

**Reducing the taboo around death and dying in the Netherlands through a serious board
game**

E. van Dam

SNR: 2104801

Master's Thesis

Communication and Information Sciences

Specialization New Media Design

Department of Communication and Cognition

School of Humanities and Digital Sciences

Tilburg University, Tilburg

Supervisor: Dr. S. Ashby

Second Reader: Dr. J. de Wit

June, 2024

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Abstract

Western society is becoming more open-minded, yet there still seems to be little talk about death. Despite the popularity of serious games and the opportunities that serious games can provide for discussing various difficult topics, there is a lack of serious board games designed to promote discussions around death and dying among young adults. Previous research has mainly focused on serious games for the ill or elderly to discuss their end-of-life preferences. The current study uses a three-part research method consisting of two expert interviews, a game-play observation, and a focus group session to explore whether a serious board game can facilitate open discussions about death among young adults in the Netherlands, aiming to break the taboo surrounding death. The game *DiaDeLi* was created with input from funeral industry experts. Young adult participants were observed while playing the game. Thereafter, a focus group session was conducted to gather their opinions. The study revealed that young Dutch adults were already quite open to talking about death but found the *DiaDeLi* game meaningful as it dealt with topics that the players do not talk about regularly, such as death and dying. Players expressed a desire to play *DiaDeLi* again with family. Despite limitations such as a gender imbalance among participants, the study offers insights into making death a more discussable topic in countries where it is considered taboo, as well as into designing serious games for addressing difficult topics.

Keywords: serious games, game design, board games, discussing death, young adults.

Reducing The Taboo Around Death And Dying In The Netherlands Through A Serious Board Game

The inevitability of death is a certainty all people share. Yet, many people seem to struggle to discuss death and dying (Quintiens et al., 2023). Engaging in conversations about personal experiences with loss can enhance self-healing, well-being, and mutual support (Booth et al., 2021). However, the success of these conversations often depends on how well friends and family members respond, as they may find it challenging to know what to say or do (Booth et al., 2021). Despite encountering death, young adults are frequently excluded from these discussions (Ribbens McCarthy, 2007). Research indicates that the earlier people start talking about death, the more resilient they become throughout their lives (Booth et al., 2021). Therefore, it is important to encourage open discussions about death and dying with people of all ages, especially young adults (Booth et al., 2021).

Young adults, between 18 and 30 years old, are an age group in Western society that is not normally concerned with talking about death and dying, considering that death, to young adults, seems far away (Carr & Luth, 2016; Gerard, 2017). An American study found that just 35.6 percent of the young adults in the sample had discussed their end-of-life wishes, such as if they wished to be resuscitated, with their relatives or significant others (Tripken & Elrod, 2018). The aim of end-of-life care discussions is to understand people's preferences and values, resulting in a care plan that reflects these wishes (Sinuff et al., 2015). This process, also referred to as advanced care planning (ACP), involves ensuring that a person's end-of-life wishes are honored and documented and is an important aspect of talking about death and dying (Fletcher et al., 2018). Moreover, discussing death and dying can be challenging due to the entrenched taboo surrounding these topics in Western society (Tradii & Robert, 2017), which typically

encompasses societal restrictions on language, behaviors, items, and individuals perceived as undesirable by a specific group of people (Saputri, 2023). This taboo may prevent young adults from talking about death and dying (Omilion-Hodges et al., 2017).

Serious games could serve as a method to encourage and support open discussions about death and dying (Li, 2023). Playing a game might help to understand complex events that are difficult to explain (Castronova & Knowles, 2015). Non-digital games, such as card and board games, are particularly effective due to their ability to facilitate heightened interaction, provide a variety of activity choices, allow for flexible design and content, and offer diverse platforms for gameplay (Talan et al., 2020). Board games stand out as suitable tools for broaching subjects like death and dying because of their emphasis on face-to-face interaction, wide accessibility, and minimal technological requirements (Li, 2023). Board games also enhance group interactions, making them suitable for sensitive discussions (Noda et al., 2019). Several serious games, such as the conversational card games “Hello” (Common Practice, n.d.; Van Scoy et al., 2017) and “Go Wish” (Coda Alliance, n.d.; Dupont et al., 2022), and the board game “The Five Flavours in a Grocery Store” (Liu et al., 2023), have been empirically tested and found effective for discussing end-of-life wishes and ACP with older adults or adults with a (chronic) illness. These games have been shown to increase ACP activities and effectively communicate end-of-life care preferences, demonstrating their potential to foster meaningful conversations about death (Van Scoy et al., 2017; Liu et al., 2023).

However, none of the previously mentioned games have been tested with young, healthy adults. Moreover, discussions surrounding ACP and the broader subject of death and dying may encounter challenges stemming from diverse socio-political constraints across countries, with certain nations regarding conversations about death and dying as taboo (Phenwan et al., 2021).

Notably, games related to ACP, such as “Go Wish,” have been translated and culturally adapted for countries like Italy (Perin et al., 2022) and Belgium (Dupont et al., 2022). Nonetheless, independent companies created these games, and empirical research into game design components through the design of a serious board game seems to be lacking in the context of death and dying. Additionally, besides “The Five Flavours in a Grocery Store”, which was specifically created for older Chinese adults, there do not seem to be board games designed to discuss death and dying among a younger demographic. On top of the previously mentioned advantages that board games offer, a well-designed board game has also been reported to distract players from negative thoughts and reduce anxiety, creating a safe space for the players to share and explore their feelings about the end of their lives (Pon, 2010). Additionally, young adults’ attitudes toward death and dying seem to be an understudied topic (Cox et al., 2012; Wilson et al., 2022). This highlights the need for the development of a board game for young adults that aids in talking about death and dying.

Taking all of these considerations into account, the purpose of the present study is to explore how a board game could spark conversations about death and dying, with the goal of challenging the societal taboo associated with these topics. This research's findings may be useful for game designers looking to approach taboo issues in general. Furthermore, the findings of this study will contribute to the existing literature on death and dying ACP, as well as end-of-life discussions assisted by playing games. Therefore, the following research question has been formulated:

RQ: *How can a board game facilitate open discussions about death among young adults, aiming to break societal taboos around death and dying in the Netherlands?*

Theoretical Framework

The current chapter starts by exploring the general foundations of serious games, then further examines the societal taboo surrounding discussing death and dying in Western society, and finally investigates how board game design elements contribute to creating meaningful and engaging player experiences.

Serious Games

Serious games are known for their ability to motivate learners and increase awareness about a topic (Bellotti et al., 2010). They can be effective learning tools because they immerse learners into contexts that are relevant to the topic, making the learning experience more meaningful (Bellotti et al., 2010). Additionally, they facilitate procedural learning by providing instant feedback, allowing players to learn through practical application (Jarvis & de Freitas, 2009). Serious games are a part of the game-based learning methodology (Hartt et al., 2020). This methodology leverages game elements, game-thinking, and game mechanics beyond traditional gaming environments to captivate users in the learning process (Tu et al., 2014). Within the game-based learning methodology, users are urged to remember and apply knowledge obtained from these games to real-life situations (Hartt et al., 2020). Besides being fun entertainment for family and friends, board games can bring more serious or sensitive topics to attention (Filius & Schröter, 2023).

Discussing Sensitive Topics With Young Adults

In Western society, death is often considered a taboo topic (Wilson et al., 2022). People tend to avoid using the word “death” and instead use euphemisms such as “passed away”, “gone”, or “kicked the bucket” (Rawlings et al., 2017). This societal taboo is particularly noteworthy given that Western society has become more open about previously sensitive, taboo

topics such as mental health and sex in the twenty-first century (Lakasing, 2014). Young adults, aged between 18 and 30 years old, reportedly perceive this taboo around death and dying as well (Tripken & Elrod, 2017). They seemingly find it difficult to be confronted with the thought of their death or the death of a loved one, leading to young adults not discussing death (Tripken & Elrod, 2017). Having severe difficulty discussing and thinking about death could be death anxiety, which is characterized by a sense of dread and negativity toward the concept of death (Barnett & Bennett-Leleux, 2022). Young adults seem to experience more death anxiety than middle-aged and older adults (Lyke, 2013). The reason young adults in the United States experience more death anxiety than older adults in the United States appears to be that younger adults are still searching for their meaning in life (Lyke, 2013).

Although young adults in the United States reportedly do not talk about death easily and regularly (Tripken & Elrod, 2017), young adults from a Midwestern university in the United States were found to be generally open to discussing death and dying when the context (Omilion-Hodges et al., 2017). Some young adults seemed to discuss death adequately by seeking out others' opinions about death and dying (Omilion-Hodges et al., 2017). This contradiction could suggest that there are differences in how open people are to talk about death and dying. Cultural differences have also been found to play a big role in people's openness to discuss death and dying and their general attitudes toward death (Jafari et al., 2020).

In Belgium, a culturally similar country to the Netherlands (Kroon et al., 2019), it has been found that middle-aged adults are more death-avoidant than older adults (De Raedt et al., 2012). This finding aligns with previous research from the United States that suggests that the older people become, the less scared they are of death and that young adults experience the most fear of death (Russac et al., 2007). It seems that in The Netherlands, young adults' attitudes

toward death and their willingness to discuss death and dying have not been specifically researched. However, it has been found that 33% of Dutch inhabitants report being afraid of death, and an even larger group, 75% of Dutch people, reportedly feel that they have not discussed their feelings about death and dying sufficiently (NOS, 2022).

Funeral professionals, such as undertakers, can provide insights into funeral behavior, attitudes, and rituals surrounding death (Schäfer, 2007). Funeral professionals may provide an opportunity to gain insight into Dutch funeral behavior in the 21st century, the attendees' behavior, and the bereaved attitudes toward death. Moreover, since Dutch young adults' attitudes towards death and dying seem unexplored, funeral professionals can help gain an understanding of their behavior at funerals. Therefore, the present study asks the following sub-question:

***SQ1:** How do young Dutch people behave at funerals, according to funeral experts, and what do funeral experts feel is important to incorporate into the game?*

Benefits Of Serious Board Games

Aside from helping people talk about topics that might otherwise be too difficult to discuss, such as the end of one's life, games can also help people understand complex topics (Van Scoy et al., 2016). For instance, the board game "Secret Hitler" was designed to discuss war while trying to achieve an enjoyable gameplay experience for the players (Filius & Schröter, 2023). Serious games may be digital or video-based, presented in a card game format, or designed as a board game (Epstein et al., 2021).

Although the use of modern technologies might seem like a more obvious choice for designing a serious game in the 21st century, more traditional game formats, such as board games, have several benefits (Epstein et al., 2021). When compared to digital games, board games have been found to offer several advantages, such as reduced errors in operation (Fang et

al., 2016). Moreover, board games are reportedly more intimate, evoke vivid imagery, sympathy among players, and provide a more satisfying game experience for players (Fang et al., 2016). Additionally, board games seem to be cheaper to produce than digital games and have the ability to provide an inclusive and social aspect to the gaming experience (Epstein et al., 2021).

Board Game Design

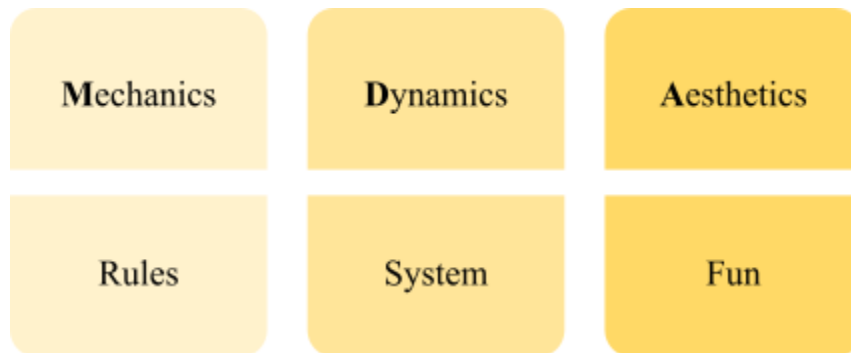
Board games are physical games, usually contained in a cardboard box that includes all the aspects of the game, and mostly designed to be played on a tabletop and in one sitting, ending in one or multiple winners and losers (Chircop, 2017). Board games use four properties to enhance players' game experience and achieve desired behavioral outcomes (Epstein et al., 2021). These four components are game mechanics, which consists of the game's rules (Epstein et al., 2021). The dynamics are how players interact in response to the game's mechanics (Epstein et al., 2021). Aesthetics are the way the board game is designed and the physical appearance of the game (Epstein et al., 2021). Lastly, emotional aspects consist of how the game makes the players feel and relate to the other players, the game, and themselves (Epstein et al., 2021).

The four game design components correspond to the MDA framework first introduced by Hunicke et al. (2004). MDA stands for Mechanics, Dynamics, and Aesthetics and has been developed to help scholars and designers understand and develop game designs and artifacts (Walk et al., 2017). Mechanics describe the game's components, frequently referred to as the game's rules (Walk et al., 2007). The game's dynamics are closely related to the game's mechanics, which involve the run-time behavior of the game's mechanics and are necessary for the players to interact with the game (Junior & Silva, 2021). Aesthetics evoke the players'

emotional reactions and are sometimes defined as what makes the game fun for the players (Junior & Silva, 2021). The MDA framework is visualized in Figure 1.

Figure 1

The MDA framework by Hunicke et al. (2004)



Note. Figure adapted from Walk et al. (2007).

Game Experience

It is difficult to determine what makes a game fun (Junior & Silva, 2021). However, games should aim to achieve a ‘flow’ experience for the players, which describes the enjoyment someone can experience when a task’s difficulty level and skill set are balanced (Caserman et al., 2020). This balance between skills and competence leads players to invest in the game experience, which can motivate them to learn more and cope better with challenges they were unable to handle before the flow experience (Shen et al., 2022). Flow leads to the players being more motivated while playing the game, thus improving their learning, creativity, and loyalty toward the board game (Shen et al., 2022) and is claimed to be what makes games fun to play (Starks, 2014).

Social interaction is another crucial aspect of players’ board game experience (Smit et al., 2019). Social interaction, competition, and cooperation have additionally been defined as making board games fun (Smit et al., 2019). By facilitating social interaction between board game

players, communication and interaction can be promoted through game design elements that support competition, cooperation, and communication between players (Ferreira de Almeida & dos Santos Machado, 2021).

Furthermore, flow has predominantly been studied within the contexts of video games and work (Shen et al., 2022; Stark, 2014). However, research on flow in board games has been scarce, especially when focusing on serious board games. Board game design components do not seem to have been studied in the context of serious games for taboo topics. Previous research has focused on serious board game design for educational purposes (Tori et al., 2022) or health care (Lameras et al., 2016). Even so, a more general investigation of board game design elements seems lacking in the literature (Samarasinghe et al., 2021). The current study will investigate what design elements, or game components, of a serious board game can encourage people to talk about death and dying and how participants interact with each other while playing the game to investigate if social interaction took place and what game elements were most efficient to facilitate social interaction. Therefore, the current study asks the following two sub-questions:

***SQ2:** What are design elements or game components of a serious board game that encourage people to talk about death and dying?*

***SQ3:** How do participants interact with each other while playing a board game about death and dying?*

Method

Study Design

Qualitative research methods, including expert interviews, observations, and a focus group session, were used to investigate how a board game can effectively stimulate discussion about death and dying among young Dutch adults. The expert interviews were carried out with two professionals from the funeral industry, selected for their expertise in the funeral industry as an undertaker and a hostess at funeral services. Their input was used for the development of the game "*DiaDeLi*". Expert interviews were seen as a method of gathering information quickly at the beginning of this exploratory research and as a way of gaining insights into a field that otherwise might have been difficult to approach because of the taboo around the topic (Bogner et al., 2009).

The focus group session was conducted with young Dutch adults and divided into two parts, the gameplay observation and the focus group discussion. The researcher observed the participants while they played the game. By observing the participants, the researcher aimed to gain valuable insights into the nuances of participant engagement, facilitating a deeper understanding of how the game functioned in practice and its potential impact on fostering discussions about death and dying (Pinedo et al., 2021). While the participants played the game, the researcher was available to answer questions that the participants had about the game.

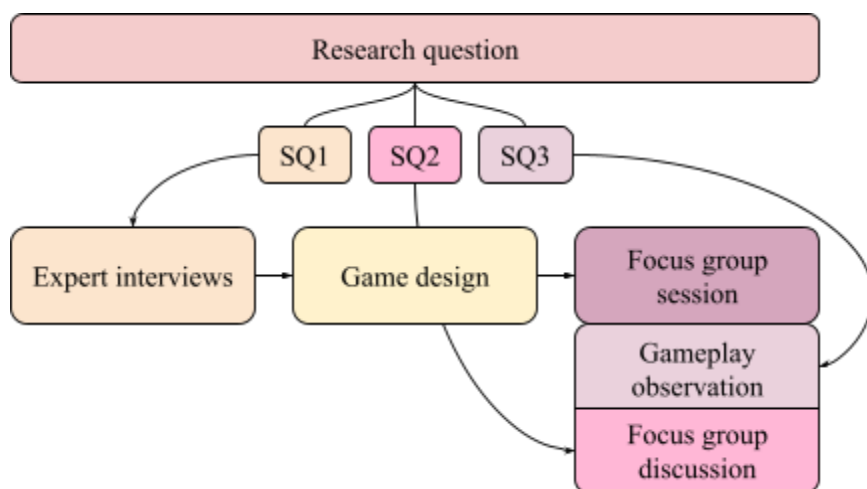
Afterward, a focus group session was conducted to gather feedback on participants' experiences with *DiaDeLi* and to determine whether playing such a board game could work to stimulate discussions about death and dying, making it less of a taboo topic among the participants. Focus group sessions have been organized by other scholars surrounding the topic of death and dying and can be seen as an appropriate research method to investigate young

adults' attitudes and opinions about death and dying (Wilson et al., 2022). The aim was to gather feedback from the participants quickly and collect in-depth data, so a focus group session was seen as an effective way to collect exploratory data (Rothwell et al., 2015). For an overview of the study design, see Figure 2.

Furthermore, as a single researcher carried out the research, a bracketing statement (also referred to as a positioning statement) has been included in [Appendix A](#) to acknowledge the researcher's bias regarding the topic (Martin et al., 2022).

Figure 2

Schematic overview of the study design



Participants

Expert Interviews

The two participants for the expert interviews were recruited through convenience sampling in the researcher's personal network, allowing the researcher to find experts in the funeral industry. In the current study, that means that the interviewees were employed in the funeral industry, for example, as undertaker, hearse drivers, or funeral home assistants at the time of the expert interview. The characteristics of the expert interviewees are summarized in Table 1.

Table 1*Experts' characteristics*

	Gender	Profession	Experience
Expert 1	Woman	Undertaker	11 years
Expert 2	Woman	Hostess at funeral services	12.5 years

Observation and focus group discussion

Participants participated in both parts of the session, the observation and focus group discussion. Participants were eligible to participate in the session if they were between the ages of 18 and 30 years old. Typically, focus groups are conducted with a maximum of 12 participants and usually last one to two hours (Braun & Clarke, 2006; Fessenden, 2022). Eventually, seven young adults participated in the session. On average, participants were 23.86 years old ($SD = 0.90$). Six identified as female, and one identified as male.

Expert Interviews***Materials***

The expert interviews were semi-structured, and the interview questions were developed by the researcher. Using expert interviews for inductive research does not require a specific interview structure but rather flexibility (Döringer, 2020). The expert interviews were conducted to answer sub-question 1. The complete interview guide used when conducting the expert interviews, including the information letter, informed consent form, and semi-structured interview questions, can be found in [Appendix B](#).

Procedure

One expert interview took place at the researcher's home and the other at the interviewee's home. Both locations were proposed by the interviewees. Before the interviews, participants were briefed about the thesis project's objectives, the purpose of the expert interviews, and the interview procedure, including recording the audio during the interview. Informed consent letters detailing these aspects were sent to both interviewees via WhatsApp.

Before the start of the interview, the participants were encouraged to reread the informed consent letter and ask about anything unclear before signing. In the informed consent forms, the participants were informed about their rights, the goal and procedure of the expert interview, any possible risks, confidentiality, their right to withdraw and to decline to answer any questions they did not wish to answer, and recording of the audio during the interview. The expert interview began after making sure that the participants did not have any questions and when they were comfortable to start the audio recording.

It was anticipated that the expert interviews would take 30 minutes. In reality, the expert interview lasted, on average, 47 minutes. The researcher began the interview by asking some background questions, such as *“Could you please tell me what you do within the funeral branch?”*. After the background questions, the researcher moved on to the core questions, which focused on the personal experience of the interviewee. An example question was *“How, in your experience, do people deal with the loss of a loved one?”*. Practical questions were asked, which included, for example, the question *“What does funeral planning usually look like?”*. Overarching questions, such as *“Can you describe some misconceptions or taboos surrounding death and dying in the Netherlands?”*. Finally, questions were asked specifically about the design of the game, such as *“What specific themes or topics do you believe should be addressed*

in a game aimed at destigmatizing death for young adults? ”. After all questions were asked, the interviewee had the opportunity to add something that the researcher had not mentioned or asked but should have, according to the interviewee. The final minutes of the expert interviews were devoted to concluding the interview, allowing the interviewee to ask follow-up questions, and thanking the interviewee for participating in the expert interview.

DiaDeLi Serious Board Game

DiaDeLi was developed by the researcher based on the insights from the expert interview and supplemented by findings from the theoretical framework. The design of the board game incorporated the key findings from the expert interview. In short, the expert interviewees noted that music is important at funerals and that young adults could be asked to think about what their funeral would look like, reflect on past funerals that they have experienced, and ask if that funeral was good enough for them. Moreover, general information about funerals and how funerals are organized in the Netherlands was used to develop *DiaDeLi*. Additionally, the expert interviews helped the researcher find a tone for the game. The interviewees were very open about their experiences and talked about unfortunate experiences but also about happy, memorable, or sometimes even funny memories that they have from funerals that they have attended. Their attitude helped the researcher to decide that the game should be meaningful but also fun and lighthearted.

To ensure that the game is meaningful for the participants, it incorporated aspects of Cognitive Behavioral Therapy (CBT) because CBT is reportedly effective against death anxiety (Menzies & Menzies, 2023), and CBT appears to be used often in serious games to improve mental health (Eichenberg et al., 2017). Additionally, using CBT was seen as a practical tool to help design the game. Specifically, the yellow “Reflection & Acceptance” cards and the purple

“Perspective” cards made use of CBT techniques, such as cognitive restructuring, aiming to reframe negative thoughts, and relaxation methods (Eichenberg et al., 2017). CBT-inspired questions were, e.g., “*Think of a negative thought about death or about losing someone, and try to transform it in a positive way. How does this help you?*”, “*What do you need to be happy?*” and “*Have you ever lost someone? Would you like to share who you have lost?*”. All the cards, including the “Challenge” and “Trivia” cards, can be viewed in [Appendix C](#). The game was designed using Figma, and the cards are 2.5 x 3.5 inches.

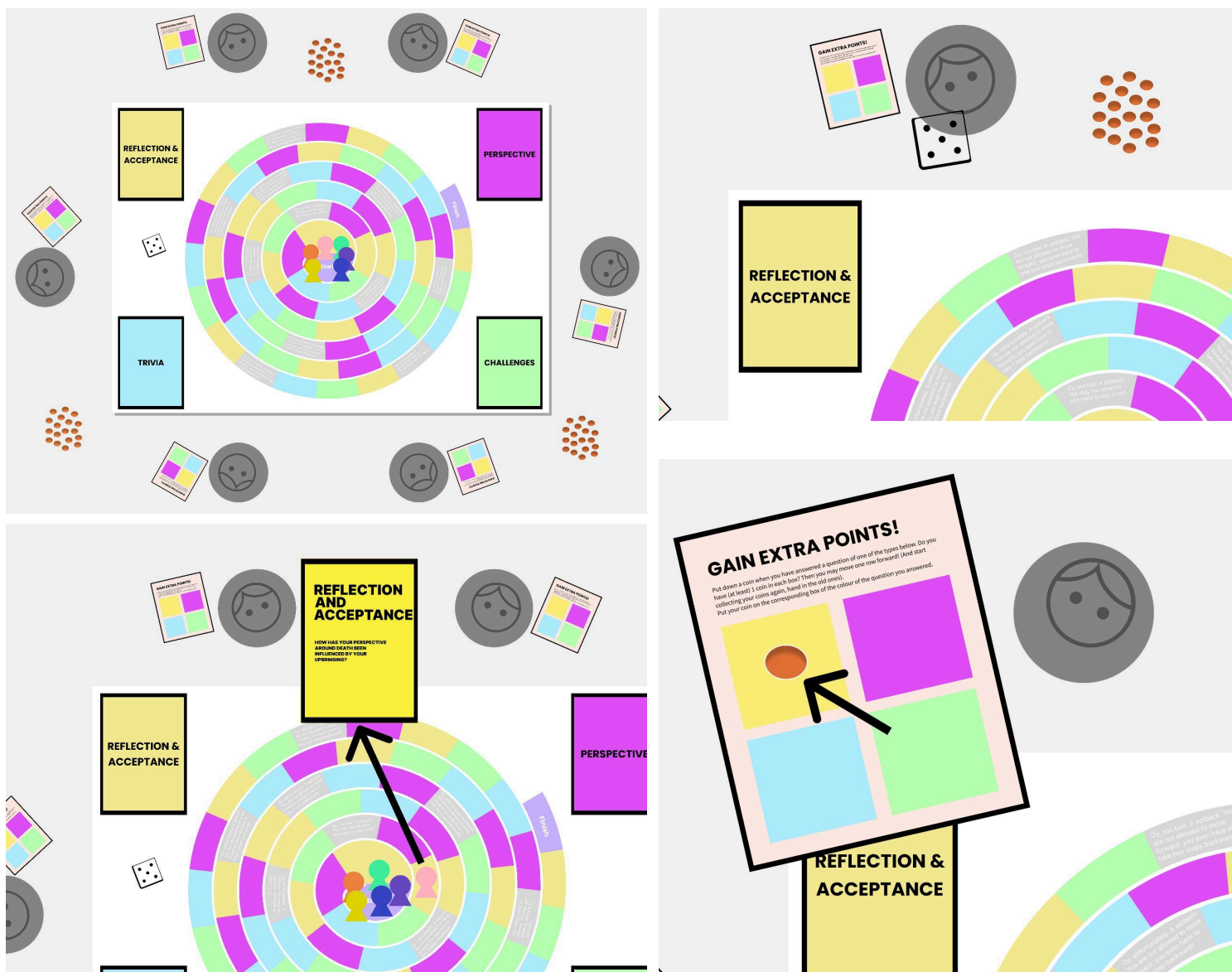
DiaDeLi stands for *Dialogue, Death, Life*, symbolizing the game's theme of talking about death and life. Moreover, *DeLi* implies that it can be discussed and played on a daily basis. The full results of the expert interviews can be found under *Results*.

Gameplay

Figure 3 visualizes how to play *DiaDeLi*. The rules of the game, shown in Figure 4, were provided to each player on a card to keep with them during the game. Figure 4 also shows the game's disclaimer.

Figure 3

Visualization of the gameplay



Note. Read from left to right, top to bottom. First image: The players sit around the game board with all the game attributes. Second image: The player begins by rolling the dice and rolls five. Third image: The player puts their game token on the fifth square, which is yellow, and draws and answers a yellow card. Fourth image: The player places the coin on the yellow square of the “bingo” card.

Figure 4

Card with the game's rules and explanation and the disclaimer of the game

GAME RULES AND EXPLANATION

Welcome! I'm glad you're participating. This serious game is specially designed to talk about death with young adults in an accessible way.

There are two important rules: Respect each other's answers and boundaries. No one is forced to answer a question or do something they are not comfortable with. You may engage each other in conversation at any time during the game about a topic you want to talk about a little more.

You may keep these rules with you throughout the game. You can also always ask the facilitator questions if you are unsure about something at any time.

How to play:

- You have your own pawn on the game board and your "bingo card," a pale yellow card with four squares on which you keep track of what color question you answered or challenge you carried out. Place a coin in the box of the same color for each question you answer. If you have at least 1 coin in all four squares, you may jump forward a whole row on the game board with your token. This way you can win faster!
- There are **four** types of cards, each with its own color corresponding to the colors on the game board. Roll the die and move the number of steps you roll. Do you land on a yellow square? Then grab a yellow "reflection & acceptance" card and answer the question. The same goes for the purple "perspective" cards. Do you land on a green square? Then take a green "challenge" card and perform the challenge yourself or with your fellow players. You read the card aloud anyway. If you land on a blue square, you may take a "trivia question" card. Read the question aloud and you and your fellow players get to answer it. Is it a multiple-choice question? Then you see the correct answer and your fellow players answer the question. You, the person who drew the card, and anyone who answers the question correctly may move one step forward.

Start:

- Everyone made their own game token. The one who rolls the highest number on the die may start.

Finish:

- The first player to reach the finish line wins the game!

DISCLAIMER

This game is not intended as a substitute for therapy, professional grief counseling, or any other form of mental health care. The purpose of the game is to initiate conversations about death.

Should you suffer from anxiety about death, or if you otherwise feel unable (mentally) to play this game or to think or talk about such topics, playing this game is not recommended.

Playing the game is completely voluntary, nothing has to be discussed, shared or answered if you don't want to. You may stop playing the game at any time, without negative consequences.

All information in the game has been carefully compiled by the researcher, but may possibly contain unintentional errors. Please feel free to report this to the researcher. Two funeral professionals contributed to this board game, this is not necessarily representative for all funeral professionals or all people.

Note. Translated into English, the players received Dutch versions of this card.

Observation And Focus Group Session

Subquestion 2 was addressed through the focus group session, while subquestion 3 was answered through the observation. The observation and the focus group discussion took place during the same session and, therefore, will be described together in the current section.

The researcher had planned for the session to last 95 minutes, allowing for any potential delays. Ultimately, the session lasted 90 minutes. Participants were informed that the session would take about two hours of their time and were sent an informed consent letter adapted from the informed consent letter used for the expert interview. This letter was sent to all players via WhatsApp one week before the session. The session was conducted on May 6, 2024, at Tilburg University in a private room, Cube 126.

At the beginning of the session, the researcher introduced the topic and the activities and explained what had been mentioned in the informed consent letter. The participants were given the opportunity to ask questions before the informed consent form was signed by the participants through a short Qualtrics survey. In this survey, a few demographic questions were asked as well. The researcher started the audio recording after the informed consent forms were signed and all questions were answered. The session began with a quick warm-up activity. In this activity, the participants were asked to design their game tokens and introduce themselves while showing their game tokens to the other players.

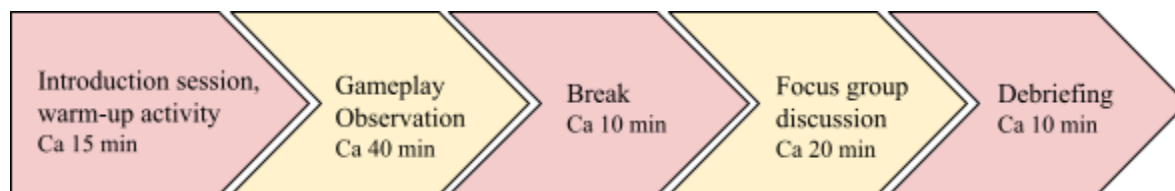
After the introduction, the researcher explained how *DiaDeLi* worked, and the participants played *DiaDeLi* together. The participants had 40 minutes to play the game while the observer observed them. The aim was for the observer to employ the “fly on the wall” observational strategy and let the participants play the game without interruption or interference (Still & Crane, 2017). However, due to fewer participants than expected, the observer joined the session as a participant. Consequently, the researcher assumed a dual role of facilitating and observing the session, prioritizing the number of participants. During the gameplay observation, the researcher took notes using a pre-prepared note-taking scheme adapted from Baxter et al. (2015). The complete focus group guide, including the informed consent letter and survey, and the note-taking scheme can be viewed in [Appendix D](#).

When the 40 minutes of gameplay were over, the researcher announced a short break of 10 minutes. After the break, the session continued, and the focus group discussion began. During the focus group session, the researcher acted as the moderator of the discussion and asked questions to reveal the participants’ opinions, attitudes, beliefs, and assumptions about *DiaDeLi* (Still & Crane, 2017). An example of a question that was asked during the focus group

discussion was, “Do you feel like playing a game about death and dying makes you feel more open to talking about death and dying?”. The entire list of prepared questions can be viewed in [Appendix D](#). After 20 minutes, the focus group discussion concluded, and the researcher debriefed the participants and thanked them for their participation. Figure 5 shows an overview of the session’s structure.

Figure 5

Overview of the session



Analysis

Thematic analysis was used to generate insights from the expert interviews, the observation, and the focus group discussion. Thematic analysis serves as a useful method for identifying patterns in qualitative data. The audio from the expert interviews and the focus group session were transcribed verbatim using Microsoft Word’s transcription tool to generate the transcripts. The researcher checked and corrected the transcripts manually. The expert interview transcripts can be viewed in [Appendix E](#) and the focus group transcript and observation notes in [Appendix F](#).

Braun and Clarke (2006) developed a step-by-step guide to thematic analysis, which was followed to perform an inductive thematic analysis. The steps that were followed were familiarizing yourself with the data, generating initial codes, looking for themes, reviewing these themes, defining and naming themes, and setting up the report (Braun & Clarke, 2006). The final coding scheme of the expert interviews is presented in Table 2, and the final coding scheme of

the focus group discussion can be viewed in Table 3 and includes the observations made by the researcher while the participants were playing the game.

An inductive thematic analysis was performed to achieve these themes and subthemes. The researcher started by open-coding the transcripts to generate the initial codes. All initial codes were imported into an online Miro board to visualize the data and look for themes. Through an iterative coding process, the coding schemes below were developed. The thematic analysis can be viewed in [Appendix G](#).

Table 2

Themes and subthemes from the thematic analysis of the expert interviews

Theme	Sub-theme	Description
People's behavior surrounding death	Opinions about/behaviors around death from clients	The expert interviewees talked about times when relatives voiced an opinion about death and dying or certain behaviors from relatives of the deceased person.
	Young adults	What stands out about young adults specifically, and how young adults handle death and dying.
	Then and now	Differences between funeral practices in the past and the present.
	Differences between people	Notable differences between clients, such as cultural differences.
Game insights	The game	According to the interviewees, what is important to include in the board game.
	Death preparations	How people prepare for (their own or someone else's) death.

Note. Example quotes for each sub-theme are provided in [Appendix H](#).

Table 3

Themes and subthemes from the thematic analysis of the observation and focus group session

Theme	Sub-theme	Description
Enhancing game engagement	Variety of the game	The participants discussed the game's variety and how it reportedly helped to keep it light-hearted.
	Players' positive feedback about different game elements	The participants' positive opinions of the game elements incorporated into the game.
	Game enjoyment	What contributed to a positive game experience.
	Player interaction & behavior	How the participants interacted with each other and acted while playing the game.
Challenges and barriers to playing <i>DiaDeLi</i>	Points of improvement for the game	What could be improved about the game, such as the size of the game board.
	Barriers to playing <i>DiaDeLi</i>	Barriers experienced while playing and barriers that might hinder others from playing <i>DiaDeLi</i> .
Reflective conversations and insights	Player reflections during and after the game	During or after the game, participants appeared to realize something about their own or others' behavior.
	How <i>DiaDeLi</i> helped to talk about death	If <i>DiaDeLi</i> helped the players to discuss death and dying.
	Players' own funeral	If the participants have thought about their funeral and what it would look like.
Alternative uses for <i>DiaDeLi</i>		The participants provided ideas for how the game could be used, for example, for (group) therapy.
Gameplay context and motivation	When participants would play the game again and with who	In what situation or with whom the participants would play the game.
Sharing personal opinions and experiences with death and funerals		What participants like and dislike about funerals, as well as their previous experiences with death and dying.

Note. Example quotes for each sub-theme are provided in [Appendix I](#).

Results

The current chapter presents the themes and subthemes that resulted from the thematic analyses of the expert interviews, the gameplay observation, and the focus group session. The *DiaDeLi*-board game was developed using insights from the expert interviews. Thereafter, a focus group session was organized wherein young adult participants played *DiaDeLi* and shared their opinions during the focus group discussion. The insights from the expert interviews are represented as ‘E1’ and ‘E2’. Insights from the gameplay observation are described as ‘O’, and insights from the focus group session that followed are represented as ‘P’ (e.g., ‘P1’). The findings from each theme will be outlined in the following sections, starting with the findings from the expert interviews.

People’s Behavior Towards Death

The expert interviewees shared their experiences with how people’s behavior, or funeral practices, have changed over the years. Both interviewees talked about the differences between past and present funeral practices. For instance, clients who planned a funeral used to have a limited choice of music to choose from for their loved one's funeral, compared to today's wide range of choices, including live performances and selections from platforms such as YouTube (E1). E1 remembered “[...] *Times have changed. You used to have, back in the day, for example. You had 30 minutes of auditorium, 30 minutes of coffee room, so it was 3 pieces of music, and you were gone. And there was coffee and cake*”. E2 presented another perspective and revealed that what stood out to them is that people have become more open about death, particularly the younger generation “*I see that [...] death is not as taboo as it used to be, I think*” [E2].

Neither E1 nor E2 reported having witnessed differences between old(er) and young adults in their behavior at funerals and around deceased people. However, interviewees did note

the difference between religious funeral services or “*multicultural*” funerals. E2 explained about the latter “[...] *those kind of [funerals] are of course very different, but they are also Dutch, but they still have their own culture that they bring to their funerals. But Dutch funerals are almost, by default, a bit similar*”. Dutch funerals usually have pictures, music, and speakers (E1).

Both interviewees talked extensively about children’s behavior surrounding death and how children, in their experience, usually approach death logically (E1, E2). E1 shared, from their experience as an undertaker, that children seem to enjoy taking part in the funeral, for example, by drawing something for the deceased person and putting the drawing in the coffin. Notably, both interviewees revealed that they do not like when a parent, for example, tells their child that their deceased grandmother or grandfather is ‘sleeping’, E1 elaborated that fear is often imposed by the parents at a young age “*No, but it is often imposed by parents. Because it's scary. And you should never say ‘grandpa or grandma is sleeping’, because then they don't want to sleep anymore themselves*”. Additionally, E2 recalls older adults who were forced to look at their deceased grandparents as a child, who, as a result of that, are still traumatized later in life. For this reason, E2 stressed that children who do not want to see their dead grandparents should never be forced, as this fear might stay with them all their lives.

Young Adults

The interviewees noticed that, when asked about young adults specifically, young adults in their experiences seem more “loose” (E1) about death and dying. Young adults do not seem afraid to show their emotions and cry (E1). E2 explains that young adults often attend funerals to support someone they know who has lost a parent, for example “*they really come for the bereaved, [...] but just friends, no, they don't [say goodbye to the deceased person]. They just keep it that way, they really come for you*” [E2]. E2 explained that this illustrates, to them, that

death is no longer taboo for the younger generation. Young adults, according to the experts, see death as a part of life. However, E2 added that young adults typically do not look forward to funerals and may be nervous to attend. Young adults, E2 reports, tend not to attend a funeral alone but rather together with a friend or a family member, such as their mother.

Game Insights

The interviewees were asked what they thought was important to include in *DiaDeLi*. They responded that it is vital that young adults know that they can make their own choices. Both interviewees indicated that the game's players could be asked about the music they would want played at their funeral, E2 emphasized that music is important at funerals. Additionally, E2 added that it might be helpful to ask if the players are okay with the standard Dutch funeral or if they would rather do it differently. E1 suggested that it might be helpful to ask young adults if, looking back at past funerals, they were content with how that funeral was organized or if the players would rather do something differently. For example, by being more involved in the funeral, speaking, playing a musical instrument, and so on (E1).

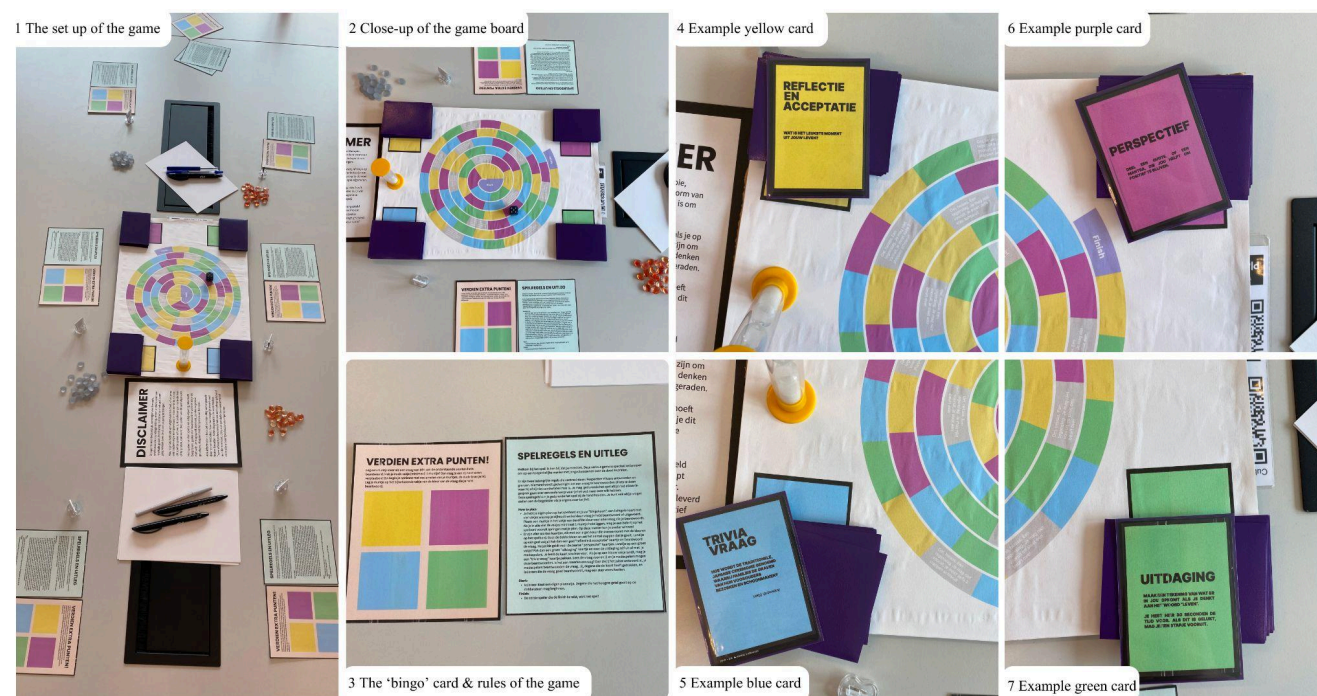
The interviewees highlighted the importance of preparing for death. E1 shared that older people and younger adults tend to make early preparations for their funerals and that these early talks are increasingly common (E1). E1 added that people seem to like to be in control of their funeral and explained that an additional benefit is that “[...] *it provides peace of mind to the family*”.

After the expert interviews, insights were incorporated into the development of the *DiaDeLi*-serious board game. Participants were invited to play *DiaDeLi* and provide their opinions about the game. See Figure 6 for an image taken while the participants played *DiaDeLi*.

Their insights from the thematic analysis of the game-play observation and the focus group session are elaborated upon in the following sections.

Figure 6

Pictures of the DiaDeLi game setup for the gameplay session before the focus group.



Enhancing Game Experience

Player Interaction And Behavior

When the participants first started playing *DiaDeLi*, “they looked at the facilitator a lot for approval” [O]. When they became accustomed to the game’s rules, they appeared relaxed, laughing and smiling and talking to each other about the topics that were incorporated into the game (O). After playing the game, P1 noted that some of the types of cards provided more interactivity than others, saying, “[...] I think with green and blue [cards] you do have that you interact with each other and everyone participates [...]”. While playing *DiaDeLi*, participants

appeared to have developed a preference for certain types of cards “*A participant said upon picking up a pink card: “Now I am going to get another deep question [...]”* [O].

Game Enjoyment

When asked about their experience while playing *DiaDeLi*, three participants (P1, P2, P3) indicated that they enjoyed playing the game “*Less stupid than I would have... than I expected*” [P2]. P4 also indicated enjoying the game and was pleasantly surprised that it was not as much about death as they had expected and added that this might have been because the more hefty questions were not drawn from the stacks of cards. When the facilitator ended the game after 40 minutes, participants did not want to stop playing the game yet, they wanted to keep playing (O).

Variety Of The Game

All participants reported being happy with the variety in *DiaDeLi* and specifically appreciated the variety between the different types of cards. P1 and P3 explained that they experienced the cards they drew as “*light-hearted*”. One participant (P5) had another experience and recalled picking only tough questions. The participant elaborated:

But I did sometimes find the contrast, indeed, quite large between the difficult questions and the light-hearted questions because you pick from the same pile; just give a nice quote that sticks with you. I got [...] to really think about death and what happens after [death], and I found that quite intense [...] [P5].

P6 elaborated on the variety of the different cards that “[...] *on the other hand, if it is all such intense questions then it does become a very tough game, I think*”. P5 appeared to agree that the variety in *DiaDeLi* is nice, even though they happened to draw a lot of tougher questions, and added that they liked the variety between the playful and the serious cards (P5).

P1 liked that the game included several different topics, which were processed in the different types of cards. P1 expressed that the variety between the trivia questions, for example, and the tougher questions was nice.

Players' Positive Feedback About Game Elements

Game elements that the participants reportedly liked were the challenges (P4), trivia questions (P1, P6), and the 'bingo' -card that the game included (P2, P5, P7). Participants also liked that they could create their game tokens (P1, P3, P5). The game tokens can be viewed in Figure 7. Moreover, participants indicated that they liked the board game format (P1, P3). P3 explained:

[...] it also kind of makes it a fun game format, because obviously, it can be quite a heavy subject, so then again that makes it just a bit more playful [...]" "[...] and also because it's really a board game. Not that it's just cards that you have to take from the pile one by one [...]" [P3].

P1 added that they liked the board game's minimal design and that it is not visible that *DiaDeLi* is about death.

Figure 7

The game tokens that the players created



Note. To preserve the participants' anonymity, the game tokens containing names have been excluded from the photo.

Challenges And Barriers To Playing *DiaDeLi*

Points Of Improvement

Although the participants seemed generally positive about *DiaDeLi*, they also offered some points of improvement. P4 indicated that the counterclockwise direction of the circular gameboard was confusing. Additionally, some of the trivia questions were too difficult and should have been multiple choice (P2, P4, O), the board could have been bigger (P1) and shorter (O) “[...] *I think it would have taken us a while to get to the finish line, haha*” [P1]. Moreover, the distinction between the different types of cards could be clearer, for example, by adding an icon to (the back of) the card (P1, P5, P6), and for more interaction, another player could read the card to the player whose turn it is (P6).

Barriers To Playing *DiaDeLi*

Players identified possible barriers to playing *DiaDeLi*. P1 shared that it is important for them to feel comfortable enough to share their feelings and that they would be apprehensive if they had to play *DiaDeLi* with a random group of people. P4 shared “*Yeah, well, that's how I felt a lot at the beginning too, because yeah, I don't know you guys.*” and explained “[...] *you did [...] answer, and then I thought, oh yes, really nice. Then you don't really know how to respond to it*”. A worry that P4 shared is that if they were to play the game with friends, they would not take it seriously and might start making jokes about some of the topics in the game. The participant elaborated “*I think they won't take it seriously. Or, on the contrary, that they [...] won't be good at saying what they would want*” [P4].

Reflective Conversations And Insights

Player Reflections During And After The Game

The game and the focus group discussion thereafter appeared to lead to the players reflecting upon death and their own opinions. While playing the game, P5 shared their outlook on life, to *"enjoy every moment"* of life (O). Notably, while playing *DiaDeLi*, P4 *"of his own accord, showed a photo showing their family with the grandfather who recently passed away, while the question on the card did not ask for this"* [O]. The challenge card instructed the player to show the other players a picture of a time when they felt good about themselves. During the focus group discussion, P4 shared that they were happy they did not get the very heavy questions but that they could have answered some of these questions because of the recent loss of their grandfather. P5 added that *DiaDeLi* led them to *"[...] thinking about death a little further because I was asked the question of, what do you think happens when you die. That's really not something I think about on a daily basis at all"*. Additionally, six participants agreed that they learned something from the game, specifically from the trivia questions (P1, P2, P4, P7) as well as from playing *DiaDeLi* in general (P3, P5).

How DiaDeLi Helped To Talk About Death

P3 expressed that they found playing *DiaDeLi* *"[...] meaningful"* and explained that *DiaDeLi* covers topics people do not talk about on a daily basis and that the game provides insights into how the other players feel about these topics (P3). Three participants (P1, P6, P7) agreed that the game allowed them to discuss death and dying openly. The other participants did not respond to this particular question. P1 stated that they are already open about death and dying, and P2 added that they *"do not know if we really had taboos?"*. The participants also

asked the other participants questions, such as P3, who asked if one could take the ashes home immediately after someone is cremated.

Players' Own Funeral

DiaDeLi led to several participants discussing their funerals during the game (O) and after playing *DiaDeLi* during the focus group discussion (P1, P4, P5, P6). P5 had difficulty answering questions about what they would want their funeral to look like during the game (O) and shared that they had not thought about their funeral yet *“I think people in their 20s don't think about that so much”* [P5]. P1 said that it surprised them that P5 had not thought about their funeral yet and shared that P1 and their partner have discussed their plans for after they die at length and do so regularly. P1 suggested that the difference might be that *“I have experienced a lot of funerals [...], so maybe there is a difference in that, that you can already paint a bit of a picture or something”*. P5 agreed and shared not having much experience with death *“[...] when my grandmother died, I was only 1.5 [years old], so I really don't know anything about that. And other than that, yeah, I never have a family member or anything, thankfully [...]”*.

P6 shared that they would never want to be cremated for religious reasons *“because we believe we will return to heaven”*.

Alternative Uses For *DiaDeLi*

The participants shared multiple ideas for how *DiaDeLi* might be used. P1, P6, and P4 agreed that the game might be suitable for (group) therapy, even though the disclaimer stated that the game was not developed for therapeutic purposes. P6 added that it might also be interesting for schools to use *DiaDeLi* *“Because you don't really talk about death anywhere”*, P2 agreed. P3 shared another perspective and shared that *DiaDeLi* may be helpful for people who find it difficult to talk about death because they still struggle with a loss. P2 agreed with P3's

perspective of playing *DiaDeLi* with people who have lost someone as a way to introduce the topic “*slow and easy*”. P4 acknowledged this perspective “*I think so, I think my father, who [...] just lost his father, I think he would like to play this game also with my uncle [...]. Is it a bit more light-hearted this way*”.

Gameplay Context And Motivation

When Participants Would Play the Game Again And With Whom

Besides using the game for group therapy and for coping with the loss of a loved one, participants also agreed that playing *DiaDeLi* with family, such as their parents or grandparents, might result in deeper, more meaningful conversations (P3, P4, P5, P7). P7 added that they would be really curious about how their family members would answer the questions in *DiaDeLi*. When asked if the participants would play *DiaDeLi* with friends, they responded that they would (P1, P2, P3, P5). However, P1 detailed that it is “[...] *situational, too. Cozy Friday night, we're going to talk about death*”. P2 agreed that getting friends to play *DiaDeLi* might take some convincing. Participants also pointed out that playing *DiaDeLi* enabled them to get to know the other players better (P1, P2).

Sharing Personal Opinions And Experiences With Death and Funerals

The game and the focus group discussion led to participants sharing their personal experiences with death with the other participants, such as P4 and P2, who shared that they have dealt with many losses over the last three to four years. The most recent loss was the grandfather of P4, who passed away last month due to euthanasia. P4 shared a detailed account of their grandfather’s cremation and how they were present when their grandfather was placed into the cremation chamber. P2 shared about their experience “[...] *it was very intense. And very hot*”. P6, who had shared that they, for personal and religious reasons, dislike cremation and would

never want to be cremated, was shocked by the experience of P2 and P4, asking if they ended up having nightmares about it, to which both P2 and P4 replied “no”.

Discussion

The current study investigated how a board game can facilitate open discussions about death among young adults, aiming to break social taboos surrounding death and dying in the Netherlands and other cultures with similar taboos. The research questions were explored through expert interviews with two funeral professionals, observations during the game, and a focus group session after the participants had played the game. The following sections will discuss the present study's key findings, practical implications, and limitations.

Board Game Inspiration And Design

The *DiaDeLi* board game was designed using insights from the expert interviews. Besides the expert interviews' use for the board game design, the interviews yielded additional insights, which will be discussed in the current section. The expert interviewees highlighted the many choices relatives of the deceased have in 2024 compared to how funerals were arranged 10 to 15 years ago. This finding might be related to the secularization and individualization in the Netherlands in the last couple of decades, which has led to a decrease in traditional religious funeral rituals and an increase in personalized funerals (Mitima-Verloop et al., 2019). Additionally, the experts shared that music is very important at funerals and suggested that, within *DiaDeLi*, players might discuss the music they would like at their funeral. Music has become more important in 21st-century Dutch funerals compared to the mid to late 20th century, reflecting the trend toward more personalized funerals wherein the music often reflects the deceased (Hanser et al., 2022). This insight was integrated into *DiaDeLi* through a (green)

challenge card, encouraging the participants to consider their music preferences. The specific card can be viewed in Figure 8.

Furthermore, the experts offered insight into the existing taboos surrounding death and dying among young adults in the Netherlands. The experts shared that Dutch youth seemed to handle death and funerals more loosely and that they seemed to view death as a part of life. They have experienced young adults attending funerals in support of a friend who lost someone instead of mainly saying goodbye to the deceased. This loose attitude aligns with the focus group insights wherein participants indicated they are already quite open about death. However, more research on this phenomenon is needed, as it appears not to have been empirically studied yet.

The expert interviews were used to develop the *DiaDeLi* trivia questions and to ensure they were relevant and culturally appropriate for young Dutch adults. The experts helped to determine what topics were important to incorporate into a game about death and dying. Research suggests that it is essential that people receive appropriate and culturally sensitive information in order to create a meaningful funeral for the bereaved (Burell & Selman, 2020). Additionally, serious games should reportedly align with the players' culture to avoid conflicting behaviors undermining the game's objectives (Meershoek et al., 2015). The expert interviews helped to understand Dutch funeral practices better, ensuring that the *DiaDeLi* board game was culturally appropriate for young Dutch adults. During the focus group session wherein the participants tested *DiaDeLi*, the researcher noticed during the observations that the participants seemed to enjoy themselves and interacted openly with one another. The Dutch young adult participants engaged in conversations during and after playing the game in the focus group session, ranging from personal experiences and opinions on death and dying to their broader societal reflections surrounding death and dying. The participants were smiling and appeared

relaxed while playing *DiaDeLi*. While noting some improvements for the game, none of the participants indicated that they found *DiaDeLi* inappropriate or unrelatable. Suggesting that *DiaDeLi* was relevant and appropriate for the participants. Figure 8 illustrates some cards based on insights derived from the expert interviews. While participants found some trivia questions challenging, they ultimately considered *DiaDeLi* informative.

Figure 8

Examples of cards developed using insights from the expert interviews



Note. These cards are translated from Dutch into English, *DiaDeLi* was developed in Dutch.

These findings offer insights into SQ1 (“*How do young Dutch people behave at funerals, according to funeral experts, and what do funeral experts feel is important to incorporate into the game?*”).

Game Elements

DiaDeLi was designed using various design aspects and game components to foster an enjoyable and believable board game experience. Multiple game components and design elements were incorporated into the game to try to achieve this goal. One game design element that the participants appreciated was the game's variety due to the four types of cards that included different types of (trivia) questions, and challenges. Aligning with research by Caserman et al. (2020), which suggests that effective serious games should balance seriousness and enjoyment, the participants noted that the mix of serious and lighter questions kept the game from being overwhelming and made *DiaDeLi* more enjoyable. Additionally, the participants enjoyed creating their game tokens. By allowing participants to design their own game token, the game gained a personal element that physical games, such as board games, often lack (Stemasov et al., 2024). By designing their token, players' gaming experiences may be enhanced because it allows them to associate more closely with their game tokens (Stemasov et al., 2024).

In line with findings from Noda et al. (2019), the participants appreciated the board game format. The participants agreed that the board game format made the game a more enjoyable experience because of its interactive nature. The board game's interactivity, as opposed to drawing cards from a pile, helped the participants address the subject of death and dying. Furthermore, board games may motivate players and enhance interaction between the players (Noda et al., 2019). Interaction was built into the game through challenge cards and trivia questions. The participants also appeared to enjoy the 'bingo' card in the game, which introduced

another level of competitiveness by allowing players to skip a line forward on the game board, giving them an advantage. Competition contributes to a pleasurable and motivating learning process (Charlier & De Fraine, 2013). Moreover, the participants appreciated the game's minimal design, which may have facilitated conversations about death and dying by reducing the perceived complexity of the game (Nealen et al., 2011).

The participants suggested several improvements for *DiaDeLi*. Implementing these suggestions through an iterative design process could enhance the *DiaDeLi* (Gugerell & Zuidema, 2017) and enhance the game's ability to facilitate conversations about death and dying. Although the participants saw room for improvement, they indicated wanting to keep playing *DiaDeLi*. The participants noted that the game seemed brief despite playing for 40 minutes, which may suggest that the participants experienced 'flow'. Forgetting the time while performing a task or playing a game is one element that describes flow (Mainemelis & Dionysiou, 2015). Serious games should provide an enjoyable player experience, flow, a sense of control, and opportunities for social engagement among players (Caserman et al., 2020).

Game Utilization

Consistent with findings by Omilion-Hodges et al. (2017), the participants indicated that they do not view death as a taboo topic and are generally quite open to talking about death and dying. Omilion-Hodges et al. (2017), in their study, found that young adults in the United States were open to talking about death, as well, possibly suggesting a shift in societal attitudes towards death and dying. This finding contrasts with the findings of Tripken and Elrod (2017), who found that young adults might struggle with discussing death and have a hard time thinking about death and dying.

The participants perceived the *DiaDeLi*-board game as meaningful since it is not a topic that people talk about daily, and by playing *DiaDeLi*, players can find out what the other players think about the topics incorporated into the game. The participants seemed to enjoy playing the game and were happy when they could move forward onto the game board. The participants had multiple ideas for how the game could be used. Among these ideas was the suggestion of using the game to talk about death with someone who has lost someone and is still struggling with this loss. The participants reported that informally introducing the topic might be helpful and that recently bereaved people might find comfort in talking about death through *DiaDeLi*. This insight aligns with research suggesting that sharing stories about the deceased with others is reportedly perceived as a helpful way to deal with loss (Mitima-Verloop et al., 2019). A game-based approach to discussing death and dying, such as *DiaDeLi*, might encourage people to share stories about the deceased and could serve as an effective coping mechanism for dealing with grief and loss. This approach may also help people overcome their barriers to talking about death and dying (Van Scoy et al., 2017). However, as *DiaDeLi* was not tested with recently bereaved people, it is unclear if the recently bereaved will find the game a helpful tool for coping with their bereavement.

These results provide answers to SQ2 (“*What are design elements and game components of a serious board game that encourage people to talk about death and dying?*”) and SQ3 (“*How do participants interact with each other while playing a board game about death and dying?*”).

Limitations

Two experts from the funeral industry were interviewed for the expert interview. While the experts have over 20 years of combined experience in the field, the small sample size might

have influenced the results. Additionally, both experts were Dutch females. If more genders and nationalities had been interviewed, the results might have been different and more generalizable to the population and other cultures.

Due to convenience sampling, all but one participant in the observation and focus group session were university students. The session had eight participants and included only one male participant. Another potential limitation of the study is that five participants were already acquainted due to their enrollment in the same Master's program. This pre-existing familiarity might have impacted the current study's outcomes. It is unclear whether the results would have been different if the game had been played with participants who were not previously acquainted. Additionally, the participants were relatively close in age and ranged from 23 to 25 years old. Moreover, although the current study aimed to investigate the Dutch population, insights from other (non-Western) cultures and an equal distribution of genders and ages among the participants would have made the research better generalizable to a broader population and might have offered insights into differences between cultural groups (Gerard, 2017).

The researcher acted as the facilitator and observer during the gameplay observation and the focus group session thereafter. Due to a train strike that made it more difficult to recruit participants, the researcher chose not to have an independent observer and to observe the gameplay session themselves. Due to this methodological decision, a fly-on-the-wall observation method could not be achieved, potentially impacting reliability due to the Hawthorne or observer effect (Still & Crane, 2017). The presence of the researcher, who also designed the game, may have changed the dynamics of the session. A lower profile of the researcher during the game could have fostered more natural interactions between the participants (Still & Crane, 2017).

Future Research

Future studies could look into more diverse age groups and other societies, as all the focus group session participants were Dutch and mostly female. A more diverse group of participants might yield different results. Comparing societal differences in attitudes towards death and dying and the effectiveness of such a serious game could be researched in the future. While card games to encourage discussing death and dying have been designed and their effectivity has been tested empirically, such as ‘Hello’ (Van Scoy et al., 2017), it appears that the difference in effectiveness between card and board games to discuss sensitive topics such as death and dying has not been researched yet. Additionally, *DiaDeLi* incorporated some CBT principles, such as cognitive restructuring, but did not test the effectiveness of these CBT principles. Future research could investigate if young adults find these principles helpful in a serious board game to talk about death and dying.

Although the *DiaDeLi* board game was designed to encourage young adults to talk about death and dying, focus group participants indicated that they would be interested in playing the game with their family instead of with their friends and that they were curious to find out how their parents and grandparents might react to the game. Therefore, future research could build on these findings to explore how family members respond to a game about death and dying and whether families would find it helpful and enjoyable to discuss these topics within the family.

Conclusion

The *DiaDeLi* serious board game, designed to facilitate open discussions among Dutch young adults to break societal taboos surrounding death and dying, was perceived as meaningful by participants, even though they did not view death as a taboo and were already open to discussing it. The board game was designed utilizing insights from expert interviews with funeral

professionals. These expert interviews guided the design and offered valuable insights into Dutch funeral practices. Notably, the experts found young adults more open about death and dying than previous generations. The board game implemented aspects of modern funeral practices, such as the importance of personalized music choices.

The focus group participants seemed to experience flow while playing the game and wanted to continue playing. Moreover, they indicated that they would play the game again and expressed interest in playing the game with their family rather than with friends. The interactive and competitive nature of the game was appreciated by the focus group participants, who reportedly liked the different types of questions, the 'bingo' card, and the minimalistic design of the board game. However, the focus group participants also saw room for improvement. Even so, the *DiaDeLi* serious board game provides insights that may be useful for other designers who want to develop a serious game to discuss a serious topic.

References

- Barnett, M. D., & Bennett-Leleux, L. J. (2022). Correlates of end-of-life treatment preferences among young adults and older adults. *Death Studies*, *46*(7), 1641–1647.
<https://doi.org/10.1080/07481187.2020.1825298>
- Baxter, K., Courage, C., & Caine, K. (2015). *Understanding your users: A Practical Guide to User Research Methods*. Morgan Kaufmann Publishers.
- Bellotti, F., Berta, R., & De Gloria, A. (2010). Designing effective serious games: Opportunities and challenges for research. *International Journal of Emerging Technologies in Learning (iJET)*, *5*(SI3), 22–35. <https://doi.org/10.3991/ijet.v5s3.1500>
- Booth, J., Croucher, K., & Bryant, E. (2021). Dying to talk? co-producing resources with young people to get them talking about bereavement, death and dying. *Voluntary Sector Review*, *12*(3), 333–357. <https://doi.org/10.1332/204080520x16014085811284>
- Bogner, A., Littig, B., & Menz, W. (2009). Introduction: Expert interviews — an introduction to a new methodological debate. *Interviewing Experts*, 1–13.
https://doi.org/10.1057/9780230244276_1
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Burrell, A., & Selman, L. E. (2020). How do funeral practices impact bereaved relatives' mental health, grief and bereavement? A mixed methods review with implications for covid-19. *OMEGA - Journal of Death and Dying*, *85*(2), 345–383.
<https://doi.org/10.1177/0030222820941296>
- Carr, D., & Luth, E. (2016). End-of-life planning and health care. *Handbook of Aging and the*

- Social Sciences*, 375–394. <https://doi.org/10.1016/b978-0-12-417235-7.00018-4>
- Caserman, P., Hoffmann, K., Müller, P., Schaub, M., Straßburg, K., Wiemeyer, J., Bruder, R., & Göbel, S. (2020). Quality criteria for serious games: Serious part, game part, and balance. *JMIR Serious Games*, 8(3), 1–14. <https://doi.org/10.2196/19037>
- Castronova, E., & Knowles, I. (2015). A model of climate policy using board game mechanics. *International Journal of Serious Games*, 2(3), 41–62. <https://doi.org/10.17083/ijsg.v2i3.77>
- Charlier, N., & De Fraine, B. (2013). Game-Based learning as a vehicle to teach first aid content: A randomized experiment. *Journal of School Health*, 83(7), 493–499. <https://doi.org/10.1111/josh.12057>
- Chircop, D. (2017). An experiential comparative tool for Board Games. *Replay. The Polish Journal of Game Studies*, 3(1), 11–28. <https://doi.org/10.18778/2391-8551.03.01>
- Coda Alliance. (n.d.). *Get Your GoWishes*. <https://codaalliance.org/go-wish/#order-go-wish>
- Common Practice. (n.d.). *Hello Game (Home Edition)*. <https://commonpractice.com/collections/hello-game/products/hello-game>
- Cox, K., Bird, L., Arthur, A., Kennedy, S., Pollock, K., Kumar, A., Stanton, W., & Seymour, J. (2012). Public attitudes to death and dying in the UK: A review of published literature. *BMJ Supportive & Palliative Care*, 3(1), 37–45. <https://doi.org/10.1136/bmjspcare-2012-000203>
- De Raedt, R., Koster, E. H., & Ryckewaert, R. (2012). Aging and attentional bias for death

- related and general threat-related information: Less avoidance in older as compared with middle-aged adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 68(1), 41–48. <https://doi.org/10.1093/geronb/gbs047>
- Döringer, S. (2020). ‘the problem-centered expert interview’. combining qualitative interviewing approaches for investigating implicit expert knowledge. *International Journal of Social Research Methodology*, 24(3), 265–278. <https://doi.org/10.1080/13645579.2020.1766777>
- Dupont, C., Smets, T., Monnet, F., Eneslätt, M., Tishelman, C., & Van den Block, L. (2022). The cultural adaptation of the go wish card game for use in Flanders, Belgium: A public health tool to identify and discuss end-of-life preferences. *BMC Public Health*, 22(1), 1–14. <https://doi.org/10.1186/s12889-022-14523-9>
- Eichenberg, C., & Schott, M. (2017). Serious games for psychotherapy: A systematic review. *Games for Health Journal*, 6(3), 127–135. <https://doi.org/10.1089/g4h.2016.0068>
- Epstein, D. S., Zemski, A., Enticott, J., & Barton, C. (2021). Tabletop board game elements and Gamification Interventions for health behavior change: Realist Review and proposal of a game design framework. *JMIR Serious Games*, 9(1), 1–12. <https://doi.org/10.2196/23302>
- Fang, Y.-M., Chen, K.-M., & Huang, Y.-J. (2016). Emotional reactions of different interface formats: Comparing digital and traditional board games. *Advances in Mechanical Engineering*, 8(3), 1–8. <https://doi.org/10.1177/1687814016641902>
- Ferreira de Almeida, J. L., & dos Santos Machado, L. (2021). Design requirements for educational serious games with focus on player enjoyment. *Entertainment Computing*, 38, 1–11. <https://doi.org/10.1016/j.entcom.2021.100413>

- Fessenden, T. (2022, July 31). *Focus Groups 101*. Nielsen Norman Group.
<https://www.nngroup.com/articles/focus-groups-definition/>
- Filios, C.-E., & Schröter, P. (2023). Ways in which sensitive themes can be effectively handled within games: A study on secret hitler, the board game, and other similar games. *SSRN Electronic Journal*, 1–5. <https://doi.org/10.2139/ssrn.4811880>
- Fletcher, S., Hughes, R., Pickstock, S., & Auret, K. (2018). Advance care planning discussions with adolescent and young adult cancer patients admitted to a community palliative care service: A retrospective case-note audit. *Journal of Adolescent and Young Adult Oncology*, 7(1), 112–119. <https://doi.org/10.1089/jayao.2017.0032>
- Gerard, N. (2017). Can millennials talk about death? Young adults' perceptions of end-of-life care. *Journal of Health Administration Education*, 34(1), 23-48.
- Gugerell, K., & Zuidema, C. (2017). Gaming for the energy transition. experimenting and learning in co-designing a serious game prototype. *Journal of Cleaner Production*, 169, 105–116. <https://doi.org/10.1016/j.jclepro.2017.04.142>
- Hanser, W. E., Mark, R. E., & Vingerhoets, A. J. (2022). Music and lyric characteristics of popular Dutch funeral songs. *OMEGA - Journal of Death and Dying*, 89(2), 452–469.
<https://doi.org/10.1177/00302228221075471>
- Hartt, M., Hosseini, H., & Mostafapour, M. (2020). Game on: Exploring the effectiveness of game-based learning. *Planning Practice & Research*, 35(5), 589–604.
<https://doi.org/10.1080/02697459.2020.1778859>
- Hunicke, R., LeBlanc, M., & Zubek, R. (2004). MDA: A formal approach to game design

- and game research. *Proceedings of the AAAI Workshop on Challenges in Game AI (4)I*, 1-5.
- Jafari, H., Cheraghi, M., Pashaeypoor, S., & Hoseini, A. S. (2020). Human death: A concept analysis study. *Journal of Nursing and Midwifery Sciences*, 7(3), 170–179.
https://doi.org/10.4103/jnms.jnms_43_19
- Jarvis, S., & de Freitas, S. (2009). Evaluation of an immersive learning programme to support triage training. *2009 Conference in Games and Virtual Worlds for Serious Applications*, 117–122. <https://doi.org/10.1109/vs-games.2009.31>
- Junior, R., & Silva, F. (2021). Redefining the MDA framework—the pursuit of a game design ontology. *Information*, 12(10), 1–19. <https://doi.org/10.3390/info12100395>
- Kroon, A. C., Trilling, D., Meer, T. G. L. A., & Jonkman, J. G. F. (2019). Clouded reality: News representations of culturally close and distant ethnic outgroups. *Communications*, 45(s1), 744–764. <https://doi.org/10.1515/commun-2019-2069>
- Lakasing, E. (2014). Death’s worsening taboo: Is hampering the provision of high quality palliative care. *British Journal of General Practice*, 64(622), 243–243.
<https://doi.org/10.3399/bjgp14x679769>
- Lameras, P., Arnab, S., Dunwell, I., Stewart, C., Clarke, S., & Petridis, P. (2016). Essential features of serious games design in Higher Education: Linking Learning attributes to game mechanics. *British Journal of Educational Technology*, 48(4), 972–994.
<https://doi.org/10.1111/bjet.12467>
- Li, Y.-T. (2023). The ‘other talk’: A co-design study of board games for cross-generational

communication of life-and-death issues. *CoDesign*, 19(4), 327–345.

<https://doi.org/10.1080/15710882.2023.2269917>

Liu, L., Wang, Y., Ho, T. C.-K., Li, M. M.-Y., Cheung, E. W.-S., Chow, R. S.-K., Gu, C., &

Chan, H. Y.-L. (2024). Co-designing a culturally-sensitive theory-driven advance care planning game with Chinese older adults and healthcare providers. *Palliative Medicine*,

38(3), 343–351. <https://doi.org/10.1177/02692163231222776>

Lyke, J. (2013). Associations among aspects of meaning in life and death anxiety in young

adults. *Death Studies*, 37(5), 471–482. <https://doi.org/10.1080/07481187.2011.649939>

Mainemelis, C., & Dionysiou, D. D. (2015). Play, flow, and timelessness. *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*, 121–140.

<https://doi.org/10.1093/oxfordhb/9780199927678.013.0006>

Martin, J. P., Desing, R., & Borrego, M. (2022). Positionality statements are just the tip of the

iceberg: Moving towards a reflexive process. *Journal of Women and Minorities in Science and Engineering*, 28(4), 1–4.

<https://doi.org/10.1615/jwomenminorscieng.2022044277>

Meershoek, C. J., Kortmann, R., Meijer, S. A., Subrahmanian, E., & Verbraeck, A. (2013). The

Culture Driven Game Design Method: Adapting serious games to the players' culture. *Perspectives on Culture and Agent-Based Simulations*, 231–249.

https://doi.org/10.1007/978-3-319-01952-9_13

Menzies, R. E., & Menzies, R. G. (2023). Death anxiety and mental health: Requiem for a

dreamer. *Journal of Behavior Therapy and Experimental Psychiatry*, 78, 1–9.

<https://doi.org/10.1016/j.jbtep.2022.101807>

- Mitima-Verloop, H. B., Mooren, T. T., & Boelen, P. A. (2019). Facilitating grief: An exploration of the function of funerals and rituals in relation to grief reactions. *Death Studies*, *45*(9), 735–745. <https://doi.org/10.1080/07481187.2019.1686090>
- Nealen, A., Saltsman, A., & Boxerman, E. (2011). Towards minimalist game design. *Proceedings of the 6th International Conference on Foundations of Digital Games, FDG '11*, 38–45. <https://doi.org/10.1145/2159365.2159371>
- Noda, S., Shirotaki, K., & Nakao, M. (2019). The effectiveness of intervention with Board Games: A Systematic Review. *BioPsychoSocial Medicine*, *13*(1), 1–21. <https://doi.org/10.1186/s13030-019-0164-1>
- NOS. (2022, February 8). Campagne om dood bespreekbaar te maken: “Vaak spijt over onvolledig afscheid.” NOS. <https://nos.nl/artikel/2416252-campagne-om-dood-bespreekbaar-te-maken-vaak-spijt-over-onvolledig-afscheid>
- Omilion-Hodges, L. M., Manning, B. L., & Orbe, M. P. (2017). Context matters: an exploration of young adult social constructions of meaning about death and dying. *Health Communication*, *34*(2), 139–148. <https://doi.org/10.1080/10410236.2017.1384436>
- Perin, M., Tanzi, S., Botrugno, C., Craddock, C., Menkin, E., Peruselli, C., & De Panfilis, L. (2022). Translation and cultural adaptation of the go wish game: Thinking about personal values to promote advance care planning. *Journal of Palliative Medicine*, *25*(10), 1540–1550. <https://doi.org/10.1089/jpm.2022.0083>
- Phenwan, T., Peerawong, T., Jarusomboon, W., Sittiwantana, E., Satian, C., & Supanichwatana,

- S. (2021). Using Zoom and card game to conduct advance care planning classes: An innovative practice. *OMEGA - Journal of Death and Dying*, 87(4), 1028–1047.
<https://doi.org/10.1177/00302228211032735>
- Pinedo, R., García-Martín, N., Rascón, D., Caballero-San José, C., & Cañas, M. (2021). Reasoning and learning with board game-based learning: A case study. *Current Psychology*, 41(3), 1603–1617. <https://doi.org/10.1007/s12144-021-01744-1>
- Pon, A. K. L. (2010). My wonderful life: A board game for patients with advanced cancer. *Illness, Crisis & Loss*, 18(2), 147–161. <https://doi.org/10.2190/il.18.2.e>
- Quintiens, B., Smets, T., Chambaere, K., Van den Block, L., Deliens, L., Sallnow, L., & Cohen, J. (2023). Discomfort with suffering and dying, a cross-sectional survey of the general public. *Journal of Pain and Symptom Management*, 66(5), 529–546.
<https://doi.org/10.1016/j.jpainsymman.2023.07.003>
- Rawlings, D., Tieman, J. J., Sanderson, C., Parker, D., & Miller-Lewis, L. (2017). Never say die: Death euphemisms, misunderstandings and their implications for practice. *International Journal of Palliative Nursing*, 23(7), 324–330.
<https://doi.org/10.12968/ijpn.2017.23.7.324>
- Ribbens McCarthy, J. (2007). ‘they all look as if they’re coping, but I’m not’: The relational power/lessness of ‘youth’ in responding to experiences of bereavement. *Journal of Youth Studies*, 10(3), 285–303. <https://doi.org/10.1080/13676260701262574>
- Rothwell, E., Anderson, R., & Botkin, J. R. (2015). Deliberative discussion focus groups. *Qualitative Health Research*, 26(6), 734–740. <https://doi.org/10.1177/1049732315591150>
- Russac, R. J., Gatliff, C., Reece, M., & Spottswood, D. (2007). Death anxiety across the adult

- years: An examination of age and gender effects. *Death Studies*, 31(6), 549–561.
<https://doi.org/10.1080/07481180701356936>
- Samarasinghe, D., Barlow, M., Lakshika, E., Lynar, T., Moustafa, N., Townsend, T., & Turnbull, B. (2021). A data driven review of board game design and interactions of their mechanics. *IEEE Access*, 9, 114051–114069.
<https://doi.org/10.1109/access.2021.3103198>
- Saputri, Y. (2023). Why are taboos still used? *Proceedings of the 2nd International Conference on Language, Literature, Education, and Culture, ICOLLEC 2022, 11–12 November 2022, Malang, Indonesia*, 1–11. <https://doi.org/10.4108/eai.11-11-2022.2329405>
- Schäfer, C. (2007). Post-mortem personalization: Pastoral Power and the New Zealand funeral director. *Mortality*, 12(1), 4–21. <https://doi.org/10.1080/13576270601088319>
- Shen, C.-C., Tsai, C.-H., & Tseng, T. A. (2022). The influence of flow experience and serious leisure on attachment in board game. *Leisure Sciences*, 1–25.
<https://doi.org/10.1080/01490400.2022.2061654>
- Sinuff, T., Dodek, P., You, J. J., Barwich, D., Tayler, C., Downar, J., Hartwick, M., Frank, C., Stelfox, H. T., & Heyland, D. K. (2015). Improving end-of-life communication and decision making: The development of a conceptual framework and quality indicators. *Journal of Pain and Symptom Management*, 49(6), 1070–1080.
<https://doi.org/10.1016/j.jpainsymman.2014.12.007>
- Smit, D., Maurer, B., Murer, M., Reinhardt, J., & Wolf, K. (2019). Be the meeple: New

- Perspectives on Traditional Board Games. *Proceedings of the Thirteenth International Conference on Tangible, Embedded, and Embodied Interaction, TEI '19*, 695–698.
<https://doi.org/10.1145/3294109.3295657>
- Starks, K. (2014). Cognitive behavioral game design: A unified model for designing serious games. *Frontiers in Psychology*, 5, 1–10. <https://doi.org/10.3389/fpsyg.2014.00028>
- Stemasov, E., Wagner, T., Askari, A., Janek, J., Rajabi, O., Schikorr, A., Frommel, J., Gugenheimer, J., & Rukzio, E. (2024). Dungeonmaker: Embedding tangible creation and destruction in hybrid board games through Personal Fabrication Technology. *Proceedings of the CHI Conference on Human Factors in Computing Systems, CHI '24*, 1–20.
<https://doi.org/10.1145/3613904.3642243>
- Still, B., & Crane, K. (2017). *Fundamentals of User-centered Design: A Practical Approach* (1st edition). CRC Press.
- Talan, T., Doğan, Y., & Batdı, V. (2020). Efficiency of digital and non-digital educational games: A comparative meta-analysis and a meta-thematic analysis. *Journal of Research on Technology in Education*, 52(4), 474–514.
<https://doi.org/10.1080/15391523.2020.1743798>
- Tradii, L., & Robert, M. (2017). Do we deny death? II. critiques of the death-denial thesis. *Mortality*, 24(4), 377–388. <https://doi.org/10.1080/13576275.2017.1415319>
- Tripken, J. L., & Elrod, C. S. (2017). Young adults' perspectives on Advance Care Planning. *American Journal of Hospice and Palliative Medicine*, 35(4), 627–634.
<https://doi.org/10.1177/1049909117727456>
- Tori, A. A., Tori, R., & Nunes, F. de. (2022). Serious game design in health education: A

systematic review. *IEEE Transactions on Learning Technologies*, 15(6), 827–846.

<https://doi.org/10.1109/tlt.2022.3200583>

Tu, C.-H., Sujo-Montes, L. E., & Yen, C.-J. (2014). Gamification for learning. *Media Rich*

Instruction, 203–217. https://doi.org/10.1007/978-3-319-00152-4_13

Van Scoy, L. J., Green, M. J., Reading, J. M., Scott, A. M., Chuang, C. H., & Levi, B. H. (2016).

Can playing an end-of-life conversation game motivate people to engage in advance care planning? *American Journal of Hospice and Palliative Medicine*, 34(8), 754–761.

<https://doi.org/10.1177/1049909116656353>

Van Scoy, L. J., Reading, J. M., Hopkins, M., Smith, B., Dillon, J., Green, M. J., & Levi, B. H.

(2017). Community game day: Using an end-of-life conversation game to encourage advance care planning. *Journal of Pain and Symptom Management*, 54(5), 680–691.

<https://doi.org/10.1016/j.jpainsymman.2017.07.034>

Walk, W., Görlich, D., & Barrett, M. (2017). Design, dynamics, experience (DDE): An

advancement of the MDA framework for Game Design. *Game Dynamics*, 27–45.

https://doi.org/10.1007/978-3-319-53088-8_3

Wehbe, R. R., Whaley, C., Eskandari, Y., Suarez, A., Nacke, L. E., Hammer, J., & Lank, E.

(2022). Designing a serious game (above water) for stigma reduction surrounding Mental Health: Semistructured interview study with expert participants. *JMIR Serious Games*,

10(2), 1–21. <https://doi.org/10.2196/21376>

Wilson, E., Caswell, G., Turner, N., & Pollock, K. (2022). Talking about death and dying:

Findings from deliberative discussion groups with members of the public. *Mortality*,

29(1), 176–192. <https://doi.org/10.1080/13576275.2022.2136515>

Appendix A

Bracketing statement

A bracketing statement is included to challenge and be mindful of researchers' inherent biases. According to Martin et al. (2022), recognizing our own biases as researchers helps to reduce bias, foster trust, create safe environments, and ensure diverse perspectives are considered within the research team. As the current research team only consists of one member, a bracketing statement is written about my own experiences with death and dying and the biases this might have led to. I, the researcher, will take these biases into account while conducting my research, analyzing the data, and designing the death and dying game. In the following paragraphs, I reflect on my personal experiences with death and dying.

In the past five years, I, unfortunately, experienced the deaths of some people close to me. My great uncle, two grandmothers (I had three), and two friends of the family who died way too young of cancer. Death is a part of life that I had not been confronted with that much beforehand, and I had never seen dying as close as I did before these losses. While the people are dearly missed by me and our family, their deaths have changed my outlook on dying and brought my family a lot of openness surrounding death and dying. One of the ways we dealt with our grief was through humor and lightness. While sadness does have a place, we are a glass-half-full kind of family and have always approached death this way.

The funeral of my great uncle helped to look at death in this way. Through certain circumstances, my parents were the ones to arrange his funeral. My great-uncle was an extravagant person with a lot of passion, and his funeral really embraced this. We were not very close to him, and this might have also helped us have a relatively good time at his funeral. It was a day that really suited him, and since then, I learned that death and dying do not have to be a

solely sad occasion. Funerals, in particular, can be days that bring connectedness with the deceased person and the other people attending. While sadness will always have a place at a funeral, since that day, I have found it increasingly important that funerals reflect the person for whom it is held.

Also, through my mother's job as a hostess at funerals and memorial services, we have many conversations about funerals and death at home. This really sparked my interest in the topic because while we talk about death and dying very openly, I know that a lot of others in my proximity do not. However, I do feel like it brings people great comfort to have these conversations and be able to talk about death and dying, which is why I wanted to pursue this thesis topic.

I know that not everyone, though, is blessed with these good experiences around death and dying. For a lot of people, it will probably be difficult to talk about death because of past experiences and discomfort around death and dying that I might not have as much anymore. This is a bias that I am aware of, and will need to be able to make sure that I make my participants feel safe and comfortable in talking about death and dying during the focus group session.

Appendix B

Interview guide: Expert interviews

Informed consent letter

Dear expert,

Thank you for your interest in the research for my Master's thesis. I am Esmee van Dam, and I am studying Communication and Information Sciences at Tilburg University. For my Master's thesis, I am researching how a game could facilitate open discussions about death and dying among young, healthy adults, aiming to break the societal taboo around death and dying in the Netherlands. I would like to base my game partially on insights from professionals from the funeral industry because of your first-hand experience with how your clients view and handle death and dying.

Participating in this expert interview will involve the researcher asking you, the expert, questions regarding your professional experiences and opinions. The interview is expected to last around 30 minutes and will be conducted at a location that is convenient for you. We will coordinate the interview timing and location together. During the interview, I will record the audio because writing everything down will take up too much time and attention. This way, I can ensure that I fully concentrate on our conversation and capture all important details accurately.

All of your responses will be treated with confidentiality and anonymity. Only I, the researcher, will have access to your contact details. Your input will be securely stored and processed anonymously for my thesis, ensuring your privacy.

Should you have any questions or concerns, please feel free to reach out to me via email or phone.

Kind regards,

Esmee van Dam

Master student Communication and Information Sciences.

e.vandam@tilburguniversity.edu

06-25208607

Expert interview introduction

Thank you for participating in this expert interview! I am Esmee, a Master's student at Tilburg University. For my Master's thesis about how a game could facilitate open discussions about death and dying among young, healthy adults, aiming to break the societal taboo around death and dying in the Netherlands, I am very interested in your professional experiences and opinions as a professional in the funeral industry.

The expert interview will last about 30 minutes, and I will record the audio during the interview so that I can incorporate your responses into my Master thesis because writing them down would take a lot of time, and I want to ensure that I listen to your responses and give you my full attention. If you feel uncomfortable during any point of the expert interview, please let me know and I will stop the recording.

This expert interview is a part of my research for my Master's thesis in communication and information sciences at Tilburg University. For my Master's thesis, I will receive a mark.

I want to ensure you fully comprehend your rights. At any point during or after the expert interview, if you feel uncertain about participating, you may halt the interview and/or withdraw from the study without facing any repercussions. Your data will be treated sensitively and will be anonymized. You retain the right to review the information at any time and make adjustments as desired. If there are questions you prefer not to answer, you're free to skip them. Participation is entirely voluntary, and I appreciate your willingness to be a part of the study.

Do you have any questions about any of the points I've mentioned?

Informed consent

<p>Purpose of the interview</p>	<p>This expert interview is being conducted by Esmee van Dam, a student at Tilburg University. You are invited to participate in this expert interview about death and dying and how to facilitate open discussions with young,</p>
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	<p>healthy adults about death and dying. I am interested in your professional experience and opinion.</p>
Procedure	<p>You are invited to participate in an expert interview lasting about 30 minutes. The expert interview is about your professional experience and opinions as a professional in the funeral industry. I will ask questions that you may answer.</p>
Possible risks	<p>Participating in this expert interview carries no inherent risks. You are under no obligation to respond to any questions you find uncomfortable or choose not to answer. Your involvement is entirely voluntary, and you have the freedom and right to withdraw from the study at any time.</p>
Confidentiality	<p>Your privacy will be protected by the researcher. No identifiable information about you will be mentioned in the Master thesis, your answers are anonymized and carefully handled. Upon your request, the results of the study can be made available to you.</p> <p>As indicated above, this thesis research project involves recording the audio of the expert interview. Transcribed segments from the audio recordings may be used in the Master thesis but will not be traceable back to you.</p>
Right to withdraw and not answer questions	<p>Your involvement in this thesis is entirely voluntary, and you have the right to decline answering any question that makes you feel uncomfortable. Should you opt to partake in the expert interview, you are free to exit the expert interview or study at any moment. You're welcome to withdraw from the study at any point without facing any repercussions. If you decide to do so, kindly inform the researcher.</p>
Consent	<p>By signing, you acknowledge that you've either read or had this consent form read to you, all your questions have been addressed satisfactorily, and you consent to partake in the expert interview willingly.</p>

	I agree to participate in the expert interview by Tilburg University student Esmee van Dam.
	Participant:
	Signature:
	Date:

Thank you for filling out the consent form. If you're ready, We will begin the expert interview, and I will start the recording.

Expert interview questions

Background questions (5 min.)

B1: Could you please tell me what you do within the funeral branche?

B2: How long have you been doing what you do?

B2-A: Have you had other jobs in the funeral business before your current job?

B3: Could you tell me a little about your day-to-day work duties?

B3-A: Do you enjoy your job? What about your job do you enjoy?

Core questions (25 min. in total)

Personal experiences (PE) (7 min.)

PE1: What is something that surprised you about working in the funeral industry?

PE2: Is there something that you noticed while being present at so many funerals?

PE3: Do you notice certain differences between the clients that you work with? Can you tell me more about these differences?

PE4: What are differences between funerals that might have stood out to you?

PE4-A: Do you see differences between people and ages?

PE5: Do you notice a difference in how people grieve?

PE6: How, in your experience, do people deal with the loss of a loved one?

Practical questions (PQ) (3 min.)

PQ1: What does funeral planning usually look like?

PQ2: Are there things that people might forget is a part of planning a funeral or that people might not think about?

Overarching questions (OQ) (5 min.)

OQ1: Can you describe some misconceptions or taboos surrounding death and dying in the Netherlands?

OQ2: In your role, what challenges have you observed young adults facing when it comes to discussing or planning for their own or a loved one's funeral arrangements?

OQ3: Have you noticed any specific concerns or fears that young adults commonly express when it comes to death and funeral planning? How do you address these in your work?

OQ4: In your opinion, what strategies or approaches have been effective in opening up conversations about death and reducing stigma among younger generations?

Game design (GD) (5 min.)

GD1: What specific themes or topics do you believe should be addressed in a game aimed at destigmatizing death for young, healthy adults?

GD2: What do you do to provide comfort and support to grieving individuals and families during funeral and memorial services?

GD2-A: How might these strategies be translated into features or mechanics in a game aimed at supporting young adults in confronting the taboo around death and dying?

GD3: Can you maybe think of any elements or aspects of funeral and memorial services that you believe could be incorporated into a game designed to encourage open dialogue about death and dying (among young adults)?

Is there anything I should have mentioned or questioned you about that I didn't?

Concluding the expert interview (5 min.)

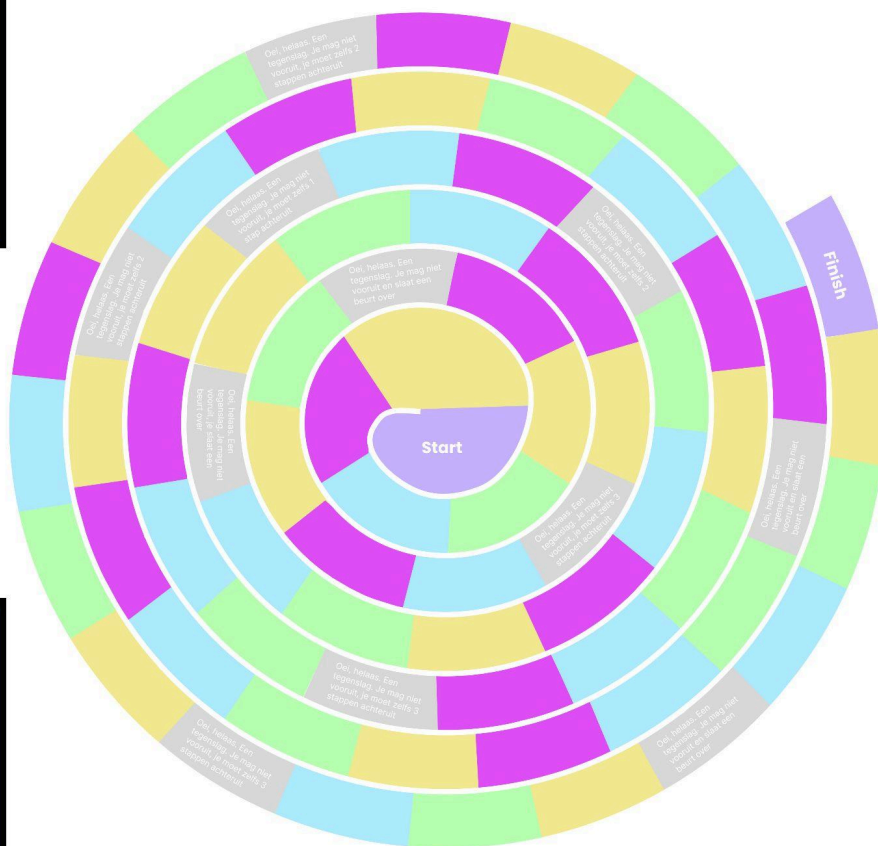
That concludes my last question, marking the end of the expert interview. Thank you for dedicating your time and sharing your insights! Your participation in the expert interview is invaluable to my thesis project. Now that the interview has concluded, do you have any questions or remarks? If not, I will stop the recording.

Appendix C

DiaDeLi's cards and game board

**REFLECTIE EN
ACCEPTATIE**

PERSPECTIEF



TRIVIA

UITDAGINGEN

VERDIEN EXTRA PUNTEN!

Leg een muntje neer als een vraag van één van de onderstaande soorten hebt beantwoord. Heb je in elk vakje (minimaal) 1 muntje? Dan mag je een rij naar voren verplaatsen! (En begin je opnieuw met verzamelen van je muntjes, de oude lever je in). Leg je muntje op het bijbehorende vakje van de kleur van de vraag die je hebt beantwoord.



SPELREGELS EN UITLEG

Welkom bij het spel! Ik ben blij dat je meedoet. Deze serious game is speciaal ontworpen om op een toegankelijke manier met jongvolwassenen over de dood te praten.

Er zijn twee belangrijke regels die centraal staan: Respecteer elkaars antwoorden en grenzen. Niemand wordt gedwongen om een vraag te beantwoorden of iets te doen waar hij of zij niet comfortabel mee is. Je mag gedurende het spel altijd met elkaar in gesprek gaan over een onderwerp waar je het wat meer over wilt hebben. Deze spelregels kun je gedurende het spel bij de hand houden. Je kunt ook altijd vragen stellen aan de begeleider als je ergens over twijfelt.

How to play:

- Je hebt je eigen pion op het spelbord en jouw "bingokaart", een lichtgele kaart met vier vakjes waarop je bijhoudt welke kleur vraag je hebt beantwoord of uitgevoerd. Plaats een muntje in het vakje van dezelfde kleur voor elke vraag die je beantwoordt. Als je in alle vier de vakjes minimaal 1 muntje hebt liggen, mag je een hele rij op het spelbord vooruit springen met je pion. Op deze manier kun je sneller winnen!
- Er zijn vier soorten kaartjes, elk met een eigen kleur die overeenkomt met de kleuren op het spelbord. Gooi de dobbelsteen en zet het aantal stappen dat je gooit. Land je op een geel vakje? Pak dan een geel "reflectie & acceptatie" kaartje en beantwoord de vraag. Hetzelfde geldt voor de paarse "perspectief" kaartjes. Land je op een groen vakje? Pak dan een groen "uitdaging" kaartje en voer de uitdaging zelf uit of met je medespelers. Je leest de kaart sowieso voor. Als je op een blauw vakje landt, mag je een "trivia vraag" kaartje pakken. Lees de vraag voor en jij en je medespelers mogen deze beantwoorden. Is het een meerkeuzevraag? Dan zie jij het juiste antwoord al, je medespelers beantwoorden de vraag. Jij, degene die de kaart heeft getrokken, en iedereen die de vraag goed beantwoordt, mag een stap vooruitzetten.

Start:

- Iedereen kiest een eigen pionnetje. Degene die het hoogste getal gooit op de dobbelsteen mag beginnen.

Finish:

- De eerste speler die de finish bereikt, wint het spel!

DISCLAIMER

Dit spel is niet bedoeld als vervanger van therapie, professionele rouwbegeleiding, of een andere vorm van mentale gezondheidszorg. Het doel van het spel is om gesprekken over de dood op gang te brengen.

Mocht je last hebben van angst over de dood, of als je op een andere wijze niet (mentaal) in staat denkt te zijn om dit spel te spelen of over zulk onderwerpen na te denken of te praten, dan wordt het spelen van dit spel afgeraden.

Het spelen van het spel is volledig vrijwillig, niks hoeft besproken, gedeeld of beantwoord te worden als je dit niet wilt. Je mag op elk moment, zonder negatieve gevolgen, stoppen met het spelen van het spel.

Alle informatie in het spel is zorgvuldig samengesteld door de onderzoeker, maar kan mogelijk onverhoopt fouten bevatten. Meld dit gerust bij de onderzoeker. Twee uitvaartprofessionals hebben een bijdrage geleverd aan dit bordspel, dit is niet per definitie representatief voor alle uitvaartprofessionals of personen.

<p>UITDAGING</p> <p>MAAK EEN TEKENING VAN WAT ER IN JOU OPKOMT ALS JE DENKT AAN HET WOORD 'LEVEN'.</p> <p>JE HEBT HIER 30 SECONDEN DE TIJD VOOR. ALS DIT IS GELUKT, MAG JE EEN STAPJE VOORUIT.</p>	<p>UITDAGING</p> <p>MAAK EEN TEKENING VAN WAT ER IN JOU OPKOMT ALS JE DENKT AAN HET WOORD 'DOOD'.</p> <p>JE HEBT HIER 30 SECONDEN DE TIJD VOOR. ALS JE DIT HEBT GEDAAN, MAG JE EEN STAPJE VOORUIT.</p>	<p>UITDAGING</p> <p>MAAK EEN 'BUCKET LIST' VAN DINGEN DIE JE GRAAG NOG EENS WILT DOEN. SCHRIJF MINMAAL 3 DINGEN OP.</p> <p>ALLE SPELERS MOGEN MEEDOEN; WIE MEET DOET, MAG EEN STAPJE VOORUIT.</p>	<p>UITDAGING</p> <p>TEKEN JULLIE FAVORIETE BLOEMEN. DIT MAG JE INDIVIDUEEL DOEN, OF SAMEN OM ER ZO EEN BOEKET VAN TE MAKEN.</p> <p>IEDEREEN DIE DE EGEN FAVORIETE BLOEM HEEFT GETEKEND MAG EEN STAPJE VOORUIT.</p>	<p>UITDAGING</p> <p>OMSCHRIJF JOUW MEEST FAVORIETE PLEK TER WERELD. DE ANDERE SPELERS MOETEN RADEN WELKE PLEK DIT IS, BINNEN 30 SECONDEN.</p> <p>JJ, EN WIE HET GOED HEFT GERADEN, MAG EEN STAPJE VOORUIT.</p>	<p>TRIVIA VRAAG</p> <p>DE ANGST VOOR VRIJDAG DE 13E KOMT VOORUIT UIT EEN ANGST VOOR HET GETAL '13'.</p> <p>HOE NOEM JE DE ANGST VOOR HET GETAL '13'?</p> <p>a. Triskaidekafobie b. Kachexie c. Trypofobie</p>
<p>UITDAGING</p> <p>OP WELKE FOTO VIND JE JEZELF ECHT EENKLAAR DEZE ZIEVEN AAN DE ANDERE SPELERS, ALS JE WILT.</p> <p>WIE EEN FOTO HEEFT LATEN ZIEN, MAG EEN STAPJE VOORUIT.</p>	<p>UITDAGING</p> <p>3 2, 1: GO! DEGENE DIE ALS EERSTE EEN VAKANTIEFOTO KAN LATEN ZIEN HEEFT GEWONNEN!</p> <p>(EN MAG DUS EEN STAPJE VOORUITZETTEN)</p>	<p>UITDAGING</p> <p>SCHRIJF ALLEMAAL 3 DINGEN OP WAAR JE DANKEBAAR VOOR BENT.</p> <p>ALS DIT IS GELUKT, DAN MAG JE EEN STAPJE VOORUIT.</p>	<p>UITDAGING</p> <p>WAT IS JOUW FAVORIETE NUMMER?</p> <p>ALS JE JE FAVORIETE NUMMER KUNT BENOEMEN EN (EEN KLEIN STUKJE) WILT LATEN HOREN, DAN MAG JE 2 STAPPEN VOORUIT.</p> <p>ALS JE JE FAVORIETE NUMMER BENOEMT, DAN MAG JE 1 STAP VOORUIT.</p>	<p>UITDAGING</p> <p>SCHRIJF CHALLENGE! SCHRIJF HET ALLE SPELERS EEN KORT VERHAAL. ELKE SPELER SCHRIJFT 1 REGEL VAN HET VERHAAL EN SCHRIJFT HET BLADJE DAN DOOR NAAR DE VOLGENDE SPELER DIE HIER EEN REGEL AAN TOEVOGT, TOT JULLIE ROND ZIJN GEWEEST. DOE DIT BINNEN 1 MINUUT. HIERNA MOGEN ALLE SPELERS 2 STAPPEN VOORUIT.</p>	<p>TRIVIA VRAAG</p> <p>WELKE TV-SHOW HEEFT DE SLOGAN 'WINTER IS COMING'?</p> <p>Game of Thrones</p>
<p>REFLECTIE EN ACCEPTATIE</p> <p>WAT WIL JJ GRAAD BEREKENEN IN JE LEVEN? WAT DOE JE ER NU AAN OM DIT TE KUNNEN BEREKEN?</p>	<p>REFLECTIE EN ACCEPTATIE</p> <p>HEB JE VAN EEN BEPAALDE GEBURTENS IN JE LEVEN ECHT SPILT? WAT HEB JE HIERVAN GELEERD?</p>	<p>REFLECTIE EN ACCEPTATIE</p> <p>HEB JE WEL EENS OM IEMAND VERLOST ZO JA; WAT HEB JE HIERVAN GELEERD?</p>	<p>REFLECTIE EN ACCEPTATIE</p> <p>HEB JE WEL EENS EEN UITVAART MEEGEMAAKT? WAT VOND JE ER MOOI AAN EN WAT VIND JE ER MISSCHIEN WAT MINDER MOOI AAN?</p>	<p>REFLECTIE EN ACCEPTATIE</p> <p>DENK JE WEL EENS NA OVER JE EGEN UITVAART? HOE DENK JE DAT DEZE ERUIT ZOU ZIJN?</p>	<p>PERSPECTIEF</p> <p>HOE KAN JE JOU ALTIJD OPVOLGEN?</p>

Sources used to develop the cards

Type of card	Sources
Perspective	<p>Chan, T., Gauthier, R. P., Suarez, A., Sia, N. F., & Wallace, J. R. (2021). Merlynne. <i>Proceedings of the ACM on Human-computer Interaction</i>, 5(CHI PLAY), 1–23. https://doi.org/10.1145/3474677</p> <p>Drenth, A. (2022, August 1). <i>35 vragen over de dood en sterven</i>. Solevita by Angela Drenth. https://www.solevita.online/35-vragen-over-de-dood-en-sterven/</p> <p>Heng, Y. K., Liew, J. S. Y., Abdullah, M. F. I. L., Tang, Y., & Prestopnik, N. (2023). ReWIND: a CBT-Based serious game to improve cognitive emotion regulation and anxiety disorder. <i>International Journal of Serious Games</i>, 10(3), 43–65. https://doi.org/10.17083/ijsg.v10i3.603</p> <p>Pietrangelo, A. (2019, December 12). <i>9 CBT Techniques for Better Mental Health</i>. Healthline. https://www.healthline.com/health/cbt-techniques#types-of-cbt-techniques</p> <p>The examples in these sources were adopted to fit the theme of the board game, and CBT techniques were applied where the researcher thought they could be meaningful.</p>
Reflection and acceptance	<p>Drenth, A. (2022, August 1). <i>35 vragen over de dood en sterven</i>. Solevita by Angela Drenth. https://www.solevita.online/35-vragen-over-de-dood-en-sterven/</p> <p>Pietrangelo, A. (2019, December 12). <i>9 CBT Techniques for Better Mental Health</i>. Healthline. https://www.healthline.com/health/cbt-techniques#types-of-cbt-techniques</p> <p>Polonia, M. (2024, April 10). <i>Counseling for anxiety: Cognitive Behavioral therapy (CBT)</i> — Dr. Madeline Polonia. Dr. Madeline Polonia. https://www.madelinepolonia.com/blog/counseling-for-anxiety-cognitive-behavioral-therapy-cbt</p> <p>The examples in these sources were adopted to fit the theme of the board game, and CBT techniques were applied where the researcher thought they could be meaningful.</p>

Type of card	Sources
Challenge	The challenges were made up by the researcher. Websites and blogs were viewed for inspiration, however, all challenges were developed by the researcher.
Trivia question	<p data-bbox="483 457 1523 541">Classicquiz. (n.d.). <i>1000+ Quiz vragen met antwoorden voor in je eigen pubquiz.</i> classicquiz.com. https://classicquiz.com/nl/quizvragen/</p> <p data-bbox="483 562 1125 646">Lehnardt, K. (2019, July 8). <i>61 Grave death facts.</i> https://www.factretriever.com/death-facts</p> <p data-bbox="483 667 1360 751">Lensvelt, M. (2023, June 27). <i>13 weetjes over vrijdag de 13e.</i> <i>Quest.</i> https://www.quest.nl/maatschappij/cultuur/a44310413/vrijdag-dertiende/</p> <p data-bbox="483 772 1563 919">RememberMe. (2024, March 22). <i>Feitjes en weetjes over de dood.</i> RememberMe. https://www.rememberme.nl/inspiratie/uitvaartzorg-en-rituelen/feitjes-en-weetjes-over-de-dood</p> <p data-bbox="483 940 1515 1035">Tokyo.nl. (2024, June 18). <i>50x feitjes en weetjes over Japan (dit wist je echt nog niet!) - Tokyo.nl.</i> https://tokyo.nl/japan/50-feitjes/</p> <p data-bbox="483 1056 1572 1192">Ward, L. (2022, October 19). <i>Top 10 feitjes over de Dag van de doden.</i> https://www.nationalgeographic.nl/fotografie/top-10-feitjes-over-de-dag-van-de-doden</p> <p data-bbox="483 1213 1572 1360">Zwart, C. (2021, February 27). <i>Wist je dat. . .? - Uitvaartnieuwttjes deelt weetjes over de dood.</i> <i>Uitvaartnieuwttjes.</i> https://uitvaartnieuwttjes.nl/2021/02/27/wist-je-dat/</p>

Appendix D

Focus group & observation guide

Informed consent letter

Dear participant,

Thank you for your interest in the research for my Master's thesis. I am Esmee van Dam, and I am studying Communication and Information Sciences at Tilburg University. For my Master's thesis, I am researching how a game could facilitate open discussions about death and dying among young, healthy adults, aiming to break the societal taboo around death and dying in the Netherlands. As a young adult, I am interested in your experience and opinion about the game that has been developed and we will test the game and discuss your thoughts during a focus group session.

The focus group session will take around two hours of your time and the time and place will be communicated with you before participating in the focus group session. Please let me know if you have a preference for a time and place or if the scheduled date and time do not work for you. During the entire session, I will record the audio because writing everything down will take up too much time and attention. This way, I can ensure that I fully concentrate on our conversations and capture all important data accurately.

All of your feedback will be treated with confidentiality and anonymity. Only I, the researcher, will have access to your contact details. Your input will be securely stored and processed anonymously for my thesis, ensuring your privacy.

Should you have any questions or concerns, please feel free to reach out to me via email or phone.

Kind regards,

Esmee van Dam

Master student Communication and Information Sciences.

e.vandam@tilburguniversity.edu

06-25208607

Informed consent

Purpose of the interview	This focus group session is held by Esmee van Dam, a Master's student at Tilburg University. You are invited to participate in the focus group session to discuss and gather your feedback about a (serious) game about death and dying. I am interested in your personal opinion.
Procedure	You are invited to participate in a focus group session lasting about two hours. The focus group session is conducted to test a (serious) game about death & dying, and you are cordially invited and encouraged to share your honest opinion with the group and discuss your thoughts. I will raise some discussion topics that you may answer and reflect upon.
Possible risks	Participating in this focus group session carries no inherent risks. You are under no obligation to respond to any question or discuss something that you find uncomfortable or would rather not answer/discuss. Your involvement is entirely voluntary, and you have the freedom and right to withdraw from the focus group session and the research at any time.
Confidentiality	<p>Your privacy will be protected by the researcher. No identifiable information about you will be mentioned in the Master thesis, your answers are anonymized and carefully handled. Upon your request, the results of the study can be made available to you.</p> <p>As indicated above, this thesis research project involves recording the audio of the focus group session. Transcribed segments from the audio recordings may be used in the Master thesis but will not be traceable back to you.</p>

<p>Right to withdraw and not answer questions</p>	<p>Your involvement in this thesis research is entirely voluntary, and you have the right to decline answering or discuss any question or topic that makes you feel uncomfortable. Should you opt to partake in the focus group session, you are free to exit the focus group or thesis research at any moment. You're welcome to withdraw at any point without facing any repercussions. If you decide to do so, please inform the researcher.</p>
<p>Consent</p>	<p>By signing, you acknowledge that you've either read or had this consent form read to you, all your questions have been addressed satisfactorily, and you consent to partake in the focus group session willingly.</p> <p>I agree to participate in the focus group session hosted by Tilburg University student Esmee van Dam.</p> <p>Please fill out the informed consent survey to indicate your consent.</p>

The participants of the focus group session will fill out a short Qualtrics survey in which they will consent to partake in the focus group session and answer a few demographic questions. The participants will receive a physical copy of the consent form to read through, this will be translated into Dutch, as will the informed consent letter. The survey can be previewed through the link below:

https://tilburghumanities.eu.qualtrics.com/jfe/preview/previewId/b56d8c34-f202-4405-99bc-e675171d3de2/SV_6FHG9IFARlvvp1s?Q_CHL=preview&Q_SurveyVersionID=current

Focus group & observation guide

Introduction about the focus group (5 min.)

Introducing the topic and myself briefly, answer questions the participants might have, and sign the informed consent forms. If all participants consent, start the audio recording.

Warm-up activity - Designing game tokens (10 min.)

The participants are invited to design their own game tokens to play with. Colored pens and pencils are provided. When the participants are finished, or after about 7 minutes, they are asked to show their game tokens to the other participants and tell them something about themselves.

Playing the game (40 min.)

The participants have the time to play the game with each other.

Observation: note-taking template

A note-taking template was adapted from Baxter et al. (2015) and will be used by the researcher while observing the gameplay.

Gameplay observations		DATE:
Primary takeaways	Gameplay related standouts	Follow-up (to ask during focus group)

Memorable quotes

Participant conversation
standouts

Focus group discussion topics (20 min.)

1. What did you think of the game you just played?
2. Did you learn anything new from playing the game?
3. Would you play the game again, and with who?
4. Do you feel like playing a game about death and dying makes you feel more open to talk about death and dying?
5. If you were to play this game with friends, would the game make it easier for you to discuss death and dying with them? How about with family?
6. Do you feel like games such as the one you just played, could decrease taboos on a topic such as death and dying?

7. Is there anything that was not included in the game that you wish would have been a part of the game?

Debriefing and concluding the focus group session (10 min.)

Thanking the participants for their participation, ask if there are any questions or concerns they would like to address now that the focus group session has come to an end. Telling the participants about the next steps for the study; analyzing the results, and using their insights to recommend game designers and future researchers about how a serious game might help or not help to address societal taboos (around death and dying).

Appendix E

Expert interviews transcripts

Can be viewed in the separate document that was handed in due to the length of the transcripts.

Appendix F

Focus group transcript and observational notes

Can be viewed in the separate document that was handed in due to the length of the transcripts.

Appendix G

Thematic analyses

Expert interviews themes and subthemes



Observation & focus group session themes and subthemes



Appendix H

Themes and subthemes for the expert interviews with example quotes

Table 2

Themes and subthemes from the thematic analysis of the expert interviews

Theme	Sub-theme	Description	Example quote
People's behavior surrounding death	Opinions about/behaviors around death from clients	The expert interviewees talked about times when relatives voiced an opinion about death and dying or certain behaviors from relatives of the deceased person.	“Yes, most people do find it to be tense. And that’s also the case with children. And then you sometimes get questions, for example, from seven-year-olds, or I think it was a seven-year-old child, and then the parents asked her if she would like to see, but what do you think? I said, well, if she really wants to see grandma, let her, I said, because if you say no, then she thinks: what is there behind that wall or behind that door, or I don’t know” [P2].
	Young adults	What stands out about young adults specifically, and how young adults handle death and dying.	“Yes. But then they also just go and look, and, yes, that’s yes, maybe with us, but then I would have to think very carefully, but with us, generally speaking... I do notice that there, that generation, especially, really wants to show their emotions well, as well. I do find that, you know, you often see those blokes” [P1].
	Then and now	Differences between funeral practices in the past and the present.	“Yes, and then, of course, slide shows are played much more often nowadays, of course, that didn’t happen at all in the past, it was three pieces of music. And also, nowadays, nothing is crazy in terms of music” [P1].

	Differences between people	Notable differences between clients, such as cultural differences.	“Yes, you do notice a lot of difference with that. Some are very closed. Well, of course, there are families where there are arguments. Yes, there are also, well, who are really very open. There are also people with whom you can't do anything right and others say, just do whatever or.... really. It really depends” [P1].
Game insights	The game	According to the interviewees, what is important to include in the board game.	“So are they okay with that (the 'standard Dutch funeral)? Or would they.... are they like, well, I would really want to do it very differently. That's obviously something that you could, could put into the game, say, or, yeah, or how you would like it or how you would like it differently if, as youngsters. You could ask that” [P2].
	Death preparations	How people prepare for (their own or someone else's) death.	“Because that's so important that if you know what someone, how someone wants their funeral, that you pursue that and make sure that that happens. Because that's very important” [P2].

Appendix I

Themes and subthemes for the observation and focus group session with example quotes

Table 3

Themes and subthemes from the thematic analysis of the observation and focus group session

Theme	Sub-theme	Description	Example quote
Enhancing game engagement	Variety of the game	The participants discussed the game's variety and how it reportedly helped to keep it light-hearted.	“Yes, well the contrast of the questions heavy to light. But I meant the playful and then the serious stuff. That you do still have a nice variety” [P5].
	Players' positive feedback about different game elements	The participants' positive opinions of the game elements incorporated into the game.	“And, I think also the game format works well too, because we were all incredibly competitive. With having to get that card full and all that” [P1].
	Game enjoyment	What contributed to a positive game experience.	“But I think also because...I didn't get a difficult question and I think there could have been more difficult questions in, in the stack. Because, they were probably in there, as well, but they didn't get picket out, I think” [P4].
	Player interaction & behavior	How the participants interacted with each other and acted while playing the game.	The players laugh and interact with each other relaxedly, despite difficult questions. They seem to answer the questions as best they can and talk to each other about the questions [O].
Challenges and barriers to playing <i>DiaDeLi</i>	Points of improvement for the game	What could be improved about the game, such as the size of the game board.	“Yes, but maybe skipping a turn or, that could be removed out of the game, because I mean, I, yeah ... don't really see the added value of it” [P1].
	Barriers to playing <i>DiaDeLi</i>	Barriers experienced while playing and barriers that might hinder others from playing <i>DiaDeLi</i> .	“And it also depends on, you also have to think about the composition, whether they are open to it or not. Because I have a couple of uncles who really don't talk about this, who are pretty closed off, and start making those, yeah, blunt jokes, whereas my aunts are all more of, yeah, open

Reflective conversations and insights	Player reflections during and after the game	During or after the game, participants appeared to realize something about their own or others' behavior.	to talking about it, you know” [P6].
	How <i>DiaDeLi</i> helped to talk about death	If <i>DiaDeLi</i> helped the players to discuss death and dying.	With grandparents a funeral is a little more 'standard,' with a younger person you realize more; enjoy every moment [O].
	Players' own funeral	If the participants have thought about their funeral and what it would look like.	“But it's also a nice game, because it's not like you talk about this every day. Or so, so then you kind of find out with each other, like, okay, what does everybody actually think about this?” [P3].
Alternative uses for <i>DiaDeLi</i>		If the participants have thought about their funeral and what it would look like.	“Well yeah, no yeah. No, think if you've been to one a lot of times then, uh, then you do think of oh, I want that, I don't want that” [P4].
Alternative uses for <i>DiaDeLi</i>		The participants provided ideas for how the game could be used, for example for (group) therapy.	“Yes, I would also be curious about what other generations think about this. Like grandpas and grandmas” [P7].
Gameplay context and motivation	When participants would play the game again and with who	In what situation or with whom the participants would play the game.	“I think so, I think my father, who just lost his father, I think he would like to play this game also with my uncle or something, he would like to play this, I think. Is it a little more lighthearted this way” [P4].
Sharing personal opinions and experiences with death and funerals		What participants like and dislike about funerals, as well as their previous experiences with death and dying	“Yes, but, and my friend's grandmother, so she just, while she was alive, just picked out her place herself and said, okay, I'm buying this place, this is where I want to be put to rest later. So you also know that she just chose it herself and, she also committed euthanasia, you know, she is lying there very contentedly” [P1].