

# Winning at more than a game!

## A storytelling board game concept to raise awareness about refugees' language barriers

Mustafa Terzioglu<sup>1</sup>, Vanessa Rodrigues<sup>2</sup>

<sup>1</sup>Linköping University  
mterzioglu@gmail.com

<sup>2</sup>Linköping University  
vanessa.rodrigues@liu.se

### Abstract

Games are an intermediary medium to attract people and help them spend their leisure time in a pleasant way. However, games are also open to utilisation for different purposes such as educating people, guiding professionals to specialise in their field, changing behaviours, and creating awareness about social issues. Combining social issues that no one wants to talk about with real stories that help engage the players' interest in those issues through games and their mechanics leads players to question the given topics.

This study takes a research through design approach to identify the potential of a storytelling board game concept to raise awareness about societal challenges. The game - called Can You Survive? - uses storytelling as a way to reflect on the experience of the ups and downs of the language barrier refugees deal with and to interactively form an empathic understanding of underrated challenges. To understand the potential and benefit of developing such a board game concept, the first author reviewed literature on storytelling and serious games while also researching examples of existing serious games that illustrate social issues. Based on this, they designed a board game prototype which was then evaluated and developed iteratively through three co-creation workshops. As a result of the research process, the final version of the board game was designed. Research and design of storytelling game concepts tackling serious societal issues are limited. Therefore, this paper offers researchers and practitioners an alternative medium of storytelling combined with a board game to highlight societal issues since it helps engage players, motivates them, and creates empathy towards the people and issue in focus through the use of storytelling and game mechanics. Besides promoting awareness, it also prompts reflections on an individual's own experience and assumptions held around the specific issue. Future work can also examine how might such a storytelling board game be utilised to spur action among individuals and communities.

### Author keywords

serious games, social design, storytelling board games, refugees, inclusive design

### Introduction

Globally, people are subject to societal problems, although some affected more severely than others. While it may vary across countries, one thing remains constant - few want to speak about them even though the accompanying challenges affect society in various ways. In addition to having a direct impact on many people, social problems also indirectly affect all of us (Glicken, 2011). There has been an increase in the number of people forced to migrate under duress as a result of climate change, long-term conflicts, disease outbreaks, and food shortages in recent years (British Medical Association, 2019). UNHCR (2020) announced that by the end of 2019, the number of people forced to flee their homes due to war, conflict, persecution, human rights abuses, and other disruptions to public order had risen to a record high of 79.5 million, with 26 million of them being refugees. Unfortunately, refugees have mostly become an undecipherable and a neglected topic, even though the directly affected population is enormous. Along with the global increase in the number of refugees and asylum seekers, the worsening wellbeing situation is becoming a far-reaching problem. Depending on where you come to the country as a refugee or the applied strategies of the government regarding refugee issues, a refugee is likely to face various economical and social difficulties on a different level. Moreover, especially language and communication barriers affect a refugee's daily life and one's feelings, leading them to feel lonely and rejected by society. In order to successfully integrate into the society and economy, post-immigration language skills are necessary (Hou and Beiser, (2006, p. 155); van Tubergen and Kalmijn, (2009), as cited in Watkins et al., (2012)). Another study shows that service providers working with immigrants and residents with migrant backgrounds both mentioned language barriers as the most common challenge they faced (Samkange-Zeeb et al., 2020). It is an undeniable fact that lack of ability to speak the local language is preventing the refugees' social well-being boost and contributing to social exclusion. Therefore, it needs to be considered as a big challenge that hampers refugees integration in society. Individuals are mainly unaware or choose to ignore the reality of refugees since they have no idea what it means to have been forced to flee and adapt to another country where they do not know the local language.



Dealing with wicked problems requires competences and knowledge from various scientific domains (Frishammar and Ericson, 2018). Manzini and Coad (2015) indicate that along with NGOs and civil society associations, individuals, families, and communities must be eager and collaborate more for the millions who have left their homes seeking better lives due to several other drivers of migration as well. From a creative competence perspective of society, designers also need to be part of the solution offering innovative alternatives, which might lead to awareness of refugees' obstacles and subsequent redressal of their issues. Therefore, how can we harness design in such a way that it creates empathy and promote awareness?

### Storytelling to create empathy

Skaraas and colleagues (2018) state that as a measure of how we handle the world, empathy is probably the most commonly cited. Therefore, as a society, we have to pay attention to refugees' feelings and the problems they deal with in their living conditions. The difficulties encountered and the constant situational changes give rise to several compelling stories. Mar and Oatley (2008, as cited in Dillon, 2021) mention that stories may play a significant role by reducing bias against outgroup members. Storytelling serves as a moral guidepost as well as a quick and vivid way to share information, sell lifestyles, spark change, or inspire others (Huber, 2018). Storytelling is a way to convey a message and ensure that everyone pays attention to it. Therefore, crafting stories based on the social challenges visible or telling those stories helps reach many people and create awareness about the given topic. On the other hand, narratives are a diverse and numerous form of expression, ranging from oral histories, literature, films, and even games (Kampa et al., 2016). Furthermore, making storytelling more interactive and creating more engagement might help to create more impact on society. As for making storytelling interactive and creating a medium where to engage with others, games would be one of the first things that come to mind.

### Serious Games, Storytelling and Awareness

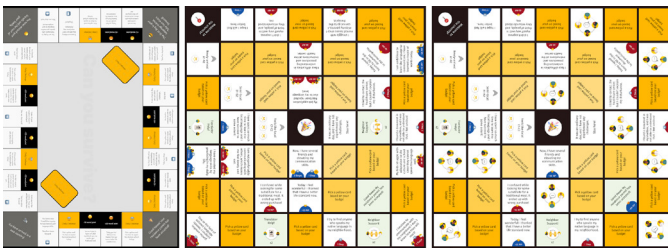
Games are an intermediary medium to attract people and help them spend their leisure time in a pleasant way. Apart from their playful function, games also offer a way to explore and explain complex social issues in a less intimidating way (Gomes et al., 2021). There have been numerous attempts in recent years to apply games and game-like methods to serious issues and discussions (Castronova and Knowles, 2015). A truly global group of practitioners, civic leaders, health and human rights advocates, educators, gamers, and researchers is increasingly interested in using games to educate, motivate, and change behaviour (Ritterfeld et al., 2009). Moreover, Serious Game research has been growing in the past few years, namely by trying to construct supporting theoretical frameworks and identifying the most effective design, implementation, and validation methodologies and models for each particular area of application and for each particular target group (Vaz de Carvalho et al., 2021).

Storytelling is beneficial to engage with players and embrace the message in the games not only for fun purposes but also with serious content. For example, a case study used the narrative storytelling approach in the game AirXorcist to

create awareness among the public about air pollution. The article states that as a result of interweaving air pollution facts into the storyline, games do result in learners learning about air pollution facts while enjoying themselves (Jupit et al., 2021). Kampa and colleagues (2016), also mention that by incorporating narrative elements, game designers can convey a deeper meaning or purpose behind the game, often for educational or training purposes. On the other hand, McDaniel and colleagues (2010), stress that players can feel demotivated by the inconsistency between the game's story and its learning content if they do not feel like they are progressing in the game. In line with that, Naul and Liu (2020) also reflect that creating immersive, motivating, and engaging learning experiences requires storytelling more than just adding story elements to serious games. Therefore, the relationship between the content the designer wants to promote and the way of the implementation should be built attentively while designing the whole game with serious content because the game environment allows the players to experience something while enjoying the game as well. In addition, Schell (2015) suggests that both stories and games can be viewed as machines that create experiences. Suter and colleagues (2021) state that each type of text with its own narrative mechanics is astonishing and excites readers. Serious games are open to engagingly addressing urgent social issues, as well as discussing actions and solutions. When properly encouraged and valued, serious games are proven to be innovative products for tackling social problems and for promoting social innovation (Gomes et al., 2021). However, the use of commercial board games as serious games has not been common; digital games have been preferred by far (Castronova and Knowles, 2015). The use of board games for serious games applications is not usually considered, but there are numerous advantages such as modifying the game dynamics by using pen and paper without needing any coding knowledge, availability for implementation into various topics, providing a small group environment with face to face interaction, and portability of the game (Castronova and Knowles, 2015).

### Material and Methods

This paper employs research through design (RtD) approach to create a storytelling board game concept to communicate refugees' language barrier and raise awareness about it. Through iteratively reframing the problematic situation and the preferred state as the desired outcome of the research, RtD is best suited to addressing these problems due to its holistic approach to integrating knowledge and theories from across many disciplines (Zimmerman et al., 2010). Akmal and Coulton (2019) state that a series of iterations of a game consisting of design, playtesting, and feedback is the most common approach used when developing games. In this research case, the board game design process includes several design iterations, game playing, and feedback sessions during co-creation workshops between the versions. The desk research was used to shape the design of the game prototype versions 1.0 and 2.0 (Figure 1) in terms of the insights regarding obstacles refugees deal with, game elements and its mechanics. Utilising the version 2.0 prototype as a workshop material, three workshops were conducted with a total of 11 participants to develop version 3.0 (Figure 1).



**Figure 1.** From left to right, the version 1.0, 2.0 and 3.0 of the game "Can you survive?"

The participants were chosen based on the criteria of experience of language barrier, familiarity with refugees and frequency of playing board games to attain diversity. The details regarding the workshop participants listed below:

» **Workshop 1 - All international students studying in Sweden**

All 4 international students mentioned that they have experienced language barrier. There are refugees around two of them. Frequency of playing board game was always, sometimes (2 persons) and rarely for this group.

» **Workshop 2 - All locals living in Sweden**

All 4 locals except one mentioned that they have experienced language barrier. There are refugees around three of them, one was not familiar with them. Frequency of playing board game was sometimes (3 persons) and rarely for this group.

» **Workshop 3 - Mix of locals living in Sweden (1 person - other participant canceled last minute) and international students studying in Sweden (2 persons)**

All 3 participants mentioned that they have experienced language barrier. There are refugees around two of them, one was not familiar with them. Frequency of playing board game was always (2 person) and sometimes for this group.

Each co-creation workshop included four parts: ice-breaker, pre-game mini-focus group, game-playing and post-game mini-focus groups.

### Ice Breaker

The co-creation workshop started with an ice-breaking session for participants to get to know each other and ease the rest of the process.

### Pre-game Mini-Focus Group

The pre-game mini-focus group was conducted to gather opinions about the language barrier that refugees struggle with during their integration into society. The discussion questions are listed below:

- 1 Have you ever been in a situation where you experienced a language barrier? If yes, how was the situation? How did you feel?
- 2 How would you describe social issues from an immigrant's perspective?
- 3 What do you think is the hardest challenge for those who have migrated with the language barrier?
- 4 What do you think about the attitude of society towards refugees?
- 5 Have you ever played a board game that stresses societal issues?

### Game-Playing Session

The game-playing session (Figure 2) was based on playing the board game prototype to test it. The participants started by randomly choosing their characters and playing the game based on the rules.



**Figure 2.** From left to right, captures from game playing session from workshops 1, 2 and 3

### Post-game Mini-Focus Group

Another mini-focus group followed the game-playing session to collect insights about the board game itself, game dynamics, the impact of the board game, and feedback to make it more impactful. The prepared questions are listed below:

- 1 You have just experienced the game. What would you say about the game and the theme? How does it meet the purpose of the game?
- 2 How did you feel while playing the game from the first moment and the last minute? Could you mention it specifically?
- 3 What do you know now about the experience of the ups and downs of the language barrier that refugees deal with that you did not know before? How does this impact your view of refugees?
- 4 What would you say about the strength and weaknesses of the game?
- 5 What needs improvement to make it more impactful?
- 6 Suppose you were in charge and could make one change to improve the game. What would you do?

After these co-creation sessions, the latest version of the game was designed based on the feedback.

### "Can You Survive?"

#### - A Storytelling board game concept

*Objective of the game:* The player with the highest positive mood points, which means happiest on the final point of the play, wins!

*Game Materials:* The game material is composed of several elements listed below.

- » A game board: The board is designed to exhibit the language and communication challenges, enriched with stories of the characters, and illustrate the phases of their journeys. The game board is divided into three levels where one progresses from being a stranger to becoming a local in the society.
- » A deck of cards: The cards include the elements representing the challenges with different shades of the colour orange, and special ones help the players during the challenges. Each level has its own challenges inspired by real life. Translation challenge entails that the player needs to translate the phrases in various languages. Charade challenge requires that the player

use body language to describe the daily life situations such as bug invasion in your kitchen. The last challenge is explaining the word or phrase using the language everyone understands. Neighbour support and translator help cards are special cards.

- » Four character cards and their corresponding story cards: The character cards includes the backstory of a representative with several skills regarding language and communication. The story cards bear stories customised for each character placed on the board supporting the story and engaging with the players.
- » Other materials: character tokens, instructions, mastersheet, mood point chart, badges, D3 or D6 dice, and 60 second sand timer.

**Gameplay:** Each gameplay starts with four players equipped with selected character tokens and rolling the D3 dice. It is a mechanism to move the player on the board with the blocks where some statements are written. These statements have different consequences that might change based on the story of the player's character. Some of them are equally valid for all participants. Challenges and the game dynamics are kept realistic, inspired by real challenges, and interpreted from a game perspective. According to the game perspective, games normally start with easy challenges and become harder depending on the level. Contrary to game perspectives, life and the challenges that refugees face become more manageable when the language is learned and integrated into society to some extent. Until that time, the journey has already been challenging for them. For example, the players face the hardest challenge at the beginning which is the translation challenge, followed by the easier one, the charade challenge in the second level, and explaining the word using the language every player understands in the last level. Each challenge needs to be completed in 1 minute. Every move and challenge results with earning or losing mood points. At the end of the last block, the player with the highest positive mood points wins!

**Storytelling:** Storytelling is one of the elements in the game, which while conveying the message and creating a game experience, supports the understanding towards the marginalised group via board game mechanics. All game mechanics support storytelling as an element and the whole game itself is a story. As Aristotle explains, the story is composed of three parts: a beginning, a middle, and an end (Dahlström, 2020). During the game, each participant starts a journey with their characters from the starting point "Welcome to the country!". The journey continues through several adverse challenges and positive experiences customised for the represented character with the subsequent consequences. The challenges end with the last block, which gives the player an ending with a strong message saying their characters survived the real journey, which is full of ups and downs. Furthermore, this journey ends with a message for all players questioning the whole journey through the game's final question - "Do you think you can survive?". In the board game context, the text is a vital storytelling element since the emotions may be conveyed through texts and help capture reality. In addition, the text customises the language and context using a personal perspective. For example, "I tried to find anyone who speaks my native language in my neighbourhood" instead of "you tried to find anyone who speaks your native language in your neighbourhood."

## Research Findings

The data collected from the three co-creation workshops is analysed using thematic analysis. Thematic analysis is a method used to analyse qualitative data such as interviews and transcripts by grouping based on similar patterns (Maguire and Delahunty, 2017). The following section describes the research insights.

### Assumptions vs Reality

The participants have some assumptions regarding the hardships of the language barrier that a refugee can face, but their familiarities regarding the given topic are limited. Their experience is based on communication level such as lack of proper communication or misunderstanding, which causes feelings of frustration, stupidity, stress, and embarrassment. However, almost all participants have no interaction with refugees in their daily life context except on few occasions.

### Promoting Awareness

Participants thought the game itself shows the real experiences regarding language barriers. The game helped some participants realise the challenges based on the given topic and develop different viewpoints.

*"I understand how difficult it was, like language barriers. Because we take everything for granted, like we understand everything here in Sweden. But like if you come here and everything's in Swedish, like I can understand why it's so difficult to integrate sometimes."*

- Local 4 from W2

*"... Maybe trying to be more understanding if someone doesn't speak English. Because I feel like for us that's very likely in Europe, it's a very normal thing. But in other regions of the world, it's not. So maybe you are trying to be a bit more understanding and not being like why can't you! But being okay, how can I react better in the situation?"*

- International student 3 from W1

Unlike understanding the challenge, one of the local people mentioned that he did not learn very much because of his previous experience with international students. On the other hand, there was another comment regarding a long-term perspective that he does not know how the game will impact his acts. Some of the participants realised the patterns and reflected on the correlations between the game dynamics and real life. Creating game mechanics based on real-life activities helped the players understand reality better.

*"Yeah, I guess just realising that you are the neighbour's support for them."*

- International Student 4 from W1

### Eliciting Empathic Emotions

During the game-playing session, the players experienced different feelings such as fun, desperation, excitement, and relaxation after the players moved their characters on the specific experiences represented on the board. The fluctuation of emotions made the game more fun and engaging emotionally. In addition, the players experienced daily life challenges in fun ways like charades. However, after they failed several times, they started feeling different emotions.



While having fun during the game, the following hardships consistently made the people feel disappointed and frustrated, which further led to them to feeling demotivated. For example, a local participant was stuck with taking several steps back consistently in the game, and it made him feel unmotivated since the others were moving forward very quickly. Therefore, the game mechanics should be well thought of from every perspective.

*"... It's still making the story and message for a very good game. And it's, it was engaging, we were having fun all the time, actually, which is very rare for some games. In some cases, it gets very dull, very, very quickly ..."*  
- Local 1 from W2

While conveying the message itself works well, some limitations prevent the participants from engaging. The first limitations were game rules and game dynamics. The participants think the rules need to be more precise, and some more rules are needed. The participants also mentioned that the stories were essential in engaging with the game itself. However, it needs to be improved considering the relationship with the other story elements. The story-related quotes need to be more engaging, so the participants can read and feel the situation. The participants quickly read the story-related blocks after a while. While discussing the game's improvements or impact, some participants bring the possibility of the actions to the table.

*"... Honestly speaking, it's like, maybe this is gonna sound way harsher than what I wanted to say. It's like, but what can I do? Because it's like everyday life, it's not like I'm interacting with refugees or not in some sort of organisation, or charity or something that can help them. So I understand the struggle that... I do not understand, obviously, fully the struggle that they're facing, I understand that they face challenges, now I'm aware of it. But what can I do about it?..."*  
- International student 1 from W1

## Conclusion

This research aimed to identify possibilities for promoting awareness of refugees' language barrier by adopting a storytelling board game concept and developing the game prototype with various co-creation workshops. It is really hard to understand the language barrier through simple explanations since it has to be experienced or explained in such a way that might have an impact. Mar and Oatley (2008, as cited in Dillon, 2021) advocate that stories may play a significant role by reducing bias against outgroup members. Based on the analysis of the co-creation workshops, it can be concluded that the storytelling game concept is likely to be used with the purpose of raising awareness of social issues since the

players agreed that the board game prototype reflects the content very well with the challenges of the game. The board game is also a promising medium to convey serious content with several advantages such as being able to iterate without spending extreme efforts, feasible to interact with the other players in person, and learning from each other. Besides raising awareness for the given topic, the players acknowledged that another potential of the game is to consider the individual actions and solutions because there are limited familiarities with the refugees and limited experience of language barriers affecting their daily lives. Through the use of real stories, the participants realised the correlations between the game dynamics and real-life interpretation that made them empathise and engage with the characters to some extent. The results indicate that storytelling and game dynamics play an essential role in engaging with the players while conveying the message. The relationship between storytelling and game dynamics such as characters, plot, and texts need to be designed attentively. The board game might have limited visual or audio support, but the text-based stories and journey integrated with fun game dynamics also help the board game convey the message and engage with the player. The co-creation workshops provide further comments that advance the game regarding rules, elements, narrative, and impression. In addition, the whole iterative design process of the game demonstrates that iteration improves the game since it leads the designer to see missing parts and provides an opportunity to better shape the game by understanding the target group's perspective. It supports the theory of an iterative approach to game development (Akmal and Coulton, 2019). Even if there are high possibilities to promote social awareness, there might be some barriers, such as language and cultural differences, reaching the target group to make them play it and propagating the game. Further, while players may empathise with characters and their stories, the game possibly falls short of spurring action amongst individuals.

## Further Research

Further studies could focus on conducting co-creation sessions with people who work in the public sector, such as teachers, doctors, and social workers since they are the ones who possibly interact more frequently with the refugees. One of the possibilities could be using this prototype as a tool or pioneer to question actions or solutions. Further research is needed to determine the relationship between the games and their possibilities of being social innovation tools and adapting the game as workshop material to generate ideas. In addition, even if the game helps raise awareness of the given topic, one question arises: What happens after the game? Further research could address the success of the game's long-term effectiveness with the potential of leading behaviour changes after playing the game.

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