Can ICT Capacity Building Activities have Psychosocial Benefits in Humanitarian Settings?

Abstract
UPDATED—7 April 2017. This paper wishes to propose a workshop design that utilizes ICT-tools to empower individuals who have experienced traumatic events. The paper furthermore wishes to highlight key concerns and acknowledge important considerations when designing an intervention in a refugee camp. The workshop evaluates the possibility of utilizing an app-inventor platform to encourage a social dialogue around the issue of Gender Based Violence within a refugee camp to empower individuals who have experienced trauma.

Author Keywords
Refugees; Trauma; Empowerment; ICT; Makerspaces; Capacity Building; Humanitarian Innovation.

ACM Classification Keywords
K.4.2 Social Issues; H.5.2 User Interfaces

Introduction
The humanitarian sector has been experiencing a shift in perspective when implementing new development programs to focus on the creative problem-solving capacities of the intended recipients themselves [1]. This shift is evident when looking at how a number of major organizations such as UNICEF and UNHCR are
gradually including innovation by affected communities within their innovation work [1]. This shift derives from an increased interest in using innovation to foster ideas and solutions from affected communities [2]. In addition, organizations focusing particularly on innovation initiatives such as the Humanitarian Innovation Fund (HIF) are focusing on how to disburse funding directly to affected communities, illustrating how resources are increasingly being focused on actualizing the creative capacities of the affected populations themselves [2].

Documented research on the effects of a bottom-up approach that leverages the creative capacities of affected populations still remain relatively scarce. This is mainly due to two factors: 1. Measuring any form of social change is 'neither straightforward nor clearly defined' [2]. Creative capacity building initiatives are in addition highly flexible and adaptive to the needs and creative capacities of affected populations; this means that the results of these activities emerge as the program develops. Hence it is difficult to have preset indicators for particular outcomes which can make measuring impact even more challenging. 2. Bottom up creative capacity building initiatives are still a relatively new phenomenon within development work, and are still in an emerging phase. Documentation on long term effects and impact for certain types of communities and particular workshop techniques are therefore yet to be formalized.

However creative capacity building initiatives are proven to have positive effects on traumatic social experiences [8], a psycho-social burden refugee communities are often exposed to be nature of being displaced. Gender Based Violence (GBV) in particular has been documented to cause ongoing trauma for refugees both during the initial displacement but also after being resettled in refugee camps [3]. Traumatic experiences are proven to have severe consequences for individuals and communities as a whole ranging from chronic health challenges to aggregate losses in economic productivity [3].

Against this background, this paper explores whether technology based capacity building workshops can be leveraged to unleash the creative capacities of affected populations, especially in dealing with the negative consequences of past traumatic experiences from GBV. We intend to offer this workshop in Kyangwali Refugee Camp in Uganda, with the aim to encourage empowerment through reflections on gender based violence through interactive ‘maker’ activities. More precisely, the workshop will utilize readily available mobile-app platforms to allow participants to create and make digital solutions that encourages a social dialogue around GBV.

**Related Works**

Gender based violence has been documented to be an ongoing cause of trauma in refugee camps. According to the UNHCR men and women can be targets of gender based violence, during conflict, during flight and in the country of asylum [3]. In the initial conflict women in particular are vulnerable to abuse by persons in power including rape, forced pregnancies and abduction by armed members of parties in conflict [3]. During flight, gender based violence can be caused by sexual attacks from bandits, border guards, pirates and human traffickers to mention a few [3]. In the country of asylum, the vulnerability does not decrease significantly, although the nature of the offenders tend to change. A study from northern Uganda suggests that the primary causes of gender based violence in refugee camps are sexual abuse of girls under 18, intimate partner violence and early or forced marriage [4]. “Indeed, a small study found the prevalence of intimate partner violence to be as high as 80% in some conflict affected areas of Uganda.” [4]

The traumatic effects on health from GBV include “injuries, gynecological disorders, unwanted pregnancy,
Adverse pregnancy outcomes, sexually transmitted infections, including HIV, mental distress and death.” [4] In addition GBV can have significant effects on the psychological well being of victims including depression and widespread post traumatic stress disorder (PTSD) [5]. The psycho-social consequences of trauma can be mediated with adequate support mechanisms, however, the availability and utilization of these support mechanisms remain minimal. The Ugandan healthcare system was disrupted by the conflict that has been ongoing for over 30 years. In the Gulu district in northern Uganda, over 60% of government health centers lack adequate staff and supplies [4]. Less than 30% of the population in northern Uganda live within a 5km radius of a functional health unit [4]. This creates barriers to accessing support mechanisms for trauma for particularly exposed groups that are victims of GBV. Elderly or disabled face severe mobility challenges as there are poor transport possibilities that allow victimized groups to access necessary trauma-support mechanisms [6]. The lack of social dialogues concerning GBV also prevents victims from accessing support mechanisms due to perceived social stigma [4]. Victims of GBV can in some cases be perceived as the causes of the problem. Domestic abuse cases that are reported to community elders or authorities are often 'played down' and addressed by telling the victim to refrain from doing activities that caused the abuse in the first place (even though these causal events can be a wife being abused for losing the supper pan on the ground) [7]. Failure to address long-standing patterns of abuse by the proper authorities may result in an unwillingness of victims to report incidents when they are abused. In addition Ward and Vann (2002) suggest that there exists overwhelming community and family stigma around GBV which can strongly discourage victims from reporting abuse due the effects it would have on social and family ties [7]. This point is emphasized in Henttonen et al’s findings that the IASC guidelines for confidentiality of health records is inadequately followed causing victims to experience potential retaliation from reporting abusive incidents.

Henttonen et al also suggest that tailoring support mechanisms to different social groups is key to increasing the utilization of such services [4]. Health practitioners in Ugandan refugee camps have acknowledged that youth are less willing to engage in support mechanisms for GBV when they must mix with adults [4]. Elderly have also been recorded to be less willing to engage with support mechanisms if they are organized by significantly younger people as they fail to see what insights or support younger people can provide that they do not already know [6]. Providing a more private and tailored environment where victims feel more comfortable can be key to increasing the utilization of support mechanisms for GBV.

The aggregate consequences of GBV with inadequate support mechanisms is a disempowered and disenfranchised population where victims fail to gain independence from their abusers and become deprived of the ability to actively impact their own future.

Empowerment is increasingly seen as a key feature of human development. The recent traction of utilizing the creative capacities of affected populations demonstrates the new and innovative bottom-up approaches to encouraging empowerment. MakerSpaces that utilize creative capacity building workshops are a new and innovative approach to encouraging empowerment through the process of 'making' or 'building'. This creative capacity building process has also been found to have positive effects on people dealing with traumatic social experiences [8]. Desmond et al suggest that “reapproaching terrifying experiences...through metaphor[s] (a form of storytelling that allows for gentleness, clarity, and appropriate emotional distance) is a means for facilitating a safe and therapeutic environment...as they begin to explore the trauma under circumstances that lend...[a sense of security and control.]” [8] Through leveraging the creative capacities of affected populations, victims can start addressing traumatic experiences in secure and controlled environments.
Yerousis et al report from their experience working with ‘computer-enabled project spaces’ in Al Amari Refugee Camp in Palestine, that cooperative activities facilitated by ICTs empower residents to become more resourceful and knowledgable agents of positive and meaningful change in their communities [9]. Through interactive activities participants were encouraged to reflect on their identity, heritage, the environment and life experience to start collectively working through traumatic social experiences [9]. Hence participants were able to address traumatic experiences through creative capacity building activities that encouraged empowerment and the participant’s ability to impact their own future through positive and meaningful change. Mikhak et al suggest that “the most sustainable way to bring the deepest results of the digital revolution to developing communities is to enable them to participate in creating their own technological tools for finding solutions to their own problems.” [10] Creative capacity building initiatives can yield transformational results when participants become active creators and designers of technological tools rather than passive recipients.

To our knowledge there still exists a research gap in the long term effects and outcomes of creative capacity building exercises on empowerment at a grass-roots level. Through this exercise, we intend to add to the scarce literature, by focusing specifically on how creative capacity building workshops can be used to reduce the traumatic consequences of GBV through empowerment. More precisely, our work proposes a workshop methodology that can help empower communities by teaching a new skill and starting a conversation between both genders around the challenges associated with GBV.

**Methodology**

The methodology we used while designing our approach for the workshop, was based on gathering qualitative data through informal interactions with participants who had lived in the Kyangwali refugee camp, a semi-structured interview with a returned peace corps volunteer who was based in Kyangwali and now works in humanitarian relief, and an extensive literature review.

This study conducted a needs assessment of Kyangwali Refugee Camp through a semi structured interview to map ICT penetration. The questionnaire design was influenced by a literature review of ICT-based empowerment workshops in refugee camps. This interview was designed to gain an understanding of what technology is already present in the camps (mobile phones, computer labs, cellular reception, cellular data availability and cost, electricity, internet/bandwidth). This assessment helped lay the foundation for what ICT tools the workshop could utilize or what measures are needed be taken to ensure the selected ICT tools can functionally operate. Based on this assessment, we evaluated the strengths and weaknesses of various commercially available app builder platforms that can be a good match for the technological environment in Kyangwali.

Finally, through informal conversations with four refugees who had previously lived in Kyangwali, an assessment of the socioeconomic environment was conducted to gain a better understanding of the demographic disposition and social structures and hierarchies in Kyangwali Refugee Camp. This includes geographic and demographic analyses as well as an analyses of the social dynamics within the camp including typical responsibilities for males, females and children such as collecting water, cooking and earning money. In addition, this assessment focused on what social hierarchies exist which are essential to incorporate into a social dialogue associated with GBV. This assessment helped assess where and when the
workshop can and cannot be held, and what stakeholders are important to partner with.

**Results**

Based on a semi-structured interview and informal conversations with individuals with detailed knowledge within the field of ICT penetration and social hierarchical structures in Kyangwali Refugee Camp, this paper emphasizes important considerations to be accounted for while designing an ICT-based workshop that focuses on GBV.

We found that stable access to electricity is a problem, and most households do not have access to electricity from the grid. However, mobile penetration in Kyangwali remains high, and the refugees emphasized that a smart-phone has become one of the most sought after technologies in the camp. This suggests that smart-phone penetration will also rise in the near future. Inhabitants are able to charge their phones through a variety of mechanisms including charging stations set up as micro-businesses. Additional local charging grids can also be established through solar or human powered dynamos (bicycles) to ensure inhabitants have access to charging infrastructure necessary to effectively use the digital products they are creating.

The app inventor platform was chosen based on a selection criteria focused on accessibility and usability. User interface had to be intuitive and easy to use, even for people with no previous programming or technological skills. Cost of creating, launching and maintaining the app was essential as monetary resources are scarce in the camp. The platform needed to be compatible with the Android operating system, to ensure the wide variety of smart-phones used in Kyangwali could use the digital products being created. Accessibility was also important in terms of online connectivity, but this proved less of an issue in Kyangwali as inhabitants tended to have data packages. However, to ensure participants feel they are not burdened with additional costs it is recommended that workshop sessions are conducted where wifi can be accessed. Based on this criteria, Appypie ([appypie.com](http://appypie.com)) was selected. An informal user test was conducted with refugees from Kyangwali to make potential revisions to the selection criteria. The user test suggested the platform sparked interest and creativity amongst participants, emphasizing the point that intuitive usability was essential to make the users focus on conceptualizing the application of making digital products, rather than getting bogged down with technical challenges using the platform. The user test also suggested the need for immediate feedback – participants wanted to see how they could download the app to their phone immediately after making it, in order to try it out. This was a potential weakness of Appypie, as the free version made it difficult to download the app immediately after launch. In addition, the free version prevented creators from making revisions to the app after its initial launch. It is important to have participants make complete products to ensure initial sparks in interest do not fade away. However, the cost of the premium version that allows this functionality, poses a challenge.

As the literature review suggested, GBV is a delicate and intimate matter often occurring within the family. Through informal conversations with refugees from Kyangwali, it was emphasized how the Ugandan government representative for Kyangwali Refugee Camp, was closely interconnected to social dynamics within the camp. It is therefore important to partner with them when designing and offering a workshop on a sensitive topic, as they can evaluate what is appropriate for the setting as well as identify government resources that can be integrated into the workshop.

**Future Work**

Based on these initial findings, we are optimistic about the possibility for launching an ICT-enabled workshop
in Kyangwali Refugee Camp. Although certain challenges in terms of infrastructure do exist, new and rapid technological advances can provide alternative solutions to problems such as stable electricity by creating alternative micro grids. The global increase in smart phones is also present in Kyangwali suggesting an increase in gadgets capable of effectively utilizing digital products. However this study wishes to highlight the limitations of proposed workshop designs when researchers have not yet had the opportunity to spend considerable time in the camp itself. This is especially important in regards to workshops aimed at addressing sensitive issues such as GBV where it is difficult to gain valuable insights without engaging with the community over a longer period of time.

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References

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