A death-positive videogame for death education of adolescents

Un videogioco per l'educazione alla morte rivolto agli adolescenti

Viola Nicolucci

National Board of Italian Psychologists, Registered in the Piedmont Region Register, Turin, Italy, violanicolucci@gmail.com

HOW TO CITE Nicolucci, V. (2019). A death-positive videogame for death education of adolescents. *Italian Journal of Educational Technology*, *27*(2), 186-197. doi: 10.17471/2499-4324/1071

ABSTRACT Meaning is what makes stories compelling, and often what conveys meaning in our stories is death. However, even if death is ubiquitous in the media, we tend to adopt an attitude of emotional denial to it in our personal lives. Death seems to trigger a great deal of anxiety in adolescents. Considering that videogames are a popular medium among teenagers, should we then use them as a tool in death education programs? Death is present in most videogames as a mechanic or a narrative element. "A Mortician's Tale" stands out from the crowd in as much as it's a story-driven, death-positive videogame that encourages players to deal with their death fears with the intent of reducing them.

KEYWORDS Videogames; Adolescence; Death Education; Death-Positive; Values.

SOMMARIO È il significato a rendere le storie avvincenti; e ciò che dà significato alle storie è spesso la morte. Tuttavia, anche se la morte è onnipresente sui media, tendiamo ad adottare un atteggiamento di diniego emotivo nella vita personale. La morte sembra scatenare molta ansia negli adolescenti. Considerando che i videogiochi sono un medium popolare tra i teenagers, potremmo adottarli come strumento negli interventi di educazione alla morte? La morte è presente in molti videogiochi come meccanica o elemento della narrativa. "A Mortician's Tale" risalta tra gli altri perché è un videogame basato su una narrazione, con approccio positivo verso la morte, che incoraggia i giocatori ad affrontare le proprie paure della morte al fine di ridimensionarle.

PAROLE CHIAVE Videogiochi; Adolescenza; Educazione alla Morte; Positività Verso la Morte; Valori.

INTRODUCTION

People carry several interacting narratives within themselves. Narrative therapy seeks to help people identify their mindset and values so they can confront the problems they face. In this process, the therapist co-authors a new narrative with the patient (Dimaggio, Salvatore, Azzara, & Catania, 2003).

For this generation, videogames are one of the most important sources of storytelling. Stories conveyed through this medium, however, are mainly employed as a tool for creating fun, with no therapeutic application. Still, narrative content in media can influence an individual's attitudes or beliefs, and thus stimulate reflection. What's

more, videogames can be used to consciously convey meaning and values (Flanagan & Nissenbaum, 2014). Lazzaro (2004) identifies four kinds of fun in videogames: easy fun, hard fun, people fun and serious fun. Meaning and value are the motivational drives behind serious fun. Serious fun takes place when the game is designed for the player to experience a shift in their perception of their self-image and of the real world (Lazzaro, 2004). Narrative is a vehicle for conveying meaning and value, resulting in a change in perspective through the learning process.

What provides us all with a sense of meaning, both in life and generally in stories, is death. Although death is ubiquitous in the news media, in the movies and in videogames, when it comes to thinking about it in our personal lives, we live in full death denial. Can we then imagine helping adolescents overcome death anxiety with the aid of a videogame?

The aim of this paper is to recommend the adoption of the videogame "A Mortician's Tale" in death education programs for adolescents. For this purpose, we will first examine loss, death and grief as experienced by adolescents – without dismissing any subsequent anxiety – to finally approach death education as a solution. We will then consider the aid of videogames for educational purpose, deepening the discussion on the most popular representations of death as adopted by this medium. Finally, we will outline and discuss the above mentioned game with special attention on the values that have intentionally been embedded in its design.

1. DEATH, LOSS AND GRIEF IN ADOLESCENCE

Understanding death involves five principal concepts (Brent, Speece, Lin, Dong, & Yang, 1996): universality (i.e. all people die); irreversibility (i.e. the physical body can't be brought back to life); non-functionality (i.e. a dead body does not engage in activities associated with life); causality (i.e. what brings about death); and noncorporeal continuation (i.e. existing in some form after the death of the physical body).

A mature conception of death does not develop until the threshold of adolescence (Speece & Brent, 1984; Toews, Martin, & Prosen, 1985). An adolescent's understanding of death appears to align with that of adults, but there might also be unique facets of an adolescent's conception of death (Noppe & Noppe, 1991). Acquiring formal operations (Piaget, 1972), the adolescent's thoughts can range over life and death but just because the adolescent can think of death in an abstract manner does not necessarily mean that he or she is thereby actively engaged in thinking about their own personal mortality. Death is typically conceptualized by adolescents as cessation of life, anticipated loss of one's own personal legacy, separation and loss (Noppe & Noppe, 1991).

The entity of the biological transformation from childhood to adolescence should infuse teenagers with energy (Noppe & Noppe, 1991). Adolescence is statistically a healthy phase of the life span, thus death during this period is likely to be unexpected. However, the risk of suicide in adolescence is underestimated (Evans, Hawton, & Rodham, 2005; Gosney & Hawton, 2007; Lester, 2003). Adolescents may encounter the death of parents, grandparents, friends (Andriessen et al., 2018) and pets. Moreover, adolescents may witness others prepare for their own deaths, and this may strike the adolescent as quite bizarre. Increasing age affords more situations in which death is encountered (e.g. funerals) and pondered (Noppe & Noppe, 1991). Adolescents may be exposed to the physical death of their loved ones or emotional death in the form of separation from parents on the path to autonomy. In early adolescence, the struggle for independence arises but autonomy comes with a price: emotional separation from the family. The loss of that bond to parents, although developmentally normal, may be construed by the adolescent as a form of death – the ending of a certain form of affective relationship (Ausbel, Montemayor, & Svajian, 1977).

Although bereavement, after any death, is potentially a disruptive life event with consequences for physical and mental health, relationships, and social functioning, it can also be associated with personal growth in

terms of increased appreciation of life, of others, and emotional strengths (Balk, 2014).

We are all assaulted by death in the media, which is mainly presented in an unrealistic, cruel and/or violent way (Testoni, Tranquilli, Salghetti, Marini, & Legrenzi, 2005). It is difficult to understand what impact these sources have on adolescents' construction of the meaning of death because there is a dearth of shared experiences of real death (Testoni & De Cataldo, 2014). Given that adolescents are a major target for the media, the latter has considerable potential for conveying relevant content. In this respect, we will later discuss why a videogame like "A Mortician's Tale" is a cutting-edge medium for this purpose.

1.1. Death education for adolescents

The study of death is called thanatology, an interdisciplinary approach encompassing various fields of study: philosophy, psychology, medicine, sociology, anthropology, nursing, bioethics, history, architecture, education, archeology, law and religious studies (Mascarenha Fonseca & Testoni, 2011). The aim of thanatology is that of constructing scientific comprehension of death, its rites, and meanings (Mascarenha Fonseca & Testoni, 2011).

Thanatology theory takes shape as death studies and research, whereas thanatology practice manifests as formal death education, end-of-life care, and bereavement counseling (Testoni & De Cataldo, 2014). Although there is a vast amount of literature on death education, its objectives and curricula are rarely discussed. Most programs include: arousing death-related attitudes through readings, media, and experiential exercises; reducing negative feelings about death (or death anxiety); and group discussion and activities (Durlak, 1994).

According to Wass (2004), death education should focus on: cultural education (being a reality and part of our culture, death should be part of children's cultural education); suicide/violence prevention (interventions and prevention programs need to be offered in all schools); media analysis (death tends to be represented as violent: discussion on natural dying may correct distorted images that glorify or trivialize the event).

Death education is spreading to many contexts, such as school classrooms, college courses, and education for health professionals, as well as the training of grief counselors and public educators (Wass, 2004).

For school-age children in some countries there are still many barriers, such as reluctance on the part of teachers or parents and the lack of adequate training (Noppe, 2007). Many people still think that death education for young children would be better taught at home, despite the fact that the most common way to deal with the subject of death in the modern home is through silence (Noppe, 2007).

Death Education is an opportunity to give skilled responses to teenagers who are unable to address the topic within their family. The school system can play an important role in death education by helping young people to sense the limits of mortality. Death education is rarely welcome at school as an opportunity for reflection because teachers do not consider it as a curricular topic but as a responsibility of the family (Testoni & De Cataldo; 2014).

Durlak and Riesenberg (1991) conducted a meta-analysis on death education where participants ranged from junior high/high school and college students to health care workers, nursing students and volunteers. The study makes a distinction between primarily didactic and experiential programs. The former aims at increasing cognitive awareness and understanding of death-related issues. Lectures, media presentations and group discussions are used for the purpose. Experiential programs may use similar instructional techniques, but the ultimate goal is helping participants examine and discuss their feelings about death.

The authors suggest important behavioural changes at the end of such programs could include the ability to express personal feelings about death; increased discussion of death issues with relatives and friends; more contact with the terminally ill; and concrete action taken to prepare for death, possibly involving organ

donor status, preparing a will and preplanning funeral arrangements.

This research highlights that death education programs are generally more successful in changing participants' attitudes on death related issues than affecting their personal feelings about death. Specifically, experiential programs achieved significantly better affective outcomes than didactic programs.

Perhaps the greatest contribution that death education for adolescents could make is to provide an environment in which taboos inhibiting discussion of such potentially frightening and emotionally charged material are lifted (Noppe & Noppe, 1997).

Videogames are safe environments in which players can immerse themselves and where negative emotions can be worked through with a sense of control (Granic, Lobel, & Engels, 2014). With the aid of videogames, the task of death education for adolescents should be to help them look at death in all of its difficult and mysterious biological, intellectual, social, and affective realism, and to adaptively incorporate it within their ongoing appraisal of the life cycle.

2. LOSING, LOSS AND DEATH IN VIDEOGAMES

Death is pervasive in videogames, but it has generally nothing to do with end of life. When reduced to a game mechanic, death can play different roles. In the early days, players were given a limited number of "lives" to fight their quest and achieve their goals, therefore death was mainly a constraint and not permanent.

"Game over" is part of a never-ending circuit of trial and error *«subverting the meaning of death as end of life by using it as a sanctioning mechanism»* (Harrer, 2013). Losing represents temporary failure on the path to mastery. As feedback, the protagonist's death could even be considered a learning tool for the player to improve their performance.

Death in gaming is also used as a reset function: a player dies over and over again throughout the game to automatically revive after restart. Watching the hero die barely affects a player emotionally, *«Games have trained us to view death as a triviality»* (Grant, 2011).

The most realistic representation of death in videogames is probably *permadeath* (permanent death), a game mechanism where the characters who die are dead and removed from the game permanently, reproducing irreversibility.

In her contribution, Harrer (2013) discusses some gameplay examples illustrating the possibility of games to leverage their expressive potential and arrive at rich representations of loss. Grounding on Freud's theories (1917), the author explores how death and loss are represented in videogames like Final Fantasy VII, ICO and Passage through the lens of Rusch's model (2009).

Freud explored loss as a universal emotional state in human life. Analysing *«mourning as the reaction to the loss of someone who is loved»* (1917), he talks about the contingent reaction to this universal human experience. Freud contrasts mourning, deemed as a fruitful reaction, with melancholia, a pathological reaction to loss. Following Freud, any cultural production can then be interpreted as a sublimating act compensating for the loss experienced (Freud, 1929/1961).

Rusch (2009) identified three devices for the purposeful design of human emotional states and complex experiential learning processes in games: procedurality, fictional alignment, and emotional metaphor. Procedurality is the language by which gameplay becomes structured. Fictional alignment combines game structures with fictional themes to convey emotions. Experiential metaphor investigates the metaphorical potential of game aesthetics and how it can help to make abstract experiences emotionally tangible.

Final Fantasy VII is a role-playing adventure published by Square in 1997 for the PlayStation console. Each playable character has skills that are useful during combat. Aeris brings healing powers to the team that exemplify procedurality (Rusch, 2009). Her healing capabilities represent a free option for the team in the

gameplay, which makes using additional potions unnecessary. During the gameplay, the player internalizes Aeris' skill and as a consequence of her death, her loss and absence are expressed by the team's need to search for alternatives to her healing skills. The character's permanent death stands out as a disruption of previously established gameplay patterns, while death in the game as a whole is a fail state creating tension during battles.

ICO is a third person action-adventure game developed by SCE Japan Studio and Team Ico, and published by Sony Computer Entertainment, released for the PlayStation 2 console in 2001. The protagonist, Ico, seeks to escape a cursed castle with Yorda while fighting the black shadows threatening her. Ico and Yorda have a symbiotic relationship reproducing the hero and damsel in distress dichotomy. Their dependent relationship together with the game mechanics illustrate the fictional alignment. Before Yorda's loss is inflicted by a malign occurrence, gameplay decisions revolve around Ico protecting her. This is controlled by the player through the R1 button. As the R1 button represents Ico's ability to make a difference in Yorda's life, when Yorda is lost, this control becomes obsolete and unnecessary in the gameplay. When Yorda is abducted, Ico's ability to care is no longer needed. Harrer (2013) highlights how this echoes the challenge of mourning to withdraw one's libido from a lost object (Freud, 1917).

Passage is a game developed by Jason Rohrer in 2007 that adopts experiential metaphor for describing the transitory nature of life. Players control a character, navigating him through mazes by pressing the arrow keys. The character can walk on his own or, later on, walk together with a non-playable character, his spouse. Being together is rewarding, but it forces the twin characters to alter path through the maze. Although the characters simply keep walking, their bodies and the surrounding environment keep transforming, reminding the player that death is in sight. Death is softly introduced by the representation of the aging process. After the spouse dies, she turns into a gravestone and the feeling of being alone is conveyed on the spatial level: the character is now literally halved and his pace is slow, suggesting the burden of mourning and grief.

The game characters Aeris, Yorda and the spouse influence the gameplay through skills and space. As soon as they disappear from the game, the player experiences a disintegration and has to look for compensation. Each time the player opts for alternative actions: this echoes loss and mourning.

Harrer (2013) concludes that in these three examples, designers represent loss through forging player agency to some extent. All these games highlight the painful difference between the initial gameplay pattern and what follows, indicating what is now missing.

The principal concepts for understanding death proposed by Brent, Speece, Lin, Dong, and Yang (1996) can be interpreted in the above-mentioned videogames as follows. As already discussed, the universality of death is presented in all three videogames. Final Fantasy VII, ICO and Passage prove effective in conveying death's irreversibility and causality. While in Final Fantasy VII and ICO the female characters die and disappear because of an external agent, in Passage death happens as a natural event. The spouse's death occurs because of human mortal nature. As Aeris dies in Final Fantasy VII, her lover Cloud – still in pain – stresses the non-functionality of her body "Aeris is gone. Aeris will no longer talk, no longer laugh, cry or get angry."

According to the game's fandom^{1,} a glitch allows the player to see Aeris' ghost at Sector 5 Church, exemplifying non-corporeal continuation.

3. A MORTICIAN'S TALE: THE GAME

So far, we have acknowledged and analysed death in videogames as a game mechanic and as a device in the narrative, but death can also be the core theme of a videogame.

"A Mortician's Tale" – developed by Laundry Bear in 2017 – is a narrative-driven, death-positive videogame, where the player plays as Charlie, a mortician tasked with running a funeral home, preparing the bodies of the deceased (via embalming or cremation), attending their funerals and listening to their loved one's stories. The main character was inspired by Caitlin Doughty, founder of the death-positive movement, called "The Order of the Good Death"² and author of the book "Smoke Gets in your Eyes" (2014). Charlie's core value is – as is Doughty's – the "death-positive" philosophy, encouraging people to open up about death and dying. The movement seeks to overcome the taboos surrounding death.

The Laundry Bear game studio fostered a death-positive mindset (Fitzpatrick, 2017) – together with other values that will later be discussed – in the game development by design. The presence of the death-positive attitude in the game could prove interesting for integration in death education programs for adolescents.

In the game, Charlie has just been hired by Rose and Daughters Funeral Home, a family business. The storyline is introduced in the gameplay via email exchange on the mortician's computer screen. The protagonist receives her tasks from her boss. Other emails include post from colleagues and friends, families and a monthly funeral newsletter.

The narrative introduces Charlie's professional tasks of preparing the deceased bodies and the funeral. The mortician takes care of eight corpses throughout the story, and in each case needs to interact with families and loved ones at the funerals and through written feedback.

During the gameplay, the player is introduced to preparation processes of different types (embalming and cremation), and to different types of funerals: open- versus closed-casket and traditional burial. Preparation is presented not only as a technical procedure, but also as taking care of the deceased. During the preparation, the procedure to be followed is suggested step by step; nothing is left optional so players do not have the option to disrespect the cadavers (Warr, 2017).

The various non-playable characters are a lens and a tool for getting to know Charlie, for exploring the funeral industry and for following the bereavement process. The player can skip both the story and the chatting at funerals, but they would miss the point of the experience, which is to process death on the cognitive and emotional levels.

We don't know much about the protagonist Charlie; she doesn't speak so the player gets to know her only through her actions and behaviour in the game, and via the feedback she receives from the non-playable characters (e.g. when families and loved ones thank her, via email, for her service). The dialogues at funerals are conveyed in written form (i.e. emails, balloons). The player does not hear Charlie's voice or the voice of other characters. The whole game is an experience immersed in quietness, providing the player with space for thinking, feeling and interacting (Fitzpatrick, 2017).

Charlie is presented both from first and third person perspectives, according to the situation. Differing points of view in games shape how viewers and participants experience the world that is being presented (Flanagan & Nissenbaum, 2014). We see the protagonist in the third person at the beginning of each story, in her office (Fig. 1) and later in the parlour (Fig. 2) among relatives and loved ones.



Figure 1. Preparation Room (third-person perspective).



Figure 2. Viewing room (third-person perspective).

The first-person point of view (Figure 3) is assumed when reading emails and preparing the bodies. The first-person perspective during the preparation is a chance for the player to identify with the mortician and her tasks, but also to access an intimate relationship with the dead and become progressively more acquainted with death. Last but not least, for players using a touch screen computer (Gray, 2017) this scenario also provides the opportunity for tangibly interacting with the body.



Figure 3. Embalming (first-person perspective).

The aesthetics of a game also express values and provide gamers with meaning. A Mortician's Tale is wrapped in delicate aesthetics. The colour palette characterized by purple shades has been chosen (Harris, 2017) to mask blood colour. The body silhouette of the deceased is stylized, avoiding graphic realism (Kidwell, 2018).

3.1. A Mortician's Tale: Analysis

Until now, videogames have tended to employ death as a mechanic (e.g. for penalty, challenge or learning purposes) or as a narrative element in the story. By contrast, A Mortician's Tale covers and explores death as a biological, emotional and social event.

People tend to deal with death by phantasizing or denying it and its aftermath. As mentioned above, the idea behind the death-positive movement and the development of the game is that getting to know what happens when a human being dies could reduce the anxiety and fear.

Death anxiety refers to the emotional distress provoked by the anticipation of the nonexistence of the self (Ka-Ying Hui, Harris Bond, & Sze Wing Ng, 2007). Fear of death includes eight components: fear of the dying process, fear of premature death, fear for significant others, phobic fear of death, fear of being destroyed, fear of the body after death, fear of the unknown, and fear of the dead (Hoelter & Hoelter, 1978). Research (Durlak & Reisenberg, 1991) shows that death education is more effective in relieving death anxiety and changing attitudes towards the subject when it is experiential rather than didactic. In this light, A Mortician's Tale represents a chance to live the experience of interacting (albeit virtually) with physical death, e.g. when the player engages in the process of preparing the deceased, which is also an opportunity for overcoming the fear of the dead body (Hoelter & Hoelter, 1978). While modern western society has the tendency to avoid contact with the bodies of the dead, this is considered a crucial step in the mourning process in eastern culture (Doughty, 2014).

Because of death anxiety, adolescents tend to grieve in solitude and silence (Gordon, 1986). To overcome their loneliness in these circumstances, it would be advisable to inform them about the normal course of

mourning. The videogame exposes the player to the social side of grieving. The mortician not only executes the physical procedures but also takes part in the funerals, interacts with families and loved ones, and pays her respects to the deceased. Beyond the emotional process of the loss, the viewing room experience presents the gamer with the normalcy and banality of death after the loss. Some may feel unable and unprepared to deal with the future loss of the beloved but, as shown in the game, despite the pain of loss, people quickly come to terms with the reality that death is an inevitable part of life. The non-playable characters in the parlour express their grief while at the same time starting to plan for the near future. In this way, the game makes the player realize death is not the monster imagined. People idealize death and their reaction to it but there isn't a single correct response to death. The game and the surrounding perspective demystify the topic. Moreover, the funeral business in the game shifts from being family- to corporate-run, presenting the player with difficult choices of both a professional and moral nature (e.g. performing procedures on the deceased at the request of the family; requests to upsell the services provided). These choices provide the player with opportunity for reflection on these topics and the chance to experience agency within the gameplay.

At the edge of these challenging changes, Charlie suddenly shows up in a new setting, her new office; she has started her own business venture in "green" burials.

"A Mortician's Tale" is a playable interactive narrative experience in which respectful treatment of the topic of death is given precedence over the gamefulness triggered by typical game mechanics (Game Developers Conference, 2018). Progression through the game is not conveyed by a point score but by the personal growth of the protagonist in the story. Instead of a final victory we are shown the protagonist's self-actualization process.

Summing up, while in most videogames death is used as a mechanic or as a component in the storyline, A Mortician's Tale stands out because death is the central theme of the overall narrative. Death is presented as a whole with all its components: physical, emotional and social. The experiential setting of the funeral home acts as a lab for the player to navigate death and its aftermath first-hand and at ease. This is an innovative feature when compared with other videogames. Last but not least, "A Mortician's Tale" is jam packed with values – the core and most innovative being death positivity – thus it is worth going through these more in detail.

3.1.1. A valuable player experience

According to Flanagan and Nissenbaum (2014) *«all games express and embody human values»*. In videogames, players can play out their beliefs and ideas. In western society, we seem to believe death is dangerous, contagious and ill, so we treat it with denial and beautification of the dead (Doughty, 2014). Through the lens of a death-positive mindset, A Mortician's Tale suggests acceptance of our own mortality, death as inevitable, coming to terms with our own relationship with mortality.

In this respect, both Gabby DaRienzo (A Mortician's Tale game designer) and Doughty (2014) witnessed a traumatic death in their childhood (Game Developers Conference, 2018). Although they benefited from support from their families, we could say they developed post traumatic stress disorder (PTSD). Likewise the journey they later undertook is a sign of post traumatic growth, meaning the pain can be processed in a constructive and empowering way.

Included in the videogame are other values delivered via the "Funeral Monthly", the newsletter Charlie regularly receives. The core theme along the exchange is respect: respect for diversity (cultural, religious and sexual orientation), for the environment (strong polluting chemicals are used during embalming) and for the deceased's will. The game and the newsletter push forward emotional support among the funeral attendees and through professional consultation when needed. Last, but not least, the subjectivity of the grief experience is suggested by the humanization of the death care (e.g. home funerals), in contrast with

corporatization and commodification in the death industry.

Empathy is another value present in the game which Belman and Flanagan (2009) suggest can be fostered in videogames. Games are particularly well-suited to supporting educational programs inasmuch as they allow players to inhabit the roles and perspectives of other people or groups in a uniquely immersive way (Belman & Flanaghan, 2009). A Mortician's Tale could be a medium for adolescents to put themselves in the shoes of the mortician, the deceased or a grieving family member.

4. CONCLUSIONS

This paper seeks to encourage the adoption of videogames in death education programs, particularly with adolescents.

Although the representation of death in games is still debated in the literature and is considered somehow deceptive, some games succeed in effectively representing death, while others have specifically been created for that purpose and could be adopted in educational programs.

For adopting videogames in death education, it would be advisable to map videogames where death is a core theme of the narrative and not just an element of it. The scope of this paper was not to explore the diverse range of titles and narratives to benefit from, but to present a valuable example of this kind of games. We have here introduced "A Mortician's Tale", a videogame where players face death not as a narrative device, but as a core theme. The icing on the cake is that the videogame confronts death through the lens of the death-positive mindset. Finally, for its unique nature, it would be interesting to carry out studies about the anthropological, philosophical and psychological background of the death-positive approach.

5. REFERENCES

Andriessen, K., Mowll, J., Lobb, E., Draper, B., Dudley, M., & Mitchell, P. B. (2018). Don't bother about me. The grief and mental health of bereaved adolescents. *Death Studies*, *42*(10), 607-615. doi: 10.1080/07481187.2017.1415393

Ausbel, D. P., Montemayor, R., & Svajian, P. (1977). *Theory and problems of adolescent development*. New York, NY, USA: Grune & Stratton.

Balk, D. E. (2014). *Dealing with dying, death and grief during adolescence*. New York, NY, USA: Routledge.

Belman, J., & Flanagan, M. (2009). Designing games to foster empathy. *Cognitive Technology*, 14(2), 5-15.

Brent, S. B., Speece, M. W., Lin, C., Dong, Q., & Yang C. (1996). The development of the concept of death among Chinese and U.S. children 3-17 years of age: from binary to "fuzzy" concepts? *Omega: The Journal of Death and Dying, 33*, 67-83. doi:10.2190/27L7-G7Q1-DY5Q-J9F3

Dimaggio, G., Salvatore, G., Azzara, C., & Catania, D. (2003). Rewriting self-narratives: the therapeutic process. *Journal of Constructivist Psychology*, *16*(2), 155-181. doi:10.1080/10720530390117920

Doughty, C. (2014). Smoke gets in your eyes. New York, NY, USA: W. W. Norton & Company Ltd.

Durlak, J. A. (1994). Changing death attitudes through death education. In R. A. Neimeyer (Ed.), *Death anxiety handbook: research instrumentation, and application* (pp. 243-260). NewYork, NY, USA: Taylor

& Francis.

Durlak, J. A., & Reisenberg, L. A. (1991). The impact of death education. *Death Studies*, *15*(1), 39-58. doi: 10.1080/07481189108252408

Evans, E., Hawton, K., & Rodham, K. (2005). In what ways are adolescents who engage in self-harm or experience thoughts of self-harm different in terms of help-seeking, communication and coping strategies? *Journal of Adolescence*, *28*(4), 573-587. doi: 10.1016/j.adolescence.2004.11.001

Fitzpatrick, I. (2017, November 6). *Interview: a talk with A Mortician's Tale game designer Gabby DaRienzo*. Roguesportal. Retrieved from http://www.roguesportal.com/39468-2

Flanagan, M., & Nissenbaum, H. (2014). Values at Play. Cambridge, MA, USA: The MIT Press.

Freud, S. (1917). *Mourning and melancholia*. The standard edition of the complete psychological works of Sigmund Freud, XIV, (1914-1916): On the history of the psychoanalytic movement, Papers on Metapsychology and Other Works. London, UK: The Hogart Press.

Freud, S. (1929/1961). Civilization and its discontents. New York, NY, USA: Norton.

Game Developers Conference (2018, April 4). A Mortician's Tale: a different view on how games treat death. Gabby Darienzo. Retrieved from https://www.youtube.com/watch?v=zEl0b_9BmE4

Gordon, A. K. (1986). The tattered cloak of immortality. In C. A. Corr. & J. N. McNeil (Eds.), *Adolescence and death* (pp. 16-31). New York, NY, USA: Springer.

Gosney, H., & Hawton, K. (2007). Inquest verdicts: youth suicides lost. *Psychiatric Bulletin*, *31*(6), 203-205. doi: 10.1192/pb.bp.105.007773_

Granic, I., Lobel, A., & Engels, R. C. M. E. (2014). The benefits of playing video games. *American Psychologist, January*, 66-78.

Grant, J. P. (2011, 29 July). Life after death. *Kill Screen Daily*. Retrieved from https://killscreen.com/articles/life-after-death/

Gray, K. (2017, 18 October). A game that finds comfort in the banality of death. *Waypoint Vice*. Retrieved from https://waypoint.vice.com/en_us/article/evbgmk/a-game-that-finds-comfort-in-the-banality-of-death

Harrer, S. (2013). From losing to loss: exploring the expressive capacities of video games beyond death as failure. *Culture Unbound*, 5, 607-620.

Harris, J. (2017, October 27). Dev Q & A: A Mortician's Tale challenges how games depict death. Gamasutra. Retrieved from https://www.gamasutra.com/view/news/308408/Dev_QA_A_Morticians_ Tale_challenges_how_games_depict_death.php

Hoelter, J. W, & Hoelter, J. A. (1978). The relationship between fear and death and anxiety. *Journal of Psychology*, *99*, 225-6.

Ka-Ying Hui, V., Harris Bond, M., & Sze Wing Ng, T. (2007). General Beliefs about the world as defense mechanism against death anxiety. *Omega Journal of Death and Dying*, *54*(3), 199-214.

Kidwell, E. (2018, March 19). A Mortician's Tale deconstructs how death should be designed. Gamasutra. Retrieved from https://www.gamasutra.com/view/news/315660/A_Morticians_Tale_deconstructs_how_death_should_be_designed.php

Lazzaro, N. (2004). *Why we play games: four keys to more emotion without story*. Presented at *Game Developers Conference*, San Francisco, California.

Lester, D. (2003). Adolescent suicide from an international perspective. *The American Behavioral Scientist*, *46*(9), 1157-1170. doi:10.1177/0002764202250659

Mascarenha Fonseca, L. & Testoni, I. (2011). The emergence of thanatology and current practice in death education. *Omega Journal of Death and Dying*. 64(2), 157-169. doi:10.2190/OM.64.2.d

Noppe, I. C. (2007). Life span issues and death education. In D. Balk (Ed.), *Handbook of thanatology* (pp.337-343). London, UK: Routledge.

Noppe, I. C., & Noppe L. D. (1997). Evolving meanings of death during early, middle, and later adolescence. *Death Studies*, *21*(3), 253-275. doi:10.1080/074811897201967

Noppe, L. D., & Noppe I. C. (1991). Dialectical themes in adolescent conceptions of death. *Journal of Adolescent Research*, 6(1), 28-42. doi:10.1177/074355489161003

Piaget, J. (1972). Intellectual evolution from adolescence to adulthood. Human Development, 15(1), 1-12.

Rusch, D. C. (2009). Mechanisms of the soul: tackling the human condition in video games. *Proceedings* of the 2009 Digital Games Research Association DIGRA International Conference: Breaking News Ground: Innovation in Games, Play, Practice and Theory, London, UK.

Speece, M. W., & Brent, S. B. (1984). Children's understanding of death: a review of three components of a death concept. *Development*, 55(5), 1671-1686. doi: 10.2307/1129915

Testoni, I., & De Cataldo, L. (2014). Death education for adolescent suicide prevention between family and school: a review. *Interdisciplinary Journal of Family Studies*, *XIX*(2), 37-50.

Testoni, I., Tranquilli, R., Salghetti, M., Marini, L., & Legrenzi, A. (2005). L'educazione alla morte come momento di incontro psico-socio-culturale tra scuola, famiglia e territorio. *Famiglia Interdisciplinarità Ricerca.* 10(3), 312-322.

Toews, J., Martin, R., & Prosen, H. (1985). Death anxiety: the prelude to adolescence. *Adolescent Psychiatry*, *12*, 134-144.

Warr, P. (2017, October 18). A Mortician's Tale Review. PC Gamer. Retrieved from https://www.pcgamer. com/a-morticians-tale-review/

Wass, H. (2004). A perspective on the current state of death education. *Death Studies*, *28*, 289-308. doi: 10.1080/07481180490432315