

# A safe space of creativity: designing with vulnerable communities

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## Abstract

This paper presents recent findings of a practice-based research conducted with underprivileged girl groups in Hungary. The research aims at finding evidence for positive change of attitude in participants, applying an intersectional approach in social design.

It is more important than ever to promote self-sustenance in disadvantaged communities as a pathway to conscious goal-setting and practicing agency over resources (Braidotti et al., 1994), and underprivileged girls have not been studied sufficiently from a social design perspective. Findings in recent research in maker practices (Clapp & Jimenez, 2016; Eckhardt et al., 2021) and the case study below suggest that certain design-based practices can help underprivileged girls gain self-confidence, problem-solving skills, and a sense of agency.

In order to understand how design can contribute to empowering underprivileged girls, the author contextualizes the barriers of the targeted community in the framework of sociology (Siposné, 2020) and intersectional theory (Crenshaw, 1989) along with a criticism of non-inclusive maker practices (Millard et al., 2018), and identifies a suitable methodological approach. When building up an empowering and inclusive methodology specifically designed for the target group, it is important that the relevant barriers and resources are considered. The methodology is based on a participatory creative process that utilizes co-creation tools through a peer-to-peer mentoring system. The results are measured through a hybrid of quantitative and qualitative methods. A case study based on a series of workshops conducted in Hungary in 2022 is presented and discussed, focusing on key factors for an age- and gender-appropriate design approach.

## Author keywords

social design; gender equality; maker movement; underprivileged; intersectional theory

## Introduction

It is more important than ever to address the increasingly pressing issue of intersecting inequalities underprivileged female communities face. The gender gap has still not been closed despite earlier incentives (UN Millennium Development Goals, Sustainable Development Goals).

There are several ways to define the meaning of disadvantage and understand the circumstances such communities face. Going beyond income in defining poverty, Green (2008) argues for a multidimensional understanding that takes into account the sense of "powerlessness, frustration, exhaustion,

and exclusion from decision-making" experienced by people living in poverty (Green, 2008, p. 7). From an intersectional standpoint, gender, class, ethnicity, sexuality and age are identified as intertwined aspects of individuals' identity that are linked to different forms of discrimination, and which can prevent individuals from accessing resources and services, including education – and making decisions about their lives, in the context of personal, economic or ecological threshold. Gaining tools for advocacy "which builds on claimed synergies between feminist goals and social development priorities has made greater inroads into the mainstream development agenda than advocacy which argues for these goals on intrinsic grounds." (Kabeer, 1999, p. 435).

Intersectional feminism is derived from intersectional theory, and focuses on those experiencing simultaneous, concurrent forms of oppression in order to understand the depths of the inequalities and the relationships among them in any given context (Crenshaw, 1989). Intersectionality identifies multiple factors of advantage and disadvantage. Examples of these factors include gender, race, ethnicity, class, sexuality, religion, disability and physical appearance. Since the 2000s, different ethnicities have adapted this originally black-centered argument on their feminism (Durst, 2001; Fernández Kelly, 1995), but in the Central European context, local ethnic identities (e.g. Roma) remain understudied from an intersectional feminist perspective. If we include age as a factor in this intersection of identities, we can state that girls are not only "marginalized within the category of children as females", but also within the category of women as minors (Taefi, 2009, p. 347), and possibly members of ethnic minorities.

When looking at the current socio-economic circumstances in Hungary, Siposné states that according to data, housing inequalities, ethnic origin and having a large family are usually closely related, creating overlapping disadvantages. Poverty and social exclusion further threaten the following groups: children under 18, single-parent households, low-educated, unemployed or Roma (in which case the aforementioned risk is three times the average) (KSH, 2016). Furthermore, the Roma population, which makes about 6-7% of the total Hungarian population, is considered the most exposed to poverty, with considerably low levels of education and employment which lead to deep poverty especially in ethnic minority groups such as Roma communities (Siposné, 2020, p. 43). Schultz stresses, in the context of the struggles of human rights advocacy and feminism, that Roma women are the



region's most vulnerable ones, facing constant, multiple discriminations, based on race, class and gender (Schultz, 2012, p. 41 and p. 37). These simultaneous discriminations can be further understood turning to intersectional theory.

In conclusion, adolescent youth should be studied by considering the cultural, institutional, and socioeconomic processes. It is crucial to overcome the misconception of seeing educational difficulties of low-income or minority students as resulting from 'cultural mismatch' and recognize how institutions might lack the knowledge to guide them (Havas & Liskó, 2005, p. 94-95).

## Theoretical Framework

The research described here investigates what methods or approaches are adequate to address the needs of disadvantaged girl groups through design tools. In order to create an effective, empowering methodology specifically designed for the target group, it is crucial to take a closer look at their barriers, difficulties and resources, which necessitates an interdisciplinary approach that includes sociological and psychological methods complimentary to gender-appropriate social design tools. In vulnerable communities, the lack of perspective can have a debilitating effect on youth groups, especially girls, as early marriage and a domestic career is their only option in sight. This is particularly true in more traditional or ethnic communities, since the family serves as both the sole economic and social support system for individuals (Czibere, 2012), so any effective method should incorporate the aspect of community and peer support.

This set of circumstances often result in not only early child-bearing and leaving the education system prematurely, but several other psychological factors that further hold back individuals from breaking out of their barriers. The lack of support in the education system (especially in rural segregated schools) further deepens the abandonment young girls can experience, and these difficulties can result in a lack of motivation, goal-setting, confidence and agency. Therefore, clearly defined structure, a realistic future planning and safe boundary-setting are necessary in order to address the target group in a meaningful way.

The adolescent phase in the psychosocial theory of development is concerned with identity formation versus role diffusion (Erikson, 1968), as well as agency-manifestation (Zimmerman & Cleary, 2006). According to surveys (Collins et al., 2011) traumatic experiences within the family appear more frequently than in other, more secure social settings (family loss, separation, unemployment, housing crises, violence, etc.) In many cases, these interconnected phenomena contribute to the formation of a role conflict between the world of family (which considers a girl an adult from early adolescence) and the world of school, which still treats them as children in need of discipline.

Since the target group is particularly sensitive, an appropriate ethical approach is required. In her essay 'Nomadic Eth-

ics', Braidotti states that "[a]n ethically empowering relation to others aims at increasing one's potential or empowering force and creates joyful energy in the process", also implying that the approach towards the group must be dynamic, transformative, decentralized, and affirmative (Braidotti, 2013, p343). These guiding principles lie at the core of the method used here, and they take shape in the iterative process that the methodology was created and tested based on participants' inputs as well as the built-in feedback throughout the program<sup>1</sup>.

Studies indicate that adolescents of low socio-economic status report lower self-esteem in comparison with their peers of higher socio-economic status (Veselska et al., 2009). Addressing and improving low self-esteem is a key factor in working with at-risk adolescent girls as low self-esteem is widely documented as a correlative factor in depression and anxiety (Veselska et al., 2009), lower health-related quality of life (Mikkelsen et al., 2020), criminal behavior, drug and alcohol abuse, and teen pregnancy (Hartz & Thick, 2005). These factors impact girls more significantly than boys, especially through adolescence, as gender-role expectations impose more limits and stronger demands on females (Hartz & Thick, 2005, p. 71). Increasing self-awareness helps girls identify personal preferences, values and a life purpose and facilitates creating a realistic appreciation and assessment of personal strengths and weaknesses, which further encourages them in setting more realistic goals and enables them to create impact in their lives and surroundings. Therefore, a set of template-based, customizable objects were discussed, personalized and built together with the participants, in order to demonstrate their creativity within a safe structure of self-expression.

## Method

The methods are partly based on features of the maker movement, but they also address the shortcomings of mainstream maker practices which are not inclusive enough towards various social groups and identities (Toupin, 2014; Chachra, 2015). On top of that, a majority of humanitarian creative tools are based on collaborative work processes (Design Kit: The Human-Centered Design Toolkit by IDEO, 2015; DIY Toolkit by NESTA, 2014), but most of them don't address the question of power dynamics and the problematic neoliberal concept of self-actualization through various activities. In the FRUSKA model, each assignment is rooted in a different psychological exercise, built up from basic towards more complex ones. The evidence for this parallelism is supported by numerous studies conducted on STEM- and STEAM-based education and maker initiatives, where participants self-assessed as more confident and empowered as a result of participation (Clapp & Jimenez, 2016). Unfortunately, disadvantaged youth, especially girls, are not the main target audience of such programs. The maker movement originally grew out of an initiative by various communities with the aim of increasing the availability of digital manufacturing and communication technologies, such as 3D printers, laser cutters and online community platforms. The maker culture adopts a set of values defined by an open source rationale

<sup>1</sup> Statement on compliance with ethical standards

All procedures performed in studies involving participants were in accordance with the ethical standards of the institutional research committee of Moholy-Nagy University of Art and Design. Informed consent was obtained from all individual participants and their legal caretakers involved in the study.

based on the sharing of knowledge and the free circulation of designs, making it theoretically open to anyone interested in open source methods (Eckhardt et al., 2021).

The core capacities identified for the current design methodology are: (a) agency; (b) skillbuilding; and (c) decision-making. The methods used throughout are rooted in social design, participatory action research (Aziz, 2011), feminist group advocacy (bell hooks, 1994) and art therapy (Hartz & Thick, 2005). The overall theoretical framework is based on critical race theory and intersectional feminist theory, which stresses the construction of identity (Crenshaw, 1989).

## Results

During a series of four workshops, groups of participants were guided through several themes and assignments, namely: (a) mapping their circumstances; (b) self-reflection, self-image and society's expectations; (c) identifying challenges in their surroundings, designing template-objects; (d) prototyping and executing planned solutions.

The program affords various levels of engagement from the participants and offers them multiple ways to solve a task in order to encourage long-term personal commitment. A well-framed, predictable structure helps with experiencing control throughout the process, which further strengthens the participant's sense of security and increases their agency. Agency plays a key role both in strengthening a developing personality and in goal setting. Psychology defines agents (which are, in the current case, underprivileged girls) as goal-directed entities that can monitor their environment



**Figure 1.** Creating templates for customized objects during a FRUSKA workshop.  
Photo: Noémi Szécsi

to perform efficient actions and achieve an intended goal, therefore, agency implies an ability on the side of the agent to perceive and to change one's environment. Considerable evidence points towards the direct connection between participating in girls-centered programs and improvements measured in future planning, including reporting concrete goals for the future and effectively articulating plans to achieve those goals. Girls also report more empowerment, a stronger sense of agency, and a greater ability to participate in critical life decisions, as well as increased socioemotional support from peers and adults (Girls' Education Program, Edmonds et al. 2021). Peer experience and seeing positive role models enhances the girls' motivation and prospects for engaging with creative tools, but it also helps them build up meaningful connections and networks outside their limited circles. Besides role models, these new communities foster sharing similar life experiences and tearing down taboos.

Throughout the process, the participants were not only asked to reflect on the proposed themes and their own experiences verbally, but they were also asked to give regular visual and textual feedback. In addition, they completed a pre- and post-workshop questionnaire, which was designed based on a survey by Hartz and Thick (2005). In order to consider basic psychological needs of adolescents, the basics of Self-Development Theory was applied, which posits autonomy, relatedness and competence as essential and universal ingredients for healthy development (Ryan & Deci, 2000; 2017).

## Conclusion

The methodology described above aims at addressing the viewpoint of underprivileged girls through the tools of design. The target group's specificities are not yet thoroughly studied in current social design in a way that provides space for target groups to take control in the process, so an intersectional approach is taken by the author in order to create a safe, adaptive and decentralized space for participants. The exclusivity of traditional maker settings is challenged through creating girl-inhabited makerspaces, focusing on agency, skillbuilding and decision making.

As a conclusion, several factors necessary for conducting meaningful social design work with disadvantaged girls are highlighted. The factors, as stated above, include jointly established boundaries, clear structure, a safe amount of personal freedom in expression, discussions respective of the participants' life experiences, and clear understanding of the role conflict that participants endure at the intersection of multiple segments of identity. In order to confirm this assumption, a longitudinal study is currently underway.

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