Thinking with the hands: LEGO® Serious Play® a game-based tool to empower young migrants integrating

Birte Nienaber¹ and Agnes Kriszan²

Abstract

In recent years, various low-threshold and often creative methods and tools have been developed, considering the specific requirements of vulnerable persons to explore their identities, experiences, knowledge, opinions and needs. The idea of LEGO® Serious Play® is based on play pedagogy. Playing allows to distance oneself from everyday life by sliding into a world of imaginations, ideas and utopias while concurrently keeping the ties to reality (Heimlich, 2015). LEGO® Serious Play® uses metaphors to enable participants to express playfully their thoughts and ideas. As the building process with Lego bricks is physical and haptic, LEGO® Serious Play® is a low-threshold method to work with vulnerable groups (Cavaliero, 2017).

The following article will concentrate on the use of LEGO® Serious Play® as creative exploration method and its possibilities and limitations when used to empower young migrants in vulnerable conditions in the Germany and Luxembourg in the H2020 research project MIMY.

Keywords: Participatory Action Research; Creative exploration methods; Lego Serious Play; Empowerment; Migrants

Introduction: About the necessity to shift away from conventional qualitative research

“Researching hard-to-reach people is not easy.“ (Ullah et al., 2020: 365). Although migration research reverts to the wide range of quantitative and qualitative tools, Ullah et al. point to the necessity of a more reflected choice of appropriate methods. They refer to the “precarious conditions [forced] migrants go through“ (Ullah et al., 2020: 358) and the vulnerabilities most of them are suffering from. Although qualitative methods in most cases properly contribute to in-depth analyses of complex social structures and thereby seem to be more responsive to the social realities of migrants, they do not always respond to complex challenges in research processes. These challenges concern especially questions of accessing and recruiting target groups as well as ethical issues, such as researcher-researched power relations (Aldridge, 2014; Heard, 2022). Qualitative research methods are very broad and can range in their research coverages, in the approaches and research techniques. Here are e.g. in-depth interviews, focus groups or participant observation. (Zapata-Barrero & Yalaz 2018)

Bettmann and Roslon (2013) appeal to be courageous and creative in the development of research designs: it is not about ignoring established ways of doing qualitative research, but about adapting them to individual research contexts. Yalaz and Zapata-Barrero (2018) analyse more than 2400 articles regarding their qualitative approaches in Migration Studies and come

¹ Birte Nienaber, University of Luxembourg, Luxembourg. E-mail: birte.nienaber@uni.lu
² Agnes Kriszan, HAWK University of Applied Sciences and Arts, DE. E-mail: agnes.kriszan@hawk.de
to the conclusion that “the field can still benefit from incorporation of certain under-used qualitative tools.” (p. 25) Also Aldridge pleads for more flexibility in the research process by developing and applying “bespoke” methods (Aldridge, 2016: 18) that are highly reflexive concerning individual contexts of migrants and which are based on narrative techniques to explicitly focus on migrants as narrators of “their” stories giving them a voice to overcome a “culture of silence” (Montero-Sieburth, 2020: 214). Experiences and views can be shared and reflected on “in a novel way that may not be captured in verbal and more conventional research methods” (Mata-Codesal et al., 2020: 204).

Game-based approaches facilitate this methodological turn as they help to dissolve systemic barriers that exist between researchers and researched people. By placing migrants (and also other vulnerable groups) as subjects into the centre of the research process power relations to researchers will not be (re-)produced and migrants themselves will be empowered to genuinely participate in processes of social change (Mata-Codesal et al., 2020; Behrensen, 2019). Following this idea, qualitative research is able to contribute not only to the creation of “knowledge for understanding”, but also to the creation of “knowledge for action” (Cornwall & Jewkes, 1995: 1667, cited from von Unger, 2014: 46).

Game-based methods create interrelations between playful self-fulfillments and social realities which Heimlich calls “central moments of reality experience” (Heimlich, 2015: 18). In the process of gaming, realities are anticipated, but they are not real. Gaming thus imparts capabilities to create utopias (Becker, 1992) as people are animated to go beyond the visible world by using metaphorical expressions of their thoughts.

While McGonigal (2011) pleads to reconsider the negative connotations widely associated with games as being “timewasters” (Morris et al., 2013: 2) this article argues that game-based approaches can be a proper supplement for qualitative research, especially with regard to vulnerable groups. They seem to be appropriate to overcome potential barriers of recruitment as well as subtle or even apparent hierarchies in the research context.

This article presents the game-based approach LEGO® Serious Play® and shows opportunities and challenges of LEGO® Serious Play® from the experiences of workshops with young migrants in vulnerable conditions.

**Overcoming barriers of participation by game-based approaches of co-research**

In recent years there has been a growing interest in game-based approaches, especially in the field of education and life-long learning (Hoblitz, 2015; Westera, 2015). Pivec identifies specific educational fields “where game-based learning concepts and approaches have a high learning value” (Pivec, 2007: 388). These are “interdisciplinary topics where skills such as critical thinking, group communication, debate and decision making are of high importance” (Pivec, 2007: 388). According to Westera, game-based learning models address certain problems in schools and trainings (e.g. media illiteracy), enhance learning motivation and reduce student dropout (Westera, 2015: 1).

Game-based learning capitalizes on theoretical cognition and empirical evidence that connect the following attributes to (more) successful learning: “1) games foster motivation, 2) play is a natural mode of learning, 3) games induce cognitive flow, which is productive for learning, 4) games support learning-by-doing, 5) games allow for performance monitoring, 6) games
offer freedom of movement and the associated problem ownership, 7) games support social learning, 8) games allow for safe experimentation, 9) games accommodate new generations of learners, who have grown up immersed in digital media, and 10) there are many successful games for learning” (Westera, 2015: 1).

Interestingly, most of these attributes can also be related to qualitative research issues. The question of motivating people to participate (actively) in research processes for example becomes apparent especially when certain groups, such as youth or migrants, are addressed. Invitations to playful meetings can lower existing barriers of willingness to join because such activities are usually perceived to be funny and joyful. Furthermore, games have the potential “to establish dialogue and break social and cultural boundaries” (Pivec, 2007: 389).

Similarly, the effects on individual learning and the ability for (self-) reflection can be transferred to co-research. The combination of collective action and reflection provides “opportunities to learn and reflect upon own experiences” (James & Buffel, 2022: 1), contributes to personal development and an improvement of self-esteem (Pivec, 2007) and thus has potential to empower people, especially in vulnerable conditions. From this perspective, co-research can be embedded into processes of life-long learning (von Unger, 2014).

Although there are plenty examples of integrating arts-based elements (e.g. Kindon et al., 2007; Gauntlett, 2007) to qualitative research, there is only scarce evidence about the integration of gaming elements into research. Gauntlett pleads in his book “Creative Explorations” for leaving the worn-out paths of “dry and technical” research towards approaches “which allow participants to spend time applying their playful or creative attention to the act of making something symbolic or metaphorical, and the reflecting on it” (Gauntlett, 2007: 3). He argues that conventional qualitative research is not able to sufficiently uncover “the unconscious” which inevitably leads to limited explanatory power of achieved data. However, experiences with arts-based or visual methods in research processes show that the application of creative approaches feasibly opens possibilities to access the unconscious. Also games can stimulate an “ability to think and create meaning” (Jabbar & Felicia, 2015: 740) which can be expressed for example by haptic models.

The method Lego® Serious Play® picks up the notion that games can be purposeful to stimulate thinking beyond consciousness by applying metaphors in narrations. “Metaphors enable people to capture complex ideas, often with a number of facets, in simple visual (or visualisable) form” (Gauntlett, 2007: 151).

Bricks as bridges: The example LEGO® Serious Play®

LEGO® Serious Play® is a strategic tool to develop joint ideas, visions and scenarios and to reflect on them. LEGO® Serious Play® has been mainly used in consulting purposes (e.g. Grienitz & Schmidt, 2012), but it has been also used in research on tourism (e.g. Wengel, 2020; Wengel et al., 2019), intercultural studies (e.g. Dunn et al., 2017), higher education (e.g. McCusker, 2020), social care (e.g. Cavaliero, 2017), technology use in refugee camps (e.g. Fisher & Yafi, 2018) and teaching (for example: with international nursing students (Ajibade & Hayes, 2020; Hayes, 2018)).

Lego® bricks have been invented already in 1934 by Ole Kirk Christiansen before they became in the late 1950s in the bricks made of Acrylonitrile-Butadiene Styrene that most of us know
nowadays (Muñoz Alvis, 2020). Based on Gauntlett, creative methods are using flows to express their identities, needs, experiences and knowledge without using language as the main tool. Especially games offer opportunities to get into a state of cognitive flow, “which is a mental state characterised by extreme involvement, concentration, engrossment, restricted awareness, altered sense of time, insensitiveness to hunger and insensitiveness to fatigue. […] If such states were achieved in schools, the students would not want to leave the school by the end of the day, but continue their work. They would not even hear the school bell ring” (Westera, 2015: 1).

LEGO® Serious Play®, as well as other creative exploration methods, are overcoming language issues (such as mutism or lack of speaking the same language). The flow is the important state for the participants to come in “to elicit authentic opinions, ideas and identities for consideration and reflection in a wider group” (McCusker, 2020: 148).

LEGO® Serious Play® was invented for consultancy processes inside the LEGO® company and then be applied to other businesses and organisations (Gauntlett, 2007). Until today the main use of LEGO® Serious Play® is for developing businesses and organisations, however, more and more being also used for research purposes (e.g. developing curricula). The method especially uses a non-judgemental, free-thinking – and therefore playful – kind of environment” (Gauntlett, 2007: 129) as well as the equality of all participants and their ideas (McCusker, 2020). LEGO® Serious Play® uses metaphors to enable participants to express in a playful way their identity or other abstract concepts. Those metaphors should mean something – especially to people who have the same cultural background (Gauntlett, 2007). As we are using LEGO® Serious Play® in the context of migration, cultural backgrounds might be diverse. Solutions can be either to work in a workshop only with participants coming from the same cultural background or to give more time and room for explaining and/or adopting the metaphor to a universal metaphor. Cavaliero (2017) argues that LEGO® bricks are inclusive for a diversity of people, as the building process is physical and haptic.

According to LEGO® Serious Play® (2002: 4), four purposes of adult serious plays are part of LEGO® Serious Play® “1) social bonding, 2) emotional expression, 3) cognitive development, and 4) constructive competition.” Gauntlett (2007) sees three steps in the playful using of Lego: “prefiguration”, “configuration” and “refiguration” showing the steps from the bricks to their connection/building to the reflection of what was built. To achieve these objectives, LEGO® Serious Play® workshops are always designed modularly. Every module lays ground for the following one and every module is always following the basic principles of LEGO® Serious Play® (“imagine”, “create”, “share” and “reflect”) (e.g. LSP, 2002). Full LEGO® Serious Play® strategy workshops, for instance, consist of the following different phases:

Warm up: this step introduces into the method and the working material; three exercises lead to a common understanding of how Lego bricks can be put together, what metaphoric use means and which role storytelling has in the whole LEGO® Serious Play® process).

Individual and joint identity building process: this step includes the creation of individual models and their junction into joint models.

Landscapes of the joint model focus on the ecosystems related to the model to simulate possible system performance. Landscapes integrate the various external actors,
stakeholders, organisations etc. into the model to reveal their positioning in the system and possible interdependencies.

Scenarios are introduced to anticipate different paths of development and to create proactive solutions in the phase of

Emergencies.

Simple Guiding Principles recap the final results of the LEGO® Serious Play® strategy workshop as a take-home-message.

The process does not need to go up-to the end every time it is used in a workshop, but no step can be skipped.

Developing workshops with LEGO® Serious Play® to empower young migrants in vulnerable conditions

Based on the European H2020 project MIMY (funded from the European Union’s Horizon 2020 research and innovation programme under Grant Agreement No. 870700) in which we wanted to empower young migrants in vulnerable conditions, we developed a LEGO® Serious Play® workshop that we first piloted with a group of 8 international students at the University of the Greater Region- Master in Border Studies at the University of Luxembourg. The students were asked to build in different steps a joint vision of how an integrated society in Luxembourg could look like. The students had given consent that pictures were allowed to be taken of their LEGO® Serious Play® models, and we were allowed to register their “storytelling” about their individual models as well as of their joint models. The workshop took four hours and showed that using LEGO® bricks was unfamiliar to all of them. Therefore, the warm-up phase needs especially attention when dealing with participants from different cultural backgrounds.

Photo 1. “Getting lost on the main station in Luxembourg” (Warm-up model on the first experience in Luxembourg)  

Photo 2. “My vision of integration” (individual identity model)
The workshop was then revised to be more according to the needs of an international and intercultural context as it has then been used (or slightly adopted) in the case studies of Holzminden, Germany and the North of Luxembourg in the context of the MIMY project. These workshops were carried out with migrants in vulnerable conditions in the Ettelbrück, Luxembourg and in Holzminden, Germany.

**Experiences from Luxembourg**

In Luxembourg, four participants were exercising the LEGO® Serious Play®, three men and a woman, two from Iran, two from Afghanistan. All in their 20s. The languages used were English and French between all fours, and then also Farsi between the two Iranians.

The participants were unfamiliar with LEGO®. Therefore, it took some time at the beginning to warm up and get used to the material. After some time, they figured out the potential of the bricks. Also, it was an outcome that using a snail - that none of them knew as an animal – in the warm-up phase to discuss what a metaphor is, it was seen as being complicated. So, other animals were discussed additionally. However, not being used to it, being an extremely hot day, and coming directly after a long day of school, motivation was needed in between. Even though there were several challenges, the participants got into the LEGO® Serious Play® and build first individually and then also a joint model of their vision of integration. It also showed that “thinking with hands” brought a lot of ideas which the participants would not have been able to express with words only. This empowered them also for the joint vision to express their thoughts. Even though here, different language and different educational skills empowered especially one participant more than the others.

**Experiences from Germany**

Two male and four female migrants in their early 20s – predominantly from Iraq and Syria – were welcomed at the Holzminden workshop. As the workshop was embedded into a language course, all of them were able to communicate in German. None of them was experienced with Lego® bricks, so the warm-up phase was of special relevance for the course of the workshop. Two participants needed more than the warm-up phase to become familiar with the process of building within only a short timeframe. They needed additional time and
continuous motivation to finish their models within the whole skills-building phase. One participant could not get into the process at all. He mentioned to be overstrained to express his thoughts in Lego® models. However, he expressed deep interest in the method. Although being offered the opportunity to leave the workshop, he observed the other participants and their interactions until he then surprisingly started to build a model on his own in the individual identity step.

“Mobility is the key” was his principle message as migrants’ contribution to become part of an integrated society in 2025. Interestingly, this first model was the entrance for the particular participant to the LEGO® Serious Play® process. By being closely tied to the process of building and subsequently starting the storytelling along the model (“Show what you mean”), he felt animated and at the same time empowered to share his ideas and become an active part of the reflection process.

Table 1. Structure of the LEGO® Serious Play® workshops in Luxembourg and Germany

Conclusion: Potentials and limitations of LEGO® Serious Play®

Undoubtedly, LEGO® Serious Play® offers various opportunities in the field of participatory research. The playful and agile character of this unique method addresses different target groups, which may be difficult to access with conventional methods. Expressing thoughts by metaphorically converting them into LEGO® models unleashes mindsets and empowers people to share their individual stories, experiences and ideas. This particular quality makes LEGO® Serious Play® so useful not only for business purposes, but for social participation and research as well. The example of the reluctant participant in Holzminden shows that some people at first have to overcome some mental barriers before getting engaged into the LEGO® Serious Play® process. They need special facilitation, but the chance of triggering their interest and getting them engaged is real. Compared to other participation methods, LEGO® Serious Play® does not require specific writing skills (e.g. to write down ideas on flipcharts etc.) as the processes of storytelling and reflection are realized verbally. However,
there has to be a common language for communication which can be challenging when working with migrant participants from different countries of origin.

Furthermore, LEGO® Serious Play® is not appropriate for quantitative, standardized research. It is rather based on the idea to open minds in order to attain a wide range of thoughts and ideas to explore and develop. A challenge within this context has to be seen in the accurate documentation of the expressed statements. As “short-track option” within workshops, LEGO® Serious Play® models are described briefly on sticky notes. The even more important storytelling, however, has to be documented by video recording. Therefore, LEGO® Serious Play® is one of the “under-used” tools where Migration and Integration Research can still benefit from incorporation, widening participatory approaches and which opens new possibilities for co-productive and empowering research in the future.

References


Heard, E. (2022). “Ethical challenges in participatory action research: Experiences and insights from an arts-based study in the pacific”. Qualitative Research, 0 (0).


Lane, L. (2013). The Meaning of Play for Adults from a Reversal Theory Perspective. Graduate Dissertation, University of Arkansas, Fayetteville, AR.


