

# Empathy in the Classroom through Video Games

*How a Video Game Affected the Narrative Empathy of Upper Secondary Students.*



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## **Abstract**

Though previously viewed as little more than entertainment, video games have gained much recognition as an art form within recent years, slowly taking their place amongst established media such as literature and films. However, such is not the case within the second language classroom, where video games are vastly ignored in favour of other media. This in spite of research showing the benefits of working with video games in the classroom. The interactive nature of games lends itself greatly to allowing students to explore narratives in a different way than presented by texts or films, and to connect with the characters of those stories on a new level. As the Swedish curriculum for the upper secondary school puts emphasis on students ability to empathise, this study seeks to explore the empathic abilities of students. If exposure to the interactive nature of a video game, rather than a static piece of text, might cause a greater empathic response within the students. Though previous research refers to the empathic benefits of video games in the classroom, the findings of this study will present why the interactive medium of video games might serve as a hindrance for empathy rather than as an advantage.

**Keywords:** Digital game based language learning, narrative empathy, static group comparison.

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## **1. Introduction**

For a long time, video games have primarily been viewed solely as a recreational activity by the general public (Sykes & Reinhardt, 2013, p. 13-14). A cultural assumption has been present, stating that learning should entail hard work, a trait that playing video games has been seen as the antithesis of (p.14). In turn, this mindset has discouraged many parents and educators from the idea that video games can be used as teaching tools (p.15). However, recent developments in the fields of game studies and educational studies have led to an increased interest in integrating video games into the classroom (ix). As future teachers and avid game enthusiasts, our personal experience with video games has prompted this research to further explore the usefulness of video games in the classroom.

This study aims to examine the impact video games might have on students' ability to express empathy for fictional characters, by using the theory of narrative empathy in conjunction with a static group comparison. Much of the previous research conducted on video games in an educational setting has focused on the effectiveness of video games in relation to specific learning goals, and how games can aid the students in achieving said goals. This study utilizes a perspective seldom used before in research where games and education are featured. The perspective in question being the theory of narrative empathy, and how it relates to the question whether playing a video game can affect the participants' ability to empathise with fictional characters. The participating students in this study will be divided into two groups and experience one of two treatment lessons, one focusing on a game and the other on a written text. Sequentially, the participating students will answer questions which will serve as the data in this study.

Empathy is an important aspect in both the syllabus for the subject of English, and in the curriculum for upper secondary school provided by the Swedish national agency for education. In the aim of the subject, the syllabus states the following:

In teaching students should meet written and spoken English of different kinds, and relate the content to their own experiences and knowledge. Students should be given the opportunity to interact in speech and writing, and to produce spoken language and texts of different kinds, both on their own and together with others, using different aids and media. (Skolverket, 2011).

The curriculum states that: “The school should promote understanding of other people and the ability to empathise.” (Skolverket, 2013, p. 4). By striving towards an understanding of others while at the same time encouraging the students to voice their own opinions, it is our belief that working with empathy in the classroom will ultimately aid the students in becoming democratic citizens. The combination of the points featured in the syllabus and curriculum and the relative lack of previous research regarding narrative empathy and video games in an educational setting strengthens the resolve to examine the potential video games have to create empathic responses from the students.

## **2. Background**

The overall structure of this section goes from the general to the specific, detailing the internal structure of a video game and culminating in the description of the game used in this study. In the pages that follow, traits commonly found within video games will be analysed in order to give a deeper understanding of the medium.

## **2.1 Traits found in video games.**

The concept of video games will be looked at from two different perspectives. The first perspective focuses on detailing traits commonly found within video games, and the contrast to other artistic mediums. The second perspective, which is featured in section (3.2), deals with how narrative is expressed in games. Defining the traits and analysing the storytelling in games is important to see how the results of the test groups differs. Also, understanding how games work will ultimately aid the analysis and the conclusion.

Before the traits of video games can be discussed, an important disclaimer must be made. In terms of defining a video game, no singular agreed upon definition exists today, and some authors have argued that seeking a true definition is futile (Salen & Zimmerman, 2003, chp 7, p.1; Wolf, 2002, p.14). This futility can be explained by two key factors: the relative youth of video games as an artistic medium (Wolf, 2002, p13), and the rapid technical improvements made to video games during the last decades (Bogost, 2006, p. 59). The improvement of technology is to some extent responsible for the difficulty in defining a video game, since boundaries can be pushed in terms of what video games are able to feature (Wolf, 2002, p. 31-32). Therefore, instead of attempting to define video games, the inherent traits commonly found within games will be discussed and defined.

The importance of defining these traits stem from the research questions of this study, found in section (4.1). To answer how the participants' empathy is articulated when playing the target game, the internal traits of the game should first be analysed (Wolf, 2002, p.13). Also, the theory of narrative empathy primarily deals with written work (Keen, 2006). Thus, it is important to understand the difference between literature and games. To examine the traits commonly found in video games, two key sources have been used. First, a book by game designers Katie Salen & Eric Zimmerman (2003) on the fundamentals of game design. They have compared and comprised previous definitions of games, and by doing so have

summarised the traits commonly found. Two traits appeared in most of the analysed definitions. The first trait - appearing in seven out of eight definitions - is for games to have rules (Salen & Zimmerman, 2003, chp 7. p.9). This is no surprise, since rules tend to set games apart from the more unstructured action of 'play' (Salen & Zimmerman, 2003, chp 7. p.2). The second trait - appearing in five out of eight definitions - is for games to have a goal (Salen & Zimmerman, 2003, chp 7. p.9). Goals are a prominent feature in both video games and L2 learning, and work as a unifying factor of games and education (Sykes & Reinhardt, 2013, p. 13).

The second key source is, J. P. Wolf (2002) and his writing about video games as a medium. Both rules and goals are also described as traits commonly found within games by Wolf (2002) as well, although the term 'conflict' is used instead of 'goals' (p. 14). Rules and goals can be applied to most games, from sports to electronic video games (Salen & Zimmerman, 2003, chp 7). However, one final trait can be found within these sources that has been applied more narrowly to video games, and that is the trait of interactivity. Salen & Zimmerman (2003) have described the trait of interactivity by dividing it into several smaller traits: immediate interactivity, manipulation of information, and automated complex systems (Salen & Zimmerman, 2003, chp. 8, p. 6).

Immediate interactivity is characterised by the player's input and the instant feedback from the video game. In practice, this action is often done through the buttons and joysticks on a controller or through a mouse and keyboard (Salen & Zimmerman, 2003, chp. 8, p. 3). Manipulation of information is the result of the immediate interactivity, as the input from the player will affect what is seen and heard from the video game (Salen & Zimmerman, 2003, chp. 8, p. 3-4). One concrete example is to jump over an obstacle in a platform game, i.e. the player presses a button and the character in the game jumps. Finally, automated complex systems make the interactive trait of video games possible. Simply put, the automated

complex systems can be viewed as an umbrella term for all the feedback the player receives from the game (Salen & Zimmerman, 2003, chp. 8, p. 4). In essence, automated complex systems can be seen as: Player commits action X, and the game responds with Y. This illustration is applicable to every interaction the player may have within the game.

To summarise, the three main traits of video games found within the key sources are: Rules, goals, and interactivity. The importance of these traits is to aid the understanding of video games as a medium, but also as reference point for the analysis. When comparing the results from the text group and the game group, these traits will be carefully looked at, since they may play a role in how the participants in the two groups articulate their empathy. While the aim of this section has been to describe traits commonly found within video games, the next section provides an overview of previous research conducted on the topic of video games and education.

## **2.2 Overview of research of video games & education. (Switched places with Traits)**

Video- and computer games have been researched several times within the subject of education, and have gained a significant recognition in the field of language learning related research (Cornillie, Thorne & Desmet, 2012). A term commonly used when language learning and digital technology function in collaboration with each other is Computer-assisted language learning (CALL). During the last twenty years, the amount of CALL and video game related research papers published have increased. Therefore, the increase of publications can be seen as an increase of interest in the use of video games for educational purposes. (Cornillie, et al. 2012; Spires, 2015). The concept of CALL functions as an umbrella-term, harbouring a wide range of research topics under its label. CALL includes topics such as: the uses of smart boards within the classroom, how computers can improve students' performance in regards to listening comprehension, students' attitudes towards working with computers in

L2 classrooms, and more (Van Han & Van Rensburg 2013; Whyte & Alexander 2014; Wangru 2016).

One term that can be said to exist within the scope of CALL is digital game-based language learning (DGBLL) (Vandercruysse, Vandewaetere, Cornillie & Clarebout, 2013). DGBLL refers to language learning that utilise video games as a central aspect of the education (Vandercruysse, et al., 2013; Cornillie, et al. 2012). Research conducted within the scope of DGBLL always uses some form of game, which is commonly categorised into two large groups: commercial off-the-shelf (COTS) games, and educational games - also called serious games (Vandercruysse, et al., 2013; Cornillie, et al. 2012). The existing body of research on DGBLL suggests that an important aspect is to have well defined goals. In serious games, the goals of the game always correlate with the teaching goals of the syllabus. This design choice entails that serious games do not tend to appeal to a large audience, and in certain scenarios, are not even available to the public (Sørensen & Meyer, 2007). COTS games on the other hand mainly fulfill an entertainment purpose, and require the teacher to construct goals which align with the syllabus (Cornillie, et al. 2012). Students also tend to have a positive attitude towards the use of video games within the classroom, if the teacher integrates the games well within the lesson and the syllabus (Sørensen & Meyer, 2007; Mifsud, Vella & Camilleri, 2013). It is also possible to integrate elements commonly found in video games into the L2 teaching without using the game itself. This phenomenon is called gamification, and uses game elements such as: progression systems, leaderboards and achievements within the lessons (Flores, 2015).

The video game used in this research is a COTS game. Therefore, a presentation of various uses of COTS games within the classroom will be presented. James Paul Gee (2003) has described several circumstances in which COTS games can be used for educational purposes. Two of the games Gee has used are *Arcanum: of steamworks and magick obscura*

and *Deus Ex*, both categorised as role playing games. *Arcanum* is used to learn about character and identity. The player can create a character that inhabits other traits and values than themselves, which creates a situation where the player can reflect upon their own values in contrast to their created character (Gee, 2003).

*Deus Ex* has been used to teach the player about situated meaning, i.e. different players will have different experiences. Since *Deus Ex* is a very open ended game the chance of two players having an identical experience while playing is very small. Therefore, the player can find all manner of information regarding the game world that will have different levels of significance depending on the actions taken by the player up to that point. In other words, by exploring the world and reflecting upon their discoveries, the player might gain a deeper understanding of meaning and how meaning is dependent on context (Gee, 2003). These two points are important since they highlight aspects of video games affecting the player. The ability to determine the personality of the protagonist, and also to reflect on the information known to the player are valuable tools when working with video games.

Several other COTS games have been used in research to support their viability within education. Some of these games include *World of Warcraft*, which has the potential to promote language learning and teamwork in an artificial world (Zheng, Newgarden, & Young 2012); *The Sims*, where the simulation of everyday life can increase the player's vocabulary (Ranalli, 2008); and *Minecraft*, in which students can play together and explore a vast array of topics, from geometry to language & literacy (Nebel, Schneider & Rey 2015).

The classroom is not the only setting in which video games have been studied through the perspective of education. Studies of students' proficiency in English have shown a connection between students who perform well within the subject and at the same time spend a substantial amount of time playing video games outside of school. Two examples include how out of school gameplay can improve students' vocabulary size (Sundqvist & Wikströms

2015), and how students who are regularly playing games both enjoy the subject of English more and perform better at it than their fellow students (Sundqvist & Sylvén 2014).

Video games within education have been extensively researched during the last few decades. No definitive claim can be made that video games have empirically improved language learning or learning in general (Vandercruysse, et al., 2013). However, all the research listed above show an ongoing interest and a growing potential for video games in education (Spires, 2015). Our stance on the matter is that as the video game industry keeps growing and the technical boundaries are continuously being pushed forward, the need for more research within this field grows. When used in an informed way that is grounded in research and caters to the strengths of video games, they can become effective tools for learning (Spires, 2015). This section has shown some of the previous research conducted on video games and education, where a majority of the focus revolves around how video games can improve students' proficiency in English. To concretise the research, the following section features a brief summary of the target video game used in the treatment lessons.

### **2.3 Target game - *Beholder***

The game *Beholder* will be used for this study. Released in 2016 and developed by Warm lamp games, *Beholder* is a COTS-game as well as an indie game, i.e it is developed by a small independent studio. The game is set in an Orwellian world with no direct resemblance to any real-life location. As the player, you are controlling Carl Stein, a man who has been assigned to the post of landlord of an apartment complex by the ministry of order. He moves to the complex with his wife, his older son, and younger daughter. During the game, the player will be given assignments centring around spying on the tenants, and sending gathered information to the ministry. In some events the tenants need to be incriminated and arrested. Some cases pose small ethical dilemmas, e.g. the tenant that needs to be evicted is an unfriendly drug

dealer. Far more difficult is the dilemma when the tenant is not only friendly, but seems to have been wrongfully persecuted by the government. The player must choose if they wish to help their tenant and defy the ministry, or if they will get the tenant evicted and in the process condemn a potentially innocent person. In addition to the primary assignments given by the ministry, secondary assignments are given out by Carl's family, and the tenants. These reward Carl in the form of money and/or influence, and sometimes the completion of these tasks can ensure your family's well-being. The ethical dilemmas presented in *Beholder* revolve around the duality of helping others or simply looking out for yourself and your family. It is made clear by the game's presentation that the government is oppressive, totalitarian, and punish citizens who do not fall in line. With that in mind, it is up to the player to choose if they want to aid the ministry or aid the tenants by not reporting illegal actions to the authorities.

### **3.Theory**

This section gives account of the theory used in this study. Three theoretical perspectives are detailed, each serving a separate purpose. The theory of narrative empathy acts as the primary theory of this study, and is applied in the analysing of the data. Narrative in video games provides an overview of the workings of narrative structure in video games. Finally, the EPIC-framework is featured, as the choice of game for this study and the structure of the lessons are grounded in said framework.

#### **3.1 Narrative empathy**

When engaging with any form of cultural artefact containing a narrative, it is possible for the person who is engaged to feel empathy. The feeling of empathy can occur in a wide variety of artistic mediums, from written works, to movies and plays, music, and video games (Keen, 2013). From this point onward when the artistic medium is unspecified, the person who is

interacting with it will be referred to as the *engaged person* (instead of reader/viewer/listener/player, etc).

Suzanne Keen is a prominent figure in terms of the theory of narrative empathy. Narrative empathy remains a mostly unexplored field of research, and Keen is one of the few who has dealt with the topic. To fully grasp this theory, the first crucial point is to define the concept of empathy. In her article she defines empathy as: “[...] a vicarious, spontaneous sharing of affect, can be provoked by witnessing another’s emotional state, by hearing about another’s condition, or even by reading.” (Keen, 2006). The benefit of empathy can be traced back through human history, even predating the written story. Oral storytelling has been a part of human interaction for a long time, and since humans are storytelling creatures, the ability to empathise with the elements of a story can be connected to proficiency in social interactions (Keen, 2006).

A closely related concept to empathy is sympathy. Empathy refers to feeling what another person is feeling, while sympathy is closer to understanding the feelings of others. It is the difference between being sad because someone else is sad and feeling sorry for someone. Though different emotional responses, Keen (2006) suggests a close connection between the two, as empathy often leads to sympathy. When applying empathy to a character in a narrative, this means that the engaged person is able to feel what the character is feeling, or at least a close resemblance of what that character feels. The theory of narrative empathy deals with the empathy an engaged person feels for fictional characters presented in a narrative. Several aspects exist that affect the way in which the engaged person can feel empathy. Especially important is the concord between the narrative portrayed and the engaged person’s perspective (Keen, 2006). This aspect plays a very significant role in terms of empathic responses.

One way in which this connection is significant is how it deals with the level of familiarity the engaged person has with the narrative in question. If the person is very familiar with typical plot elements and archetypes commonly used within the specific genre of narrative they are engaged in, then they might not feel as much empathy as someone who is not familiar with said tropes (Keen, 2006). However, this statement has not been thoroughly tested. Even simpler and more formulaic stories can create empathy with the engaged person since it can create a feeling of familiarity (Keen, 2006). The phenomenon described is referred to as character identification. Aspects that promote character identification includes realism in the way a character is portrayed, and if the engaged person has experienced similar events and feelings as the character (Keen, 2006). Another aspect deals with the fact that some people feel strong empathy for real people and little for fictional ones, and vice versa. Aspects such as economic, social, and cultural background also affect the level of empathy different people feel in different contexts (Keen, 2006).

In terms of video games, an important distinction exists compared to other mediums regarding the relationship between the creator of the medium and the engaged person. Games often tend to have non-playable characters (NPCs) which in many cases serve more as a plot device or an obstacle rather than as a character. This is especially common for enemies within games. It might not be a problem within the context of the game that the protagonist is killing hundreds of people, but it might pose a problem for the player (Jones, 2008). However, the major aspect separating video games from other mediums is once again its inherent interactivity. A written text or a film does not change between each reading/viewing, even if the engaged person's interpretation might change. Even if a video game has a limit in the ways it can be played, each session can be said to be different than the last. Consequences in the game can also be said to be caused by the player, since it is their input that progress the narrative. Thus, the player becomes more responsible for the events unfolding in a game

compared to that of film and literature (Jones, 2008). Of course, just as with readers, the amount of empathy the player feels for the characters within a game can vary vastly between different people. Some people may see enemies as actual people, and other might just see them as nothing more than inhuman obstacles.

In this study, narrative empathy will serve as a method for defining and measuring the empathy and sympathy of the participants. Keen (2006) mentions that asking subjects how they feel about certain situations will provide insight into the empathic process. As such, insight into their empathic capability can be revealed by having the participants experience the narrative of the game or text, and answer questions regarding said experience.

### **3.2 Narrative in video games**

In the field of academic game studies, there has been an ongoing debate often titled ‘ludology vs narratology’ (Frasca, 1999; Juul, 2001). Ludology is the study of games as an artistic medium, and the term gained traction when several scholars saw a need for the study of games to carry an independent term (Frasca, 1999). The debate of ‘ludology vs narratology’ was most prevalent during the early 2000’s and stemmed mainly from ludologists’ desire to separate the field of game studies from other schools such as sociology and psychology (Frasca, 1999).

The question if video games can be said to contain narratives was a central point in this debate (Juul, 2001). Since then, the question if video games do contain narratives or not has been answered by several game theorists and designers, and today there is more or less a consensus that video games can contain narratives (Wesp, 2014; Simons, 2007; Jones, 2008 Schröter & Thon, 2014.) However, even if video games are able to feature a narrative, they can still work perfectly fine without one, take Tetris as an example (Bogost, 2006, p.70; Juul,

2001). Nevertheless, the question regarding *how* video games tell stories is a topic which is still being discussed, and that discussion will be the focus of this section.

Narratives should not be viewed as separate from artistic mediums, but rather viewed through them (Juul, 2001, Ryan 2001). Three points of interest regarding narrative will be discussed through the lens of video games. These points are: Time, characterisation, and the player's role. The way time affects the storytelling in video games can be said to stand in contrast to film and literature. Two types of time can be said to exist in film and literature: Story time - which is the chronological order in which the events of the story takes place, and discourse time - which is the order the reader/viewer is presented with the events of the story (Juul, 2001). Games provide the player with autonomy and interactivity. The choices the player face provide a sense of what they are doing and why (Sykes & Reinhardt, 2013, p. 17). Therefore, story time and discourse time can be viewed as synchronous, since they are dependent on the player's input (Juul, 2001).

Characterisation in video games tend to happen mostly during cut-scenes and similar scripted events where the player is not in direct control. The reason being that characters in games tend to have both a narrative purpose and a ludic (gameplay related) purpose (Schröter, Thon, 2014). A good example can be found in games with large open worlds. Within the narrative, the protagonist probably has a specific task set before them, but the player may seek to explore the vast world. The specific task represents the narrative purpose, and the ability to explore represents the ludic purpose (Schröter, Thon, 2014). This duality in function can sometimes lead to the phenomenon known as ludonarrative dissonance, which occurs when the playable character commits a ludic action or a gameplay mechanic is introduced that violates the character traits built up by the narrative (Hocking, 2007). One of the most famous examples of ludonarrative dissonance can be found in *Tomb raider*, released in 2007. In a cut-scene, the protagonist Lara Croft is forced to kill a man to defend herself, which is portrayed

as an emotionally stressful moment for her. However, mere moments later she is able to shoot down several enemies, since it is part of the game mechanics.

Finally, the role of the player is significant in terms of narrative in games. Games are unique as a medium because even if they have pre-planned narratives, the ludic acts of the player will always be random to a certain extent (Jones, 2008). Still, the player does not have full control over the game, since there are always rules. Many games are also designed so that players cannot progress until they complete a specific objective. Written works on the other hand - while static - can be said to be much more free, since they are not bound by rules in the same way as games (Jones, 2008). The following section details the framework through which the game *Beholder* was chosen to be used in this research.

### **3.3 The EPIC-framework**

The game chosen for this study was chosen using the *Ethics Practices and Implementation Categorization Framework*, also known as the EPIC framework, created by Karen Schrier (2015). This framework seeks to facilitate the use of video games as a means of teaching ethics using two separate levels of use: educational goals and strategies.

The reason for utilising this ethics framework in a study centred on analysing empathy lies in how the participants will show their empathic capability. By structuring the treatment lessons around the concept of ethical dilemmas, the participants are given ample opportunities to ventilate their own thoughts, feelings, and values. When channelling these emotions into the tasks, it will show how they use them to solve problems. The way they solve these problems will provide insight into the empathic capability of the participants. Furthermore, ethical dilemmas serve as a medium through which the participants can express their empathic capability. That is the purpose of the EPIC framework in this study, to present the participants

with ethical dilemmas containing no clear-cut answers, so they might connect with the characters and express their empathy.

The EPIC framework divides the field of ethics into seven parts. These parts are referred to as educational goals and each one refers to a specific area of ethics aimed at students. As such, the first stage of using the EPIC framework is to decide which ethical skills correlates with the treatment lessons. The educational goals, as described by Schrier (2015), are as follows:

### **Educational Goals**

**E1. Enhance ethical awareness**

**E2. Enhance emotional intelligence**

**E3. Practice care or empathy-related skills**

**E4. Practice ethical reasoning**

**E5. Practice ethical reflection**

**E6. Enhance character**

**E7. Cultivate facility with major ethics issues, approaches, and frameworks**

(Table 1, Schrier, 2015).

The goals narrow down which video game should be used during the lesson, since finding a game that enhances all the educational goals is difficult, if not impossible. Therefore, the choice of educational goal reflects which game will best aid the students in reaching said goal.

In this study, focus lies on *E4. Practice Ethical Reasoning*. The participants will focus on analysing, interpreting and evaluating ethical issues, choices, and situations (Schrier, 2011).

By facing ethical issues, the participants will be confronted with the fates of fictional characters. It is through their attempts to understand and evaluate these situations and characters that their narrative empathy will be shown. The second half of the EPIC framework

revolves around educational strategies. While the educational goals focus on what the students are going to learn, the educational strategies focus on how the students will reach the goal.

The 12 educational strategies included within the framework are:

### **Educational Strategies**

**S1. Emotion, mood, and tone**

**S2. Diaries or personal reflection devices**

**S3. Role-taking and role-playing**

**S4. Story or narrative**

**S5. Modeling**

**S6. Choice and consequences**

**S7. Simulation**

**S8. Social interaction**

**S9. Deliberation, dialogue and discourse**

**S10. Application to real-world issues**

**S11. Procedural exploration**

**S12. Nudges**

(Table 2, Schrier, 2015)

This study will focus on *S6. Choice and consequences*. The concept of choices and consequences within games are often used to give direct feedback to the player, which has been suggested as an effective strategy for teaching ethics (Peacock et al., 2012). Also, the player's choices shape the world in which the game takes place, through relationships with NPCs, loyalties of factions, different story options, etc. (Schrier, 2015). Though the focus lies on choice and consequences, this strategy often pairs with *S3. Role-taking and role-playing*.

Choices in video games tend to give the player a perspective on the character they are playing

as. It is easier to form a connection with the narrative by placing oneself in the role of the playable character. The very act of playing a character within a game requires some degree of role-taking to experience the situation from the character's perspective. The effect of role-taking promotes perspective-taking, self-/other-awareness (Gerdes, Segal, Jackson, Mullins, 2011), and develops empathy-related skills. (Schrier, 2015).

By having the participants make choices and discuss the consequences an outlet will be provided through which their narrative empathy will be analysed. Finally, the participants will take on the role of the main character and experience the narrative through his perspective, further developing their empathic skills. The game *Beholder* was chosen due to its compatibility with the selected educational goals and strategies. It contains plenty of ethical issues to be used together with educational goal *E4. Practice ethical reasoning*. Furthermore, the game is very much focused around the concept of choices and consequences as well as placing the player in the role of Carl Stein, thereby connecting to the chosen educational strategies.

## **4. Method**

This section will present the research questions of this study, as well as detail how the data used in this study was gathered. Furthermore, information regarding the lessons and participants will also be provided in this section.

### **4.1 Research questions**

- Do students who play a video game experience stronger empathy than students who read a text?
- How does playing a videogame affect the narrative empathy of upper secondary students?

## **4.2 Static-group comparison.**

The data in this study was collected using the static-group comparison method. "This is a design in which a group which has experienced X is compared with one which has not, for the purpose of establishing the effect of X" (Campbell & Stanley, 1963, p.12).

In this study, two groups of upper secondary school students were tasked with answering five questions related to the narrative in the game *Beholder*. These questions were designed to test their narrative empathy. Before answering, one set of participants experienced the narrative through playing *Beholder* while the other set of participants were given a written summary of the same narrative. The lessons were therefore designed to explore how video games affect narrative empathy based on the participants' answers. The reasoning behind this research design was mainly resource based. Limitations of time and availability of participants made a pre-test impossible, thereby making the experimental method, as described by Nunan (1992, p.26), unavailable. Therefore, the static-group comparison was chosen as an approximate and more time efficient method for collecting the data.

## **4.3 Participants**

The 25 participants of this study were all students from the same Swedish upper secondary school, although they differed in age and grade. All participants were placed in one of two sets of groups. The text groups, which would read a text and then answer the questions - or the game groups, which would play a video game before answering the questions. The placement of the participant was not pre-planned in order to avoid issues regarding the students' proficiency levels, which would require data pertaining to their earlier achievements in the subject of English. They were therefore arbitrarily placed in one of the two sets of groups. The participants were also informed that their involvement in this study was

completely voluntary and that they at any time during the lessons could leave without consequences, as stated by the Swedish Research Council (Vetenskapsrådet, 2017).

#### **4.4 Structure of the lessons**

Both groups were placed in separate classrooms, to go through the different lesson plans. The lessons were carried out over two days, with one of them containing one text and one game lesson, and the other contained two of each. The reason behind the distribution of lessons over two days was purely practical, as they had to be scheduled based on the availability of the students. The game groups were informed that they would be playing *Beholder* and that they would not be playing from the start, but rather from the second main task of the game. Therefore, the groups were given a synopsis of the events that had taken place up until the point at which they would start.

Taking control of the game, the participants selected one member from within their own group to serve as the player. This player was the one controlling Carl within the game. Even though one participant controlled the game, the decisions impacting the game were reached through discussion amongst all the participants of the game group. The group was given a task to complete within the game, namely to evict a tenant named Klaus Schimmer by any means necessary. In the context of the game, Carl was given the task by the ministry. It was his job to evict Klaus. The participants were informed through the synopsis that up until this point in the game, Klaus had been both kind, and had not committed any illegal actions that Carl or the participants were aware of. Two possible ways existed for the participants to evict Klaus. They could find or plant an illegal item in his apartment and report the finding to the police, or they could offer to help Klaus leave the country. After this task was completed or enough time had passed they would stop playing and move on to the written task. The lessons were approximately 80 minutes long and the playing would stop if more

than 55 minutes had passed, giving the participants enough time to answer the questions regardless of the status of their in-game task.

The written task revolved around five questions regarding the actions they would take if they were put in the same situation as Carl Stein, as well as general morality based questions. These were questions with no right or wrong answer and relied entirely on the perspectives of the participants. After these questions had been completed they handed in their answers and the lesson concluded.

As for the text groups, they were tasked to read a text featuring the narrative of the game. The text was three pages long, written by us, presented in English, and featured a synopsis of the game's story leading up to the point where Carl is tasked with evicting Klaus. Furthermore, the text was written through a first-person perspective of the protagonist of the game, Carl Stein. Research shows that the use of texts written in a first-person perspective give a more personal relation with the protagonist and increase the potential for the reader to empathize with them (Keen, 2006). This was also done in order to help the participants view the narrative through the role of Carl, in accordance with the educational strategy of role-taking and role-playing (Schrier, 2015). The narrative stretched from the starting point of the game until the point where the game group started playing. The aim was to provide the story of *Beholder* without the gameplay. After they read the text they were given the same questions as the game group. The text group were free to discuss the text as well as the questions amongst themselves. Since the game group discussed and talked about their decisions it felt prudent to allow the text group the same freedom. After they answered the questions and handed in their answers the lesson ended.

## **4.5 Constructing the questions**

Two important points of consideration existed when constructing the lesson plan. One aspect was to create an environment where the participants' narrative empathy could be properly measured. To see to what extent they were able to empathise with the characters of the story and if they were capable of putting themselves in the role of the protagonist, Carl Stein. The other aspect was to connect the playing of the game with the syllabus. This connection is essential when video games are used within education, since it keeps the focus on the learning aspect (Cornillie et al. 2012; Mifsud, Vella & Camilleri, 2013). When the participants' task was constructed, it was based on the exploration and investigative traits of *Beholder* in collaboration with an excerpt from the syllabus for the subject of English stating that students should give reasons for their opinions (Skolverket, 2011), which is what the questions aim to do. This section will explain the construction of the questions used to collect the data for this study. The questions were constructed through the perspective of narrative empathy as presented by Keen (2006). Guidelines for how the questions were analysed is featured in section (4.8).

### **1. What would you do in Carl's place regarding the situation with Klaus Schimmer?**

#### **Explain in detail what you would have done.**

The situation with Klaus Schimmer refers to how the participants would go about evicting this man. The question immediately placed the participants at a crossroads. They might help Klaus Schimmer, thereby going against the direct orders of the totalitarian state they serve, putting both their own life and the life of their family at stake in order to aid this man who is little more than a stranger. They could also choose a more detached approach, to get rid of Klaus by any means necessary. This would put Klaus in a terrible position but Carl and his family

would be safe. The answers for this question were meant to be descriptive, simply detailing the actions the participants would take in order to resolve the situation. It should also be noted that regarding the game lessons the participants might have resolved the situation in a way all participants did not agree upon, seeing as only one computer was available. In such a case they were encouraged to write down their own preferred course of action, not necessarily the one they took as a group.

## **2. Motivate your decision. Why would you have done it?**

The participants were then asked to motivate their decisions from the previous question. Where the first question was designed to be purely descriptive, the second one was constructed so as to allow the participants to further explain their actions.

## **3. The order to evict Klaus came from the government, but the one who must do the action is Carl. Do you think Carl is responsible for evicting Klaus, and if so, to what extent?**

This question was constructed as an opportunity for the participants to further show their empathic capability. This question, like the others, did not feature a right or wrong answer, but relied instead on the perceptions of the participants themselves. It also functioned as a test of the participants' abilities to place themselves in the role of Carl. If Klaus would be evicted in the first question the responsibility of the action would fall upon the participant, as they were the one who made the decision. As such, to evict Klaus and at the same time claim that Carl was not responsible for the action could be an indicator that the participant has successfully placed themselves in the role of Carl.

## **4. How do you feel about putting yourself in danger to help a stranger in need?**

## **5. Is it ok to hurt others in order to keep your family safe? Motivate your answer.**

Both question four and five were constructed with the same concept in mind. Up until now the questions had all been directly focused on the story of *Beholder*, whether it was read or played. The last two questions instead served to move away from the narrative to the reality of the participants. The idea was to observe whether the narrative empathy - which might have been gained during the playing of the game or reading of the text - would remain even after leaving the context of the narrative. These two questions were therefore constructed in such a way that they were both applicable to the story as well as the reality of the participants.

#### **4.6 Gathering the data**

The process of data gathering will be presented as a detailed overview in this section. The participants who partook in this study were all students attending the same upper secondary school in southern Sweden. Already at the early stages of this research the school was contacted, and permission to invite the students to be participants was granted. Furthermore, the school was chosen as the first option since one of the researchers had prior contact with the school, and was familiar with its staff. One teacher in particular, who teaches the subject of English, became the contact person between us and the school. Initially, all of the students at the school were approached with the question if they would be interested in participating in this study or not. A selection of the voluntary students was then conducted in order to maximise the number of participants during each lesson. However, only one of the participants showed up at the arranged time.

This turn of events lead to a new structure of the data collection, in which the contact teacher offered us to use three of their English lessons, as well as all of the students who would participate in them. In order for the participation to still be voluntary, all of the students were given an assignment by their teacher, should they wish not to partake in the data collection. Before making their decision to join or not, the students were provided with basic

information regarding the lessons. They were told that the lessons would centre around ethical dilemmas, the students' own thoughts and feelings, and would culminate in written questions. They were also informed that those who did not want to participate would join the contact teacher in a separate classroom to perform regular classroom activities unaffiliated with the data collection. Furthermore, when the participants had answered the questions, they were sent to the contact teacher's classroom.

The remaining participants of each class were then divided into two groups, as equally large as possible, by assigning either the number one or two to each student and then putting every student with the same number in a group. This method of group division was used in order to separate the participants into two equally large groups as quickly as possible. Since we did not possess any information regarding the individual students, it did not matter which student was placed in either group. Half of them were then asked to move to a separate classroom. However, not all of the participants went to their assigned places, which explains the lower number of participants in the text groups. The yield from these treatment lessons accumulated in the data from twenty-five individual students, spanning three classes, with two being first year students and one being second year.

## **4.7 The groups**

This section will provide a more detailed description of the different groups from whom the data were collected.

### **4.7.1 Game group**

The game groups consisted of ten students in the first group, three in the second, and two in the third. In the first group, the participants were given a short plot synopsis and a basic explanation of the controls and game mechanics featured in *Beholder* before they began playing themselves. However, this procedure was changed in the second and third group.

Instead of simply describing the plot and the mechanics to the participants, the introductory portion of the game was being shown to them. The intent was to give the participants a sense of the plot and game mechanics in a much more intuitive way by showing them how the game looks and works instead of starting them off with only a verbal explanation. Of course, in the second and third group, verbal commentary was still being provided to explain the actions that were performed in the game's introductory phase. Since the study was limited to one computer, one participant was chosen to actually play the game, and act as a proxy. The participants were tasked to choose a proxy themselves, but in the case of a stalemate the researcher would choose at random from the voluntary participants. Meanwhile, the rest of the participants watched the game play on a projector screen and provided the player with thoughts, suggestions, and guidance throughout the lesson.

At all times the participants had access to a manual, detailing the actions available in the game as well as basic controls. Also, one of the researchers could be asked for help during the lesson. Important to note is that the researcher only answered questions pertaining to the gameplay. No information on how to progress or what consequences certain actions had was given to the participants. Still, one exception to this rule existed. If the participants were stuck and did not know how to progress, the researcher could list some of the options available.

The first group managed to evict Klaus rather quickly by framing him. In their first encounter with Klaus they chose to threaten him. After that, they chose to place an illegal item in his apartment, and then called the police which resulted in Klaus being incarcerated. The second group took the same route, and also managed to solve the task quickly. The third group differed from the rest in many ways. First of all, several participants chose to abort the treatment lesson by leaving before answering the questions. Secondly, they were the only group who tried to help Klaus escape the country. The participants managed to provide some aid for Klaus, especially by retrieving a few important documents of his, but ultimately they

were unable to arrange a safe passage out of the country. The third session ended with one participant taking control of the game and evicting Klaus in the same manner as the previous groups. This participant had prior experience with the game and knew how to get Klaus evicted.

#### **4.7.2 Text group**

The text groups consisted of five participants in the first group, four participants in the second, and one participant in the third. The reason why there were fewer participants in the text groups was due to the high number of participants leaving the text lessons after learning of its structure, in addition to some participants not moving to their assigned group. Since the participants were free to leave the lessons at any time if they so desired, many chose to exercise that right. It would seem like many participants were discouraged when they saw the text and chose not to participate. The ones who stayed simply read the text and answered the questions, barely speaking with each other even though it was encouraged. They seemed to treat it more as a regular test where collaboration is seen as cheating. One researcher was also present to answer any query the participants had regarding the text or formulation of the questions. The researcher did not answer any inquiry regarding the right or wrong of the questions as they are completely subjective and influencing the participants would compromise the data.

#### **4.8 Categorising the answers**

After reviewing the participants' answers, each one was put into one of two categories: high or low empathy, where high empathy answers showed signs of narrative empathy and low empathy answers did not. The answers received from the participants contained much variance between them, both in structure and content, and could thus be interpreted in many

different ways. However, for the purpose of this study the only important aspect lies in whether the answers showed signs of narrative empathy or not. In order to make that distinction, signs of empathy or sympathy in the answers were highlighted. If none were found the answer was deemed to show low empathy.

Suzanne Keen (2006) tells us that empathy and sympathy are deeply connected, and that empathy always leads to sympathy. Because of this, the decision was made to treat them both as signs of narrative empathy in the answers. Making a distinction between them when analysing the answers would be counterproductive since it would split the answers into varying degrees of narrative empathy, adding unnecessary complexity to the study. Sympathy is the product of empathy, and as such it was viewed as a clear sign of narrative empathy. Since neither access to nor proficiency to operate the machinery used by psychologists to objectively measure empathic responses such as changes in heart rate were available (Keen, 2006), interpretations of the received answers would have to be more subjective. There are no groups of words or utterances that automatically create an emphatic answer. As such, the whole of the answer would first have to be taken into consideration and then the elements shifting it into either high or low empathy would be uncovered. The most important aspect while examining the answers was the stance taken by the participant. The answers categorised as high empathy showed a sympathetic stance towards the characters. They were interested in their well-being and the actions taken in these answers were focused on ensuring the safety of the characters. In contrast, the answers categorised as low empathy showed an unsympathetic stance. The participants were more interested in ensuring their own safety, ignoring the needs of the characters, and placing themselves as far away from the conflict as possible. These are signs of personal distress, a state of mind which differs greatly from empathy in that instead of producing a deeper connection with the character it awakens fear for the safety of oneself and the desire to be somewhere else (Keen, 2006). Therefore, when analysing the answers and

categorising them into high or low empathy, focus was placed on the stances taken by the participants as well as signs of personal distress.

Looking at two examples of the answers given, and how they were categorised, might bring greater clarity regarding our process. Starting with an example categorised as high empathy.

“I would try to warn Klaus that he has to move away from the area. But it could be trouble because maybe the ministry finds out that he is trying to escape. So if I maybe could try to tell the police the truth, but I have no evidence. So I would try to warn him that he has to move and he has to trust me. But maybe I would tell his wife instead because she knows he has problems with the government.”

The answer clearly took the sympathetic stance. Showing concern for the safety of the characters and taking actions to ensure it, as shown by two sentences in particular, underlined in this example for clarity's sake. Next will be an example of an answer categorised as low empathy,

“I think I would just quit the job. It just sounds like too much drama and too much stuff happening there.”

A clear sign of personal distress was found in this answer. The participant wants nothing to do with the situation as a whole, and as they seek to remove themselves from the narrative no thought is spared for the safety or well-being of the characters. In conclusion, the categorisation of the data into either high or low empathy was a subjective process where we

had to look at the individual answers and the stances taken, searching for signs of either empathy or personal distress.

#### **4.9 Thematic analysis**

The analysis of the data has been done through themes. That is, as the quantitative data was compiled and sorted, focus was put on divergences within it. These divergences were then explored by analysing the individual answers to the questions to see if any theme became apparent. Once a theme was determined the data was then further analysed in order to explain its existence. The reason for choosing this approach was heavily attributed to the small amount of research done within this field, since there was so little auxiliary research, the thematic approach was chosen in order to present our own analysis of the data.

### **5. Results**

In the following text the collected data will be presented quantitatively with the amount of high and low empathy answers for each question produced by the participants of each group respectively. In some cases, the participants' answers contained grammatical errors and spelling errors. Corrections have been made in the analysis to increase the intelligibility of the answers. This was done in accordance with Ochs (1979) who states that "...the transcript should reflect the particular interests - the hypothesis to be examined - of the researcher." (p.44). Since this study is focused on the content of the answers and is not interested in the spelling and grammatical properties of said answers, the optimal way of presenting the answers would be in a grammatically correct fashion in order to ensure clarity for the reader.

Certain answers have been classified as unusable. In these cases the participant might either have misunderstood the question, or the answer is too nonsensical to interpret as either high or low empathy. Previously, the participants have been divided into three game groups

and three text groups, because of the three separate occasions when the lessons could be performed. Through the rest of the paper, all of the game groups and text groups have been added together respectively in order to perform a more holistic analysis. However, when discussing individual groups they will be numbered accordingly. The quantitative data looks as follows:

#### **Game group - 15 Students**

**Question 1: High empathy: 1(7%)      Low empathy: 14(93%)      Unusable: 0**  
**Question 2: High empathy: 0(0%)      Low empathy: 15(100%)      Unusable: 0**  
**Question 3: High empathy: 8(53%)      Low empathy: 6(40%)      Unusable: 1(7%)**  
**Question 4: High empathy: 4(27%)      Low empathy: 10(67%)      Unusable: 1(7%)**  
**Question 5: High empathy: 4(27%)      Low empathy: 11 (73%)      Unusable: 0**

#### **Text group - 10 Students**

**Question 1: High empathy: 5(50%)      Low empathy: 4(40%)      Unusable: 1(10%)**  
**Question 2: High empathy: 6(60%)      Low empathy: 3(30%)      Unusable: 1(10%)**  
**Question 3: High empathy: 7(70%)      Low empathy: 3(30%)      Unusable: 0**  
**Question 4: High empathy: 3(30%)      Low empathy: 5(50%)      Unusable: 2(20%)**  
**Question 5: High empathy: 5(50%)      Low empathy: 5(50%)      Unusable: 0**

In the first question, the game group showed a very low level of high empathy answers, with only one participant producing an answer within that category. Observing the answers by the text group on the same question showed a more even distribution between high- and low empathy answers, even though there were a slightly higher amount of high empathy answers.

In the second question, all of the answers provided by the game group were categorised as

low empathy, but they were still very similar to the results found in the first question.

However, this was the question that had the largest percentage of low empathy answers, and also the highest percentage of the answers being in a single category - in this case low empathy - across all of the data. The text group still produced a majority of high empathy answers, with a slight increase compared to the first question.

The third question showed a large upswing of high empathy answers produced by the game group. This was also the first and only question where a majority of the answers from the game group had been categorised as high empathy answers. The amount of high empathy answers were also high in the text group. This was the question that had the largest percentage of high empathy answers across both groups. The fourth question showed a dip in the amount of high empathy answers provided by the game group. The text group's answers to this question is significant, since it was not only the lowest percentage of high empathy answers across all of the text groups answers, but it was also the only question where the text groups have a higher rate of low empathy answers. Finally, the fifth question showed very similar results for the game group when compared to the fourth question. The text group showed a perfect divide between high- and low empathy answers in the fifth question.

Overall, the game group showed a lower amount of high empathy answers in all of the questions compared to the text group. From a quantitative perspective, this data indicates that the game provided less of an opportunity for the participants to develop narrative empathy than the text did. However, the answers themselves need closer examination in order to provide insight into how the participants articulated their empathy. The answers will therefore also be analysed through a qualitative perspective by examining them through themes.

## 6. Themes

This section will present the major themes found within the collected data.

### 6.1 Gameplay over narrative

When answering the first question: ‘What would you do in Carl’s place regarding the situation with Klaus Schimmer? Explain in detail what you would have done’, the majority of participants in the game group gave low empathy answers, which stands in contrast to the text group which gave mostly high empathy answers. When examining the answers for any reasons why this might be, one important aspect was discovered. It would appear that the game group focused on using gameplay mechanics when answering the questions. Since Carl inhabits both ludic and narrative functions, it is possible to view him both as a character as well as a tool that only fulfills functions within the game (Schröter & Thon, 2014).

Focusing on the first question, two answers that highlight this theme will be presented, one from the game group and one from the text group.

#### Text group answer:

“First of all I would have tried to benefit both my family and Klaus' so no one would have to get hurt. First I need to talk to Klaus and explain to him what's going on to try and convince him to leave and find another apartment, but as smoothly as possible. Now I understand that there's still a chance that I can take the fall and go to jail in a kind of twisted way, but if I gather enough evidence then I can twist the play and make the leader of the government pay for the crimes that they would have me do. The state doesn't want to make the situation worse than it already is. The evidence will make the people come together and unite against the things that are wrong.”

Game group answer:

“First I would put cameras in his apartment so if he would do anything illegal I would report him. Klaus liked wine so I would put drugs in his wine and then report him for a test.”

Looking at the text group answer, the participant develops a far-reaching plan, not stopping at ensuring the safety of Klaus but actually going so far as to bring down the totalitarian government by uniting the people. Moving on to the answer from the game group, a different perspective on how to solve the situation is given. This participant wants to put cameras in Klaus' apartment and possibly frame him if no other illegal activity was observed. Everything described by the game group participant is possible to do in the game, and to some extent even encouraged. Placing surveillance cameras in the apartments is done in order to watch for illegal activities to be reported, awarding the player with points if any such an activity is observed. The fact that Klaus likes wine is also information provided by sneaking into his apartment in the game and inspecting his possessions. Even the placement of illegal substances in Klaus' apartment in order to frame him is part of the gameplay mechanics. It can therefore be theorised that the answer given by the participant in the game group is restricted by the actions allowed within the game. The actions of the player is one of the most central parts of any video game, and largely complicates the creation of consistent characters since the player is in control of them (Schhöter & Thon, 2014). Also, in terms of ludology and narratology, video games are capable of working without a narrative at all (Bogost, 2006, p.70; Juul, 2001). Keeping this point in mind, it is plausible to think that the participants discarded much of the story presented by the game and solely focused on the gameplay. The experience of playing the game and the rules imposed by it are still fresh in the mind of the participant when answering the question, seeing as they were given the questions directly after playing.

Returning to the text group answer, the grand plan constructed here is not executable within the game. Convincing Klaus to leave certainly is, but the action of forcing a civil uprising against the government is not. The question then becomes if the text group participant would have given the same answer after playing the game. As it is the answer was given without restrictions, the only thing limiting the participant's avenues of action was their own imagination. The reason as to why this strict adherence to the gameplay mechanics would lead to low empathy answers might be found in the gameplay of *Beholder* itself. The path to frame and evict Klaus is very simple and straightforward while the route to save him is much longer and more complex. This led to the game group almost exclusively ending up evicting Klaus, since it was faster, easier and therefore perhaps more rewarding.

In summary, the reason behind the game group's overwhelming low empathy answers regarding the first question might be found in their adherence to the rules imposed by the game they just experienced. By applying the same gameplay mechanics to their answers, they might be drawn towards the more rewarding action presented by the game, framing and evicting Klaus. This stands in contrast to the answers given by the text group, which tends to be more complex and unbound by the rules of the game.

## **6.2 The limitations of the game**

A large portion of this study has been devoted to describing and analysing video games as an artistic medium, mostly in order to determine the traits that separate games from other mediums. One perspective through which the participants' answers can be understood is that of the limitations of the video game. Jones (2008) mentions that even though games give the player autonomy, they are at the same time more restrictive than written works due to games having rules. To illustrate this point further and give a concrete example, the answers of the

game group and the text group will be looked at through the discourse of restricting rules in games.

One large flaw exists in the game *Beholder* when analysing narrative empathy. The flaw consists of the rules in *Beholder* being quite strict and limiting the actions of the player. When the player first confronts Klaus about the eviction order, two paths present themselves to the player; they can either choose to threaten Klaus or offer to help him. The most commonly picked choice in the game group were to threaten Klaus, and in that decision lies the problem of restricting rules. If threatened, Klaus will not accept any future offers of help from the player. Thus, the only option left for the player is to find or place an illegal item in Klaus' apartment if they wish to fulfil their task of evicting him. Also, the method of placing/finding an illegal item in Klaus' appartement is much easier to accomplish than the more time consuming and more difficult task of helping him leave the country. Here, the rules of the game affect the narrative, making progression impossible without following a specific story route within the game. This phenomenon of putting gameplay in the forefront (which all games more or less do) can cause the story to be rudimentary and therefore seem uninteresting to the player (Jones, 2008).

In the answers to question 1 and 2 from game group 1, who chose to report Klaus to the police after placing an illegal item in his apartment, a majority of the participants answered that they would deal with the situation in the same way as they did in the game. In terms of question 2, many participants from game group 1 answered that the action was easy and risk free. Similar results are found within game group 2 and game group 3, even though game group 3 chose not to threaten Klaus at the start. Comparing the game groups' answers with those of the text groups – text group 2 in particular - shows that not only did all of the text groups produce longer answers in general, but they also show a larger ratio of answers with high empathy. Also, the participants of the text group show a willingness to talk to

Klaus, and by communicating with him solve the situation. Here are some of the answers provided by the game group and text group respectively.

Game group answers:

“It is the easiest way since Klaus did not want to leave.”

“Because it’s a low risk for me to get caught and I think it’s the easiest way.”

Text group answer:

“I’m a person who thinks before acting. I need a really good reason to do something wrong, so if a person who hasn't done anything wrong gets in trouble, especially by the state, I will do anything in my power to convince the people that that man is innocent. So you can understand how much I would fight if someone makes me want to do something to a person who is innocent. Especially if I might take the fall too.”

High signs of empathy and longer more elaborate answers from the text group can be related to the previously mentioned limitations of the game. By only giving the player two choices, help or threaten, where threatening hinders any further attempts at the helping, the game offers little in terms of choice. Looking at the answers themselves, the first example from the game group states that Klaus did not want to leave. By mentioning the fact that Klaus did not want to leave, the participant takes a stance which indicates that their course of action was the only possible one - which is correct in this case. The second example by the game group focuses on the low risk and relative ease in framing Klaus with an illegal item. While not taking a stance and claiming that they had no other choice, this participant points to the problem regarding the two ways in which Klaus can be evicted. Since the route of evicting Klaus is easier than helping him escape, it can be argued that participants who are focused on

completing the task will lean towards evicting Klaus rather than helping him. Even if their original intention is to help him, the game is designed so that the player needs to be adamant and complete several smaller tasks before Klaus can leave the country. Simultaneously, the player can choose to evict Klaus at any moment while trying to solve the smaller tasks, making eviction the easier option.

The text group on the other hand, even though they were given implications to what Carl might do, are shown to be more considerate, as well as more strident in their willingness to help Klaus. As mentioned in section (6.1), the text group can be said to be less restricted in their answers since they have not experienced the rules of the video game. According to Jones (2008), the reader of a written work is given the possibility to imagine the text in almost infinite ways much due to the internal nature of reading. Looking closer at the answer by the participant of the text group, they take a stance at the start and show signs of a strong moral code by stating that they need a good reason to do something wrong. The latter half of the answer shows that the participant considers Klaus to be innocent and that his safety is worth fighting for. Keen (2006) says that the amount of empathy a person can feel for a fictional character is highly subjective. In this case, the answer shows that the participant cared for Klaus, and could imagine saving him, which stands in stark contrast to the answers of the game group.

To summarise, by virtue of its design, the game provides the participants with a narrower set of alternatives to tackle the task of evicting Klaus, while the written text provides options for the participants to freely imagine how the problem can be solved.

### **6.3 Role-taking**

The lessons used to collect data for this study was built around the act of role-taking, as described in section (3.3). By having the participants place themselves in the role of Carl Stein they would in turn forge a deeper connection with the character, strengthening the empathy they might feel for him and possibly the characters he interacts with (Schrier, 2015). This was done through different means for the different groups. The game group got to place themselves directly in the role of Carl by taking control of the character within the game. They got to move him around, make his decisions, and through him interact with the narrative. The text groups experienced the role of Carl in a less direct way. Instead of controlling him, the text they were given to read was written through a first-person perspective. As such, they experienced the story through his eyes, effectively taking on the role of Carl as they moved through the narrative. The use of texts written in a first-person perspective gives a more personal relation with the protagonist and increase the potential for the reader to empathize with them (Keen, 2006).

The first two questions focus on the act of role-taking, how the participants would act if they were placed in the same situation as Carl. When looking at the answers for these two questions a great divide can be seen between the game group and text group. The game group having a 7% ratio of high empathy for the first question and 0% for the second question, compared to a 50% on the first and 60% on the second for the text group. Just by looking at these results it would seem as if playing the role of Carl leads to a diminished sense of empathy compared to experiencing the narrative through his perspective. That being said, an interesting turn of events can be seen when observing the results of question three: ‘The order to evict Klaus came from the government, but the one who must do the action is Carl. Do you think Carl is responsible for evicting Klaus, and if so, to what extent?’. This is the one question where the game group reaches above 50% in its high empathy answers. Furthermore,

this is the question that elicits the highest empathic responses from both groups, with the text group having a high empathy response ratio of 70%.

Even though the game group shows an incredibly low amount of empathy towards the fate of Klaus, as can be seen from the results of questions 1 and 2, the majority of participants expressed sympathy for Carl's position when asked if he is to blame for the possible eviction. Looking at how one game group participant answered the first three questions might provide some insight into this discrepancy.

1. What would you do in Carl's place regarding the situation with Klaus Schimmer? Explain in detail what you would have done.

"I would do like we did when we played the game. Place something illegal in his apartment then report it to the police."

2. Motivate your decision. Why would you have done it?

"Because it worked very well and it was easy."

3. The order to evict Klaus came from the government, but the one who must do the action is Carl. Do you think Carl is responsible for evicting Klaus, and if so, to what extent?

"I don't think Carl is responsible for evicting Klaus because the order came from the government and the laws too."

The participant shows neither empathy nor sympathy for the fate of Klaus when answering questions 1 and 2, choosing to frame and evict Klaus simply because it would be the easier choice. However, when answering question 3 the participant shows sympathy for Carl, claiming that the order came from the government and that he had no choice but to enforce it.

What this might entail is that while playing the game and deciding the fate of others the empathic capability of the players are quite low, seeing them as nothing more than data on the screen and not worrying about their fate. Yet the act of taking on the role of Carl enables some form of empathic bond to form between the player and the playable character. In a study focusing on the connection between morality and character creation within video games, people tend to create avatars with a code of morality that is similar to their own (Ewell, Guadagno, Jones, Dunn, 2016). In this case, the playable character Carl was not an avatar the participants could freely create, but rather one that was handed to them. However, Carl does function very much like a blank slate with all the important decisions made in the game being left to the player to decide. Because of this, one could argue that the morality of the player would be passed on to Carl, and that the role-taking shown through these questions would be a result of the player's own morality (Ewall, et al. 2016). Even though they do not care for the other characters they feel a need to justify the actions of Carl - and thereby themselves - by claiming obedience to the totalitarian government.

As such, even though the act of playing the game does not seem to raise the narrative empathy of the players, the role-taking aspect of the game seems to be somewhat effective, allowing the game group participants to better understand and bond with the character they take control of.

## **7. Conclusion**

The focus of this study has been the answering of two questions:

- Do students who play a video game experience stronger empathy than students who read a text?
- How does playing a video game affect the narrative empathy of upper secondary students?

Starting with the first question, by analysing the data collected through this study it is apparent that the participants playing a video game, as opposed to reading a text, showed a lesser amount of narrative empathy. For each of the five questions asked at the end of the lessons the text group always showed a higher percentage of high empathy answers when compared to the game groups. As such, as far as this study is concerned, playing a video game will not lead to stronger narrative empathy compared to reading a text.

As for the second question, it would definitely seem as though playing a video game does affect the narrative empathy of upper secondary students, although not in the way that was initially theorised. The premise was that the act of controlling Carl within the game, effectively taking the role of the character, would lead to an increase in empathy-related skills (Schrier, 2015). However, as the collected data shows, that was not the case. As far as empathy was concerned, the text groups showed a much higher ratio overall. The reason as to why this would be the case seemed to lie within the structure of the game itself. The participants of the game group were restricted in their ability to develop answers outside of the gameplay mechanics imposed by the game. Due to the limitations of the game and the choices of the participants they often found themselves unable to progress by means other than framing and evicting Klaus. Even outside of the game, when answering the questions, they were compelled to work within its rules and mechanics. Though they could resolve the situation in any way they would like, the answers show them continuing to use gameplay mechanics in describing their actions. It could therefore be argued that instead of empowering the participants the game would imprison them within its framework, limiting their options and avenues to approach the situation. In comparison, the answers of the text group showed no such limitations and the text group participants were able to write more complex answers with a higher ratio of empathy.

Even though the game would push the participants towards low empathy answers, it would seem the role-taking was at least somewhat effective. The third question was the only one where a majority of the participants from the game groups showed high empathy. This question focuses on the responsibility of Carl's actions and shows that the game groups had some sympathy for his actions. The reason for this lies in the role-taking aspect of the game. Although the participants did not show any sympathy for Klaus or his situation, they would show sympathy for the character they played as. While the game groups showed an unusual amount of narrative empathy in the third question, compared to the other questions, the text groups showed an even higher ratio of high empathy answers here as well.

In conclusion, it would seem that playing a video game - rather than reading a text - elicited a lower empathic response from the participants due to the imposed rules and limitations of the game. Although the act of role-taking seems to be somewhat efficient, it can still be employed with greater success through the use of a text.

## **8. Future research**

In this study, the ways in which a video game can affect the participants' narrative empathy has been analysed. As shown in the conclusion, in this case it cannot be said that video games aided the participants in expressing their empathy for the characters featured in the game. However, plenty of potential can still be found in future research of this topic.

In an article by John w. Rice (2007), he lines up several obstacles commonly found when working with video games within education. These are obstacles that were present during this study as well, and ought to be addressed by anyone who aims at working with video games in the classroom. The first obstacle relevant to this study deals with the availability of computers within the school, and their technical capacities. In this study, the participants only had access to one computer. Ideally, all of the participants in the game

groups would play on separate computers in order to make sure that every participant is given a chance to experience the game on their own and potentially show empathy for the characters. By being limited to one computer, the participants had to make decisions as a group, which is not ideal when analysing individual answers. The next obstacle comes in the form of time constraints. Video games tend to require several hours of playtime before the player is properly invested. The classroom already being restricted by tight schedules does not allow for an easy integration of video games, unless the integration is fully committed to. As such, this study would have greatly benefitted from having more time dedicated to the data collection, since that would allow the participants to explore the game at their own pace and not be restricted to a single lesson. Finally, it is always crucial to put the games in a larger context, which for educational purposes refers to a connection between the game and the curriculum. If the video games are used in the classroom for an educational purpose, it is important that the teacher creates a solid connection between the playing, the teaching, and learning concepts (Mifsud, Vella & Camilleri, 2013).

Video games are an unique form of artistic medium, since they differ much from both film and literature, primarily due to them being dynamic and interactive. Because of this interactivity, the combination of video games and narrative empathy is interesting. By actually interacting with the narrative and the characters, these aspects within video games have the potential to create empathic responses from the players. That is why further research into how video games can create empathy, and how that empathy is articulated is required.

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