

Acts of Kindness in Gaming: A thematic analysis of self-reported altruism accounts in gaming

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ABSTRACT

Altruistic actions in contemporary media is a topic which has been widely discussed in literature, less common is the topic proposed by this paper, a study of altruistic actions in online gaming. Some initial work within the field of AI has begun to experiment with synthesising artificial altruism in game agents, but the rationale of players to engage in altruism has yet to be adequately explored. In this paper, self reported accounts of altruism are thematically analysed to find common factors, motivations and barriers to altruism in video games. Trust, reciprocation, cooperation, role assignment, progress and responsibility were found to be the primary motivators for Altruism. Linking to wider theories of motivation and self-determination theory, and proposing a new theory of motivation focused on online video game play.

Author Keywords

Altruism; Video Games; Digital Media; Social Dynamics; Prosocial Behaviour

ACM Classification Keywords

J.4 Social and Behavioral Sciences; K.8 Personal Computing

INTRODUCTION

Video games are pervasive digital constructs which hold significant social and cultural value in society [9]. They facilitate a wide variety of interactions among players and this investigation is principally concerned with the use of games to support other players. Some work has already been undertaken on the utility of video games as tools for addressing traumatic events [14], but literature remains scant about the rationale for helping others in a game on an interpersonal basis. This study focuses on how players identify acts of giving and altruism and analyses how they relate to established work.

PRIOR LITERATURE

Altruism

Auguste Comte introduced the word ‘altruism’ to describe pursuit of other’s interests over the interests of the self [21].

Due to the often abstract nature of personal experience and motivation, there are several theories about why altruism occurs. These can be classified into two major groups, ‘Altruism’ and ‘Pseudo Altruism’. Where ‘Altruism’ conforms to the pursuit of another interest over the interests of the self, ‘Pseudo Altruism’ typically argues the perspective that even acts of Altruism are done with selfish, egoist intent [8].

An example of this is the ‘just world theory’ [18] where followers believe that if you do good things, then good things

will happen to you. Another example focuses on someone in need of attention, the observation of seeing one in need conjures negative emotion arousal. This can then be acted on in a positive manner to reduce the negative emotion [6], thus making it a egoist act.

The opposite of this is ‘true’ altruism [2] where the intention of the act is solely motivated by the betterment of the recipient, without any thought for the giver. Similar to the negative emotion state reduction there exists an argument for the ability to have an altruistic motive independent of the egoist perspective [12].

Altruism in Society

The National Philanthropic Trust estimates the global philanthropy market to be worth approximately £182 Billion pounds and people in the UK gave £13.1 Billion in 2020, with 62% of people giving via charity or sponsorship. The average amount donated per person was £49 pounds [20].

The effects of broader media on one’s Altruism has also been investigated in music and film. Ruth Nicholas investigated the affect of prosocial lyrics in music on the choice between fair-trade and regular coffee [23]. Ruth recorded the purchase decision of 256 people in a coffee shop when playing neutral lyric content verses a curated CD with music containing prosocial lyrics. She concluded that 38% of customers bought more fair trade coffee, despite the 30p increase on cost to the customer. Another example of the boarder media having a positive affect on helping behavior is shown by the affect of Disney movies on children’s helping behavior [7]. Leeuw and Van der Laan took 113 children and their friends to conduct an experiment where the experimental group were shown a Disney clip in which the main character helped a friend, while the control group watched a clip void of helping content. The children were then asked to complete a puzzle challenge with their friend. They found that the children that were in the experimental group were more likely to help their friend in the puzzle experiment than those in the control group [7].

The influence of Video Games on Altruism

Examples of Altruistic actions both within and adjacent to video games can be seen by the numerous investigations into acts performed by players towards others in online play.

Popular media content producer Yogscast produces a variety of game related media and hosts an annual charitable event called Jingle Jam. This event ran in December and raised £3.1 million, which was disseminated among a variety of charities[31].

Humble Bundle is a small subsidiary of J2 Global and is a digital store for books, games and software. It offers bundles which are paid for at a price determined by the consumer and the proceeds are split between humble bundle, the developers and charities. Humble Bundle periodically offers charitable bundles in support of a particular cause or charity. Since starting in 2010, Humble Bundle has raised over \$240 Billion Dollars for charities[13].

Kang investigated the Massively Multiplayer Online Role Playing Game (MMORPG) game “Aion”, looking at the action of gift or money giving, along with the party system to allow players of different levels to quest together [16]. They observed transactions between players investigating how the level difference between players affected the trades between said players. They looked at several different transaction types, free money and item, party play, and different situation when the trading of items may be exchanged. Overall they found that 9.4% of total players gave items and money to significantly lower leveled players and 15.4% of total players participated in party play with significantly lower leveled players.

The effects of positive altruistic actions in video games has also shown to have an impact on real prosocial behaviors, Rosenberg, Baughman, and Bailenson [22] conducted an experiment where they gave 74 participants one of two VR experiences: A superhero flight experience, and a passenger flight in a helicopter. They were then given one of two objectives, tour the city to explore as much as possible, or deliver insulin to a lost child in the city, totalling four different experimental scenarios. To assess the impact of the experience on the participant they then accidentally knocked over a cup of pens to give the participant an opportunity to help pick up the pens. They found that the participant was quicker to offer help picking up pens if they were given the superhero flight experience as oppose to the passenger in a helicopter, they also found that the extent that the participant helped changed. The participants that were given the superhero flight experience picked up more pens than those who rode in a helicopter regardless of their helping or observing objective given. They conclude that the perception of embodying a superhero could have primed the participants self-concept or indent to someone who helps others.

We have found work on the frustration and satisfaction of psychological needs, but have noted potential for exploring how needs can be met with interpersonal help and support from players[1]. The distinction between benevolence and altruism has already been drawn in business literature and how this relates to self interest outlined by Lawrence Blum; “Altruism is a concern for the well-being of persons other than oneself for their own sake. It involves actions motivated by such concern. Benevolence is the sentiment of concern itself. Both contrast with “beneficence,[4]” which refers to actions that promote the welfare of others, independent of the motivation behind them. For altruism, the beneficent action cannot be in service of one’s own interest, as when we help out another with the expectation that our doing so will result in greater benefit to ourselves. The motivation must be toward

the good of the other for its own sake” [28]. The long term effects of receiving help has already been explored in depth [10][3]. Compassion and punishment has been shown to have a vital link to the benefits of altruism [29] and it was found that compassion had a greater effect on promoting altruistic behavior than punishment. Although it is widely held that Altruism is egocentric in origin [8], there is some dissenting work in this field, espousing the benefits and validity of true altruism [5].

Some early work has also looked at how we evaluate help in games [11]. The gap in the literature appears to be a more granular study of individual acts of altruistic kindness and the factors that players find important when deciding to act altruistically. Previous work appears to demonstrate that prosocial games increase helpful behaviour and violent video games decreases helpful behaviour [25]. There is also some evidence to support that altruism in games has a positive impact on real life behaviors [22]. There is also plenty of evidence to support the ways in which altruism in wider media affects real life behaviors [23][7].

These factors become more important when we consider the potential scale for impact that altruism may present in video games. The video games industry is expected to reach global annual revenues of over \$300 billion and a worldwide audience of 3.8 billion active players by 2030 [26]. Given their pervasive reach throughout many societies, it is imperative to consider the role of benevolence and altruistic help present in the use and consumption of video games and how many people altruism in video games may truly affect. This consideration in turn may have substantial impact on social cohesion and some initial work on the relationship between team formation in games and wider social cohesion has been undertaken [27]. This work shows how team games can be effective tools for building trusting relationships.

There is some work discussing the factors surrounding donations on video game streaming [30], but research has yet to examine whether this behaviour translates to in game altruism. This work opens an interesting paradigm between a perceived benefit as spectators of game play and the player of a game. It is arguable that regardless of whether the benefit enjoyed by the donor is perceived or real, the practical reality is that some aspects of game play are funded and therefore instigated by donations as play for broadcast entertainment purposes.

Previous work leads to logical questions of whether helpfulness is important in meeting a specified need. Initial work exploring the health benefits of playing video games shows some promise [17], as does investigation into pro-social behaviour[15], but the field has yet to find any definitive work linking these important outcomes to altruistic play.

It is therefore unclear, why players make the decision to offer help or not, in a virtual environment with no explicit reward.

METHODOLOGY

As a purely qualitative investigation, we utilised a simple survey of up to 25 respondents. We advertised our survey on a

variety of community discords and accepted the first 25 responses.

Respondents were asked to describe an event where they either gave help to another person in a game, with the following prompt:

“We would like to ask you to provide us with one or more examples of a scenario where you feel you helped someone. We would like you to be as specific with the details as possible. For e.g. who were they and what (if any) was their relationship with you? What led you to give them your attention? What factors did you think about when you decided to give them some help? What exactly did you help them with? What do you think the effect on that person was? Was there any reciprocation? Was there anything that made you hesitant about offering help?”

Responses were coded and analysed utilising thematic inductive analysis.

Code groupings were formulated based on the content of the first five responses. Coding began under the proviso that more would be added as they were encountered.

Detailed summary of Study

The Focus of the study revolved around why a participant would display acts of Altruism, this presents an open ended question that allowed many freedoms of the participant. The coding process thus must reflect this freedom focused style. We chose to conduct an Inductive Thematic Analysis as we wanted to explore the different facets of the study. Allowing the facets to reveal themselves in data could counter our pre-conceived notions about the phenomena. We identified that “structural coding” and “values coding” fit our research aims best due to the open ended nature of the question and our focus on why gifting or helping actions occur.

Procedure

The coding process was done collaboratively between the researchers. Additional perspectives of the data led to a broader range of codes that represent a wider set of beliefs. Therefore, more data and potential themes could be extrapolated from the question’s responses.

Participants

Participants for this study were sourced from multiple different dedicated gaming communities online. They were chosen due to the focus of study and the intended target audience. We chose certain Discord communities due to their focus on specific games. These specific games were identified to be of a genre that promotes prosocial behavior and that facilitates through game mechanics and systems the ability to conduct altruistic actions. MMORPGs are a genre that has been identified in previous literature to allow for and promote the type of prosocial behaviour that we are interested in.

Open communities, not tied to a specific game, were chosen to allow for new discoveries in the types of games that allow for Altruism.

Listed beside each entry is the number of people in each community:

SONAR: A VRChat group and Discord Community that regularly helps people create content for VRChat and hosts social events (108)

The Dragon Lair: A discord group hosted by “The Bearded Nardo” a streamer playing online games (48)

Land of Kittens: A discord group hosted by “Epic Kitt” a community member for in real life and in-game social events (300)

York FragSoc: A University society at the University of York dedicated to digital gaming in a wide variety of formats(311)

Infinity: A recently defunct discord community based around the game New World (37)

Space Pirates: A long standing discord community built around variety gaming (95)

An important distinction to make is that at some point in the past researchers have been in contact with (or participated in) these communities prior to the commencement of this study. Another distinction to make is that one of the co-authors is Co-Admin of the “SONAR” community. However, this was managed and mediated by another two administrators and checked to make sure no additional bias was present. Additionally, the advertisement and distribution of the questionnaire was conducted by another admin on the discord server to allow for impartiality.

RESULTS

The data was imported to Atlas.ti to create codes and generate a database based on the codes (that we identified during the inductive coding process).

Generating Initial Codes

Initial themes were generated by sorting through the responses and coding anything deemed to be significant in the criteria of ‘structural coding’, (who, what, when, and how) following the ‘semantic coding’ approach. The study’s focus on meaning and rationale behind the actions taken meant that while the initial coding focused on ‘structural coding’ method, the second pass focused on the ‘value coding’ method taking a ‘latent coding’ approach. This took longer but familiarity with the material allowed for a better understanding of the meaning of each action. The core philosophies that govern altruism differed between the researchers, the latent approach allowed these differences to be used as different perspectives and form a broader understanding of the intent behind the participant’s actions.

Generating Themes

Analysis through Sankey diagrams allowed us to find common codes that were present between multiple participants.

This allowed us to group according to similarities and thus create more general themes. Thematic analysis allowed us to delve into the common themes that connect the motivation of altruism described in the data and theories of motivation. Grouping the data in this way can help to generate a more solid foundation to conduct future research based in this area.

Summary of Findings

In total we had 13 submissions of which two were either incomplete or described irrelevant experiences. This left us with 11 responses to code. We were able to extract 86 unique codes that filtered into three major groups: Social, Help, and Factors to Help, with Game Genre, Platform and Motivation being smaller in size. You can find all the codes in appendix 1.

The major groups were broken down as follows:

Social

- Relative Relationship (More experienced vs less experienced)
- Familial (Sibling, Family)
- Interaction Length (One time interaction, Continued interaction)
- Community
- Life Cycle (Introduction, Ending)

Help

- Requested
- Given
- Intention
- Impact

Factors to Help

- Economic
- Temporal
- Social
- Communication
- Event
- Knowledge

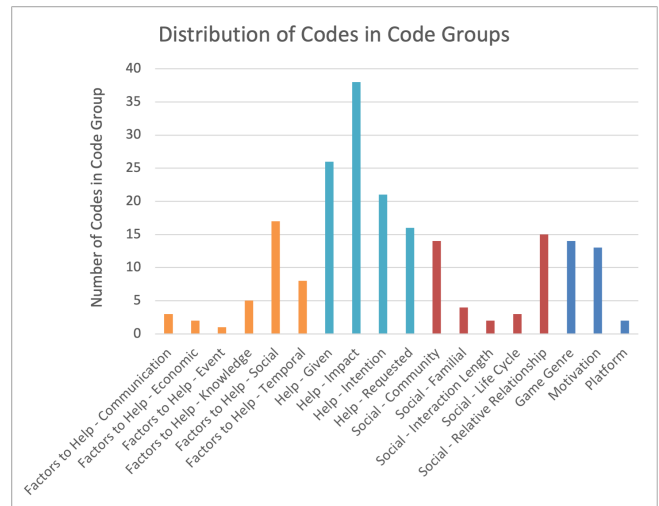


Figure 1: We created 3 primary code groups

The distribution of game genres was dominated by First Person Shooter (FPS), MMORPG and Social games. We believe that this concentration comes from the discord servers that we posted to. Every game under the ‘social’ genre was labeled as ‘VRChat’ a social virtual reality game where the primary objective is talking and making friends. There is a loose objective of rank based on a myriad of factors but generally promotes prosocial behavior. The MMORPG contained a mixture of ‘World of Warcraft’, ‘Genshin Impact’, ‘Neverwinter’, and ‘Palia (Beta)’. A surprisingly dominant genre was that of FPS where the games were split evenly between ‘Call of Duty: Modern Warfare’, ‘The Division’, ‘Counter Strike: Global Offensive’ and ‘Valorant’.

A surprise to the researchers was the presence of a Racing genre in the analysis. However, the account that mentions the game ‘Asseto Corsa’ mentions technical support with modding and primarily ‘out of game’ activities as the leader of a community for the game.

One interesting account mentioned an example of asynchronous altruistic actions with the game of ‘Death Stranding’ where, although the game is single player in nature, you are able to place objects to help other players in across single player instances. An example described is that you can leave signs and materials for players to pickup. This is something which has also been displayed in game series such as ‘Dark Souls’ where you can leave notes for other players to give them hints as to how to progress.

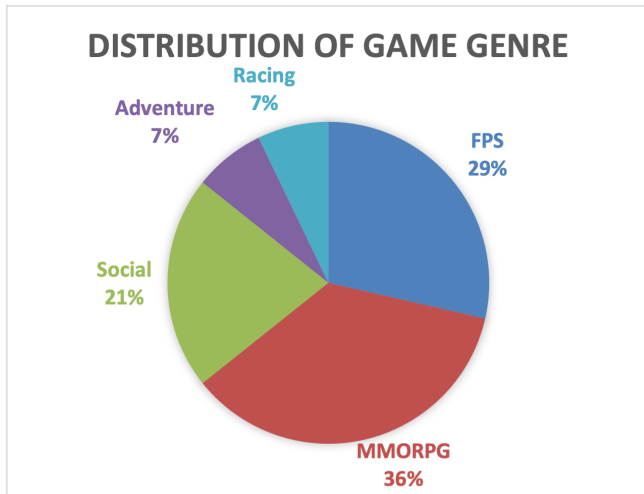


Figure 2: Out of 11 use-able responses there were 6 unique genres

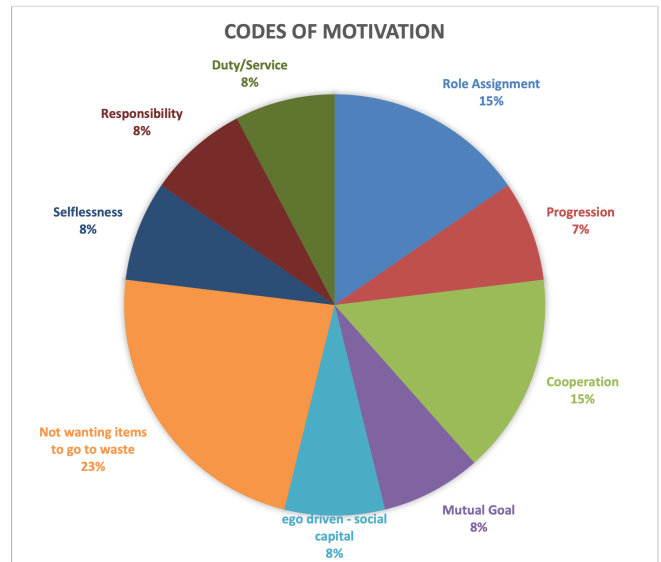


Figure 3: There were 9 unique expressions for why Altruistic actions were taken.

We gathered 36 instances of 'Factors to Help' with 6 unique codes that described reasons that either enabled or hindered their ability or willingness to help the player in the game.

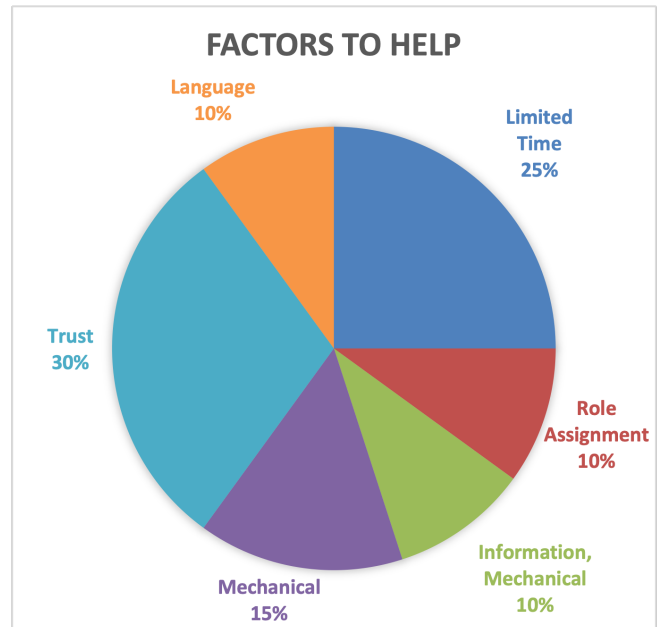


Figure 4: There were 6 unique factors the either contributed or limited the help given

According to the data our highest code of motivation was 'Not wanting items to go to waste'. This was primarily biased because of the method which we coded where we coded every occurrence instead of one occurrence and ignore repeats. In this way we ended up with more mentions of codes but a potential odd distribution of codes. The 'Not wanting items to go to waste' only came from one document but accounted for the largest portion of motivation due to how many times it was mentioned in the document.

Upon further investigation we noticed that 'Responsibility' and 'Duty/Service' could be further grouped together and 'Progression', 'Cooperation', and 'Mutual Goal' could be grouped together too. This would form the largest motivation of altruistic actions which would consist of 30% of the codes.

With all of these attributes taken into account we set about discussing and generating themes from our data, we settled on six themes that we felt contributed to altruistic actions in gaming:

Trust

Cooperation
Reciprocation
Role Assignment
Progress
Responsibility

DISCUSSION

Trust

Trust was the most common theme identified amongst most of the respondents, in a variety of different aspects. Respondents felt they needed to trust the intentions of their counterparts, as a foil to anti-social behaviour or activity.

In one response, there is an implicit trust formed between under geared and well-geared players in *The Division* and the desire to remain ambivalent in order to support community growth directly challenges the prominent game mechanic to eliminate each other in a competitive Player vs Player paradigm.

Trust is also present when receiving aid from other players (trusting the donor to lead them to helpful or useful experiences and gifts). We have seen evidence of acts of support, where players take on support roles, such as a healer or medic role and there is an implicit trust that the player will provide support when it is crucial or necessary.

We have also noted an instance of trust when a player was coaching or mentoring others.

One noteworthy example of trust being exercised in an altruistic way is through the asynchronous method of leaving messages in *Death Stranding* for future players. Even though the players never meet, they can choose to trust or distrust guidance which on face value appears helpful.

Cooperation

One important factor of note in our evidence is the decision to cooperate or not. We have noted several examples of collaboration to achieve a goal benefiting at least one or both participants in the interaction. Some procedural factors have been observed; for example, both players may need to move to the same location in game in order for one of them to benefit by way of collection of resources.

One of our evidence samples demonstrated an important paradigm surrounding cooperation. We were offered an example of two other players working together in *The Division*, an online PvP (Player vs Player) multiplayer first person shooter game. A higher level player was assisting a lower level player, when our respondent encountered them. They stated that "I noticed over time that if I noticed a lower level player, I would instinctively let them pass and actively help them to extract their loot. Though, if they were grouped with a higher level player, I would focus on killing that higher level player. Then, if the lower level player retaliated, I would react and take their loot." This represents an important dynamic as it shows evidence of the disposition of a potential antagonist becoming an ally until provoked. It is arguable whether this

matches the design intent or whether social dynamics stimulate divergent play in this case.

Several submissions also noted more mundane examples of cooperation in our investigation, where players work together to harvest treasure, equipment and solve puzzles or quests together.

One of our responses illustrated their use of designed mechanics - using a healer or support role in first person shooter games, which appears to be part of the explicit design. We have also noted in our example of a *Death Stranding* game where players have been leaving helpful messages behind them for future players. Whilst evidence of trust, this is a clear example of collaboration to ensure the success of another player. We have several examples of cooperation in Virtual Reality chat rooms where players have cited examples of sharing knowledge or teaching other players specific aspects of how to engage with both the game and the community.

Reciprocation

Our data has presented some evidence of reciprocation. In one case, Players have helped out others simply on the basis that they were participating in a streaming event and they helped another player out because they engaged with their online streamed game play.

We have also noted several examples of reciprocal social engagement and even friendship being generated as a result of altruistic behaviour, although it is worth noting in some cases, the behaviour wouldn't meet the classic definition of altruism as there was a direct benefit to the donor.

Role Assignment

Our investigation has revealed a couple of examples where players with altruistic intent or desires have deliberately taken on game roles, such as a medic or engineer in order to facilitate such motivation. Although we have concrete examples, our data set is quite small and it would be premature to posit whether such behaviour was altruism was self-motivated or a product of game design.

Progress

There were a few examples of where progress within a game was a motivating factor for altruistic behaviour. As noted in the example for *The Division*, the newer, lower-level player was disregarded so that they can make progress gaining gear and in so doing, become more prominent in the game in future.

One example demonstrated the experience of a *Genshin Impact* player who's altruistic intervention has directly benefited the recipients progress in getting niche or hard to acquire items in the game.

Multiple instances of knowledge sharing being made available to VR Chat players so that they can progress as participants in play have also featured heavily in the dataset.

Responsibility

The final key theme we have drawn on from the evidence provided is one of responsibility. There are several seemingly

unrelated codes which all speak to a wider personal responsibility for the actor in the relationship.

One participant in our study even stated this directly, with the following comment: “I never hesitate to help If i have time i will since I think its a sort of duty due i’m the one who runs my community.”[sic]

CONCLUSION

The evidence suggests that there are several distinct running themes which emerge from the analysis and these themes may constitute instrumental factors as to whether players conceive and act on altruistic motivation.

Trust is an implicit requirement for much (although not all) altruistic behaviour and this is a complicated dynamic which requires much more detailed investigation and analysis in order to draw firmer conclusions. Given the frequency with which trust has appeared in the evidence, especially given how small our sample of participants was, we are confident in highlighting it as an instrumental factor.

Cooperation presents itself in many transactional or discursive scenarios in our body of evidence and although altruism isn’t exclusively found within such scenarios, it is an important factor when such scenarios occur.

Reciprocation appears to be quite a subjective and intrinsically motivated factor in a limited number of scenarios. Whether an event or interaction is altruistic could be up for debate, and may even be classified as benevolent rather than truly altruistic. It was however, a prevalent factor in the analysis.

Role Assignment leads to altruistic actions but can be argued that it merely fills out the team to be better over all. Perceived skills deficiency lead team members to chose more mechanically focused roles, for example a healer which restores lost player character health or an engineer which repairs mechanical tools and environmental mechanics. The effect leads to altruistic actions but it is presumptuous to state that such a decision may have been chosen out of altruistic intent.

Progress is motivated by the mechanical and Ludic journey through the game. Better items mean you are progressing and it unlocks more of the game with better gear. This motivates people to get better items or gear. Our data suggests that helping players to achieve this goal may be an instrumental factor in supporting player progression in a game.

Responsibility appears to be a common value or belief which informs the disposition of an altruistic actor in many scenarios.

These themes appear to form into a triumvirate of altruistic motivation; action, disposition, personification and a new model of altruistic motivation may inform wider engagement and motivational theory.

In conclusion, we would consider it important to explore how these themes relate to established motivational theory. Self-Determination Theory [24] offers a useful framework for internal motivators and Marczewski’s Hexad[19] builds upon

Self-Determination Theory by incorporating external factors into its framework. The findings point to a gap in established frameworks which do not account for the absence of self-interest and there may be an opportunity for further work in this area.

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