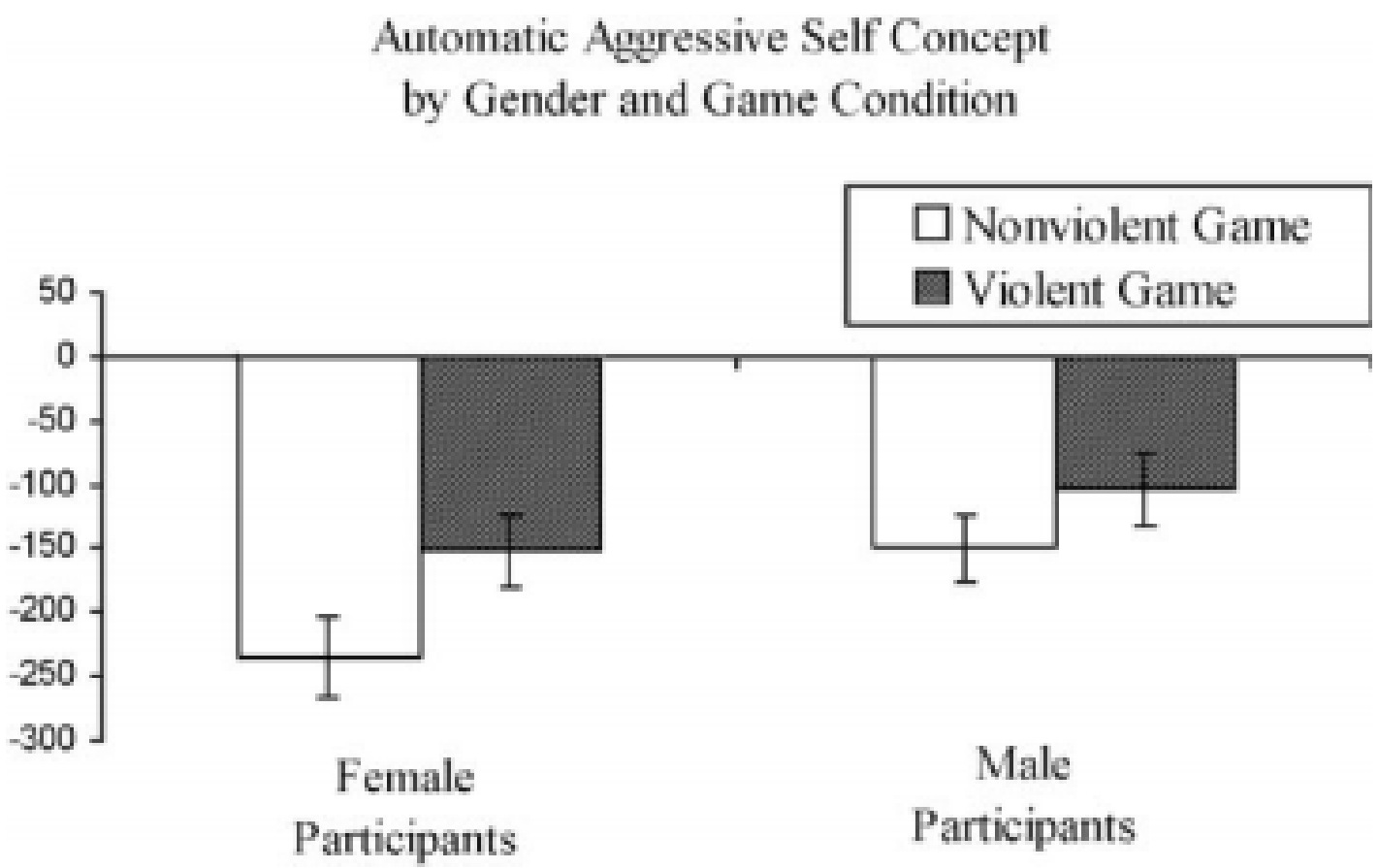
- Aggression impacts player cognitive processes
- Many factors affect the level of aggression
- Aggression level is key to player behaviour which in turn affects ethical decision

Controlling Player Behaviour

- Factors that affect player behaviour:
  - Level of exposure to violence
  - Solo, Cooperative, or Competitive environments
  - Frustration
  - Rewards or Punishments
  - Communication Channels
  - Social Identity
  - Group Interaction
  - Gender

Study: Automatic Aggressiveness from DOOM and Mah-jongg

- Test group played Doom and Mah-jongg
- Equal play intervals (10 minutes)
- Completed an Implicit Association Test (IAT)
  - Participants categorize words under 4 headings:
    - Self and Other
    - Aggressive and Peaceful
  - The more positive the score, the stronger aggression and self were associated


Automatic Aggressive Self Concept
by Gender and Game Condition
Nonviolent Game
Violent Game
50
0
-50
-100
-150
-200
-250
-300
Female
Participants
Male
Participants

Results

- SURPRISE: Playing violent video games can increase aggressiveness
- Aggression level raised, but still not high
- What if players were in the presence of others?

Cooperative and Competitive Play

- Many studies simplify game characteristics as *violent* and *non-violent*
- Aggression is affected by more than just exposure to violence:
  - Availability of humans (friend or foe)
  - Rewards
  - Play mode

Competition and Aggressive Cognition

- Reward structures in *competitive* modes alter cognition (i.e. killing for points)
- Presence of *competition* can serve as a motivator and produce enjoyment
- *Competition* can also lead to frustration
  - Players impede success of one another

General Aggression Model (GAM)

- Model for aggression
- Factors in that **learning** may be a mechanism for aggression
  - Individuals mimic actions
  - Behaviours learned when rewarded or punished even if *self-administered*
    - *WarZ* player behaviour can be attributed to learning mechanisms

Cooperation and Aggression

- In 2007, Eastin conducted a study of human players:
  - Different group sizes (2,4,6)
  - Different goals (fight with or against each other)
  - Communication through voice-chat
- Results demonstrated that:
  - Larger groups were more aggressive
  - Aggression was higher when *competing* rather than *cooperating*

Study: Aggression and Play Mode in HALO

- Competitively and Cooperatively (30 minutes)
- Participants filled out questionnaire:
  - Complete words (KI, DE, BL, ST, RI, SL)
  - Determined aggressive cognition
- Arousal level (excitement/anxiousness) and Aggressive Affect (anger) were also monitored

Table 1. Differences in Aggression, Frustration, and Violent Strategizing by Game Mode and Gender

Game mode	Aggressive cognition	Aggressive affect	Arousal	Frustration	Violent strategizing
F, mode	6.26***	2.72*	0.79	2.84*	3.18*
F, sex	0.29	0.92	3.97**	0.99	1.97
F, Mode × Sex	2.65*	0.39	0.69	0.57	1.34
			Men		
Cooperative	1.08 (0.38)	1.67 (0.54)	2.79 (0.40)	3.56 (0.52)	3.07 (0.41)
Competitive	2.81 (0.32)	0.91 (0.47)	3.42 (0.36)	3.10 (0.45)	4.31 (0.36)
Solo	2.08 (0.33)	2.23 (0.49)	3.43 (0.37)	4.11 (0.46)	4.07 (0.37)
			Women		
Cooperative	2.02 (0.27)	1.79 (0.41)	3.81 (0.31)	3.49 (0.38)	3.07 (0.31)
Competitive	2.37 (0.29)	1.75 (0.43)	3.69 (0.32)	3.90 (0.41)	3.26 (0.33)
Solo	2.09 (0.29)	2.51 (0.43)	4.05 (0.33)	4.65 (0.41)	3.69 (0.33)
			Combined		
Cooperative	1.55 (0.21)	1.73 (0.33)	3.30 (0.25)	3.52 (0.31)	3.07 (0.25)
Competitive	2.59 (0.20)	1.33 (0.31)	3.56 (0.24)	3.50 (0.29)	3.78 (0.23)
Solo	2.10 (0.21)	2.37 (0.32)	3.74 (0.25)	4.38 (0.30)	3.88 (0.24)

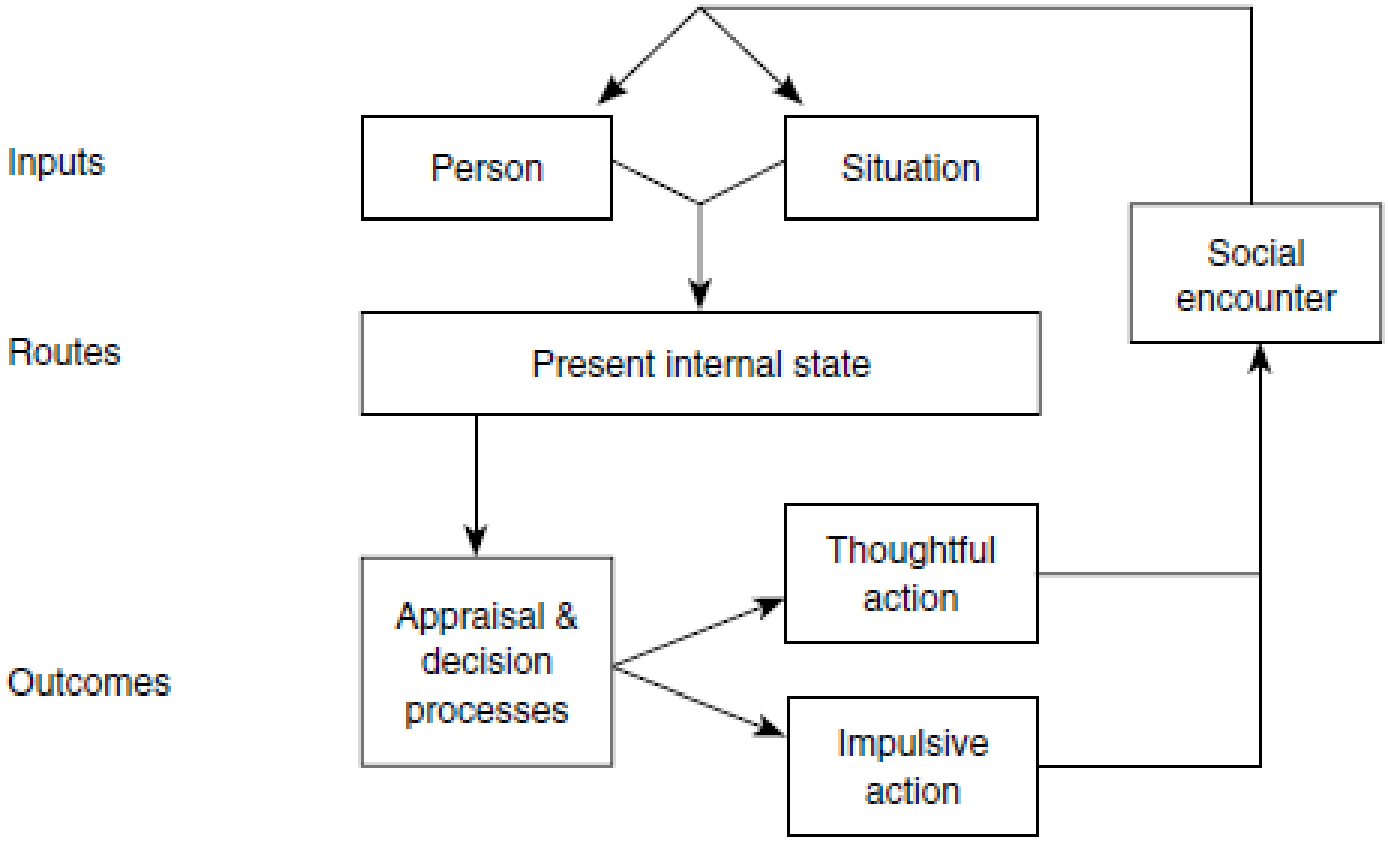
Results

- Competitive players showed the highest level of cognitive violence
- Solo players were most angry and frustrated
- Cooperative was the lowest in terms of violent strategizing
- Possible reasons: survival (competitive and solo)

Hostile Expectations

- Game environments can promote hostile expectations:
  - Players in a state of greater hostility assume hostile intentions of others (i.e. *WarZ*)
- Research on hostile expectations expands the GAM to include *group dynamics*
- How does social interaction affect behaviour?

Interaction with Players



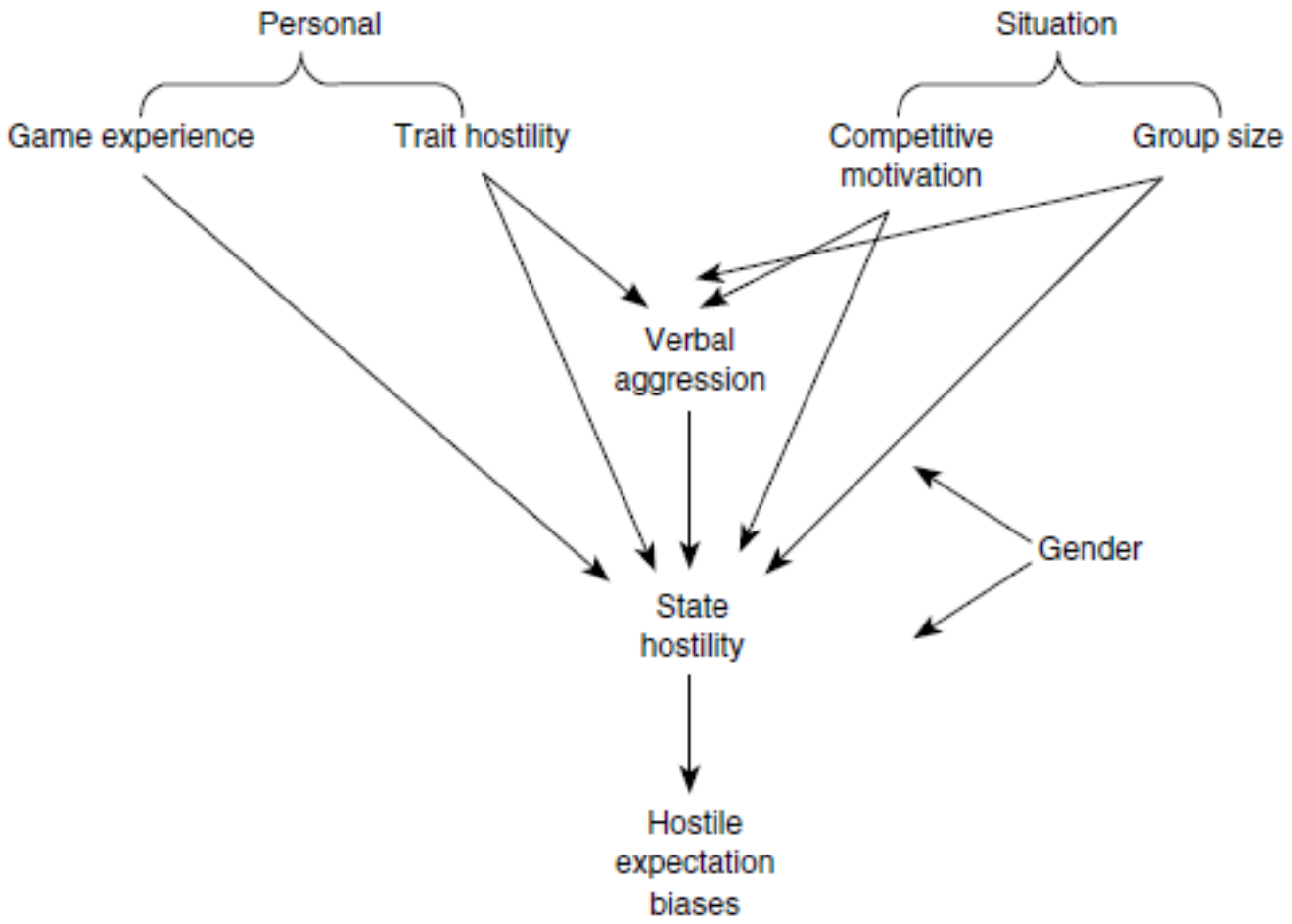
- Figure 1 The single episode aggression model

Social Interaction

- Williams and Skoric suggest no long-term effects from violent gameplay (exposure)
  - Asheron's Call 2
    - Designated zones for combat
    - Players frequently help weaker players or less knowledgeable players
- Counter-example:
  - WarZ
    - Designated zones for non-combat
    - Players frequently try to kill other players regardless of player knowledge

GAM Inputs for Aggressive Cognition

- *Trait Hostility*
  - Cognitive structure that exaggerates indications of hostility
- *Game Experience*
  - Time spent playing violent video games (hostile response)
- *Group Size*
  - Large groups are more competitive than small groups



• Figure 2 Proposed path model based on the general models of aggression

GAM Inputs – Verbal Aggression

- *In-Game Verbal Aggression*
  - Aggressive communication directly connects aggressive behaviour (i.e. insults, profanity, ridicule)
- Results of a story completion protocol test:
  - verbal aggression raises hostile expectation bias
- Greater anonymity results in greater tension and antagonism (no social standing)

Griefing and Grief Play

- Griefing
  - Disruptive cultural activity (i.e. hacking, crashing economies, servers, stealing characters, etc.)
- Grief Play
  - Using the boundaries of the game world to disrupt other player's gaming experiences
- But why do these things to begin with?

Study: Griefing Second Life

Study: Griefing Second Life

- Second Life
  - Considered a *platform* rather than a game
  - Main purpose is player interaction
- Griefing is a cultural phenomenon rather than just play in SL
- Collective goal is to bring down the system

Study: Griefing Second Life

- Griefing brings together users with similar goals (to the detriment of others)
- Organized griefing becomes a culture, not just isolated pathology (PN group from /i/ on 4chan)
  - Similar to cooperative or competitive play in groups
  - Demonstration of power through knowledge (i.e. scripting)

Study: Griefing Second Life

- SL has a list of forbidden behaviour (a moral code per se):
  - Intolerance, Harassment, Assault, Disclosure, Indecency and Disturbing the Peace
- Ethical codes are specific to each subculture or group
  - Griefers have their own subculture
  - Moral code is only a moral code if it can be enforced (ex. Bans)
  - Good and Evil are determined by each subculture's ethics (subjective) and the game's moral code

Deindividuation Theory

- When individuals assimilate with a crowd, their consideration for consequences of actions is diminished (anonymity)
- Video Games lack social cues and social standards – open communication
- Anonymity does not result in a *loss* of awareness but a *shift*
  - Personal to social

Ethical Choices in Solo Play

- Ethical thinking
  - Ability to assess, interpret and reflect on decisions
  - Empathize with others
  - Comprehend complexities of ethical questions
- Problems with examining ethical choices in video games:
  - No real-world risks (can choose again)
  - Morality meters

Morality Meters

Study: Ethical Choices in Fable 3

- Test group documented how they handled certain scenarios in-game:
  1. “Surrender a Friend”
  2. “Walter”
  3. “Build a brothel”

Study: Ethical Choices in Fable 3

Table 3. Frequencies of Decisions on "Surrender a Friend" by Condition

Decision	Condition 1; *n* = 10 (%)	Condition 2; *n* = 10 (%)
Choose Elise/Elliot to live	40	10
Choose the villagers to live	60	70
No decision	0	20

Results

- Based on the “Surrender a Friend” scenario:
  - Impulse decisions are generally self-less decisions
  - Planned decisions are generally selfish
- The other 2 scenarios follow these results as well
- Gender of the avatar effected decisions as well
  - If the player could not empathize with one choice, the other was made

Conclusion

- **Are humans inherently good or evil?**
  - Neither
  - Humans have the instinct to **survive**
    - Cognitive aggression is born from the desire to succeed
    - Belonging is an important subconscious desire that offers safety and promotes aggression for the success of the group
  - *Good* and *evil* completely depend on the culture examining or the individual involved
- Examining multiplayer interaction is far more significant than solo play, it offers a closer connection to reality