GAMES FOR LEARNING AND DIALOGUE ON HUMANITARIAN LOGISTICS
Applied improvisation training for disaster readiness and response
Preparing humanitarian workers and communities for the unexpected

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Abstract

Purpose – The purpose of this paper is to introduce applied improvisation (AI) as a tool for training humanitarian aid workers. AI incorporates principles and practices from improvisational theatre into facilitation and training. It is an excellent modality for training aid workers to deal with crisis and disaster scenarios where decision-making and collaboration under pressure are critical.

Design/methodology/approach – This paper provides a theoretical base for understanding skills needed in disaster response and provides a case for innovative training that goes beyond the current standard. AI principles, activities and case examples are provided. Interviews with development experts who have participated in AI training are excerpted to reveal the impact and promise of this methodology.

Findings – Different from typical training and games, which simulate potential crisis scenarios, AI works with participants in developing the skills necessary for success in disaster situations. The benefit is that workers are better prepared for the unexpected and unknown when they encounter it.

Research limitations/implications – The current paper is based on author observation, experience and participant interviews. While AI is consistently transformative and successful, it would benefit from more rigorous and structured research to ground the findings more deeply in larger evidence based processes.

Practical implications – The authors offer specific activities, resources for many others and practical application of this modality for training purposes.

Social implications – Its application has tremendous benefits in training for specific skills, in creating greater cohesion and satisfaction in work units and breaking down culture and language barriers.

Introduction

We live in a volatile, uncertain, complex and ambiguous (VUCA) world. VUCA is a military concept (Stiehm and Townsend, 2002) often applied to myriad other contexts that are growing increasingly unstable. Humanitarian workers frequently operate under VUCA conditions where the typical strategic processes of timing, planning, decision making, executing and reflecting are challenged by pressured and unpredictable circumstances. This is particularly true when dealing with disasters, which demand an ability to respond effectively under the most acute and immediate circumstances. Agile leadership and teamwork are necessary for these difficult conditions, requiring people to have the skills to deal with these elements of the VUCA world (Horney *et al.*, 2010). We need people who are able to take necessary and strategic risks, are good in error recovery instead of failure evasion, can stay calm and focused in the midst of challenges, can process multiple dimensions of a situation at once, can thrive in the unknown, can communicate and collaborate effectively with others and problem solve quickly in the face of uncertainty.

Theoretical knowledge alone cannot prepare aid workers for the unexpected realities of disaster situations. Experiential training that includes innovative modalities and simulation processes, such as games and simulations, are often needed to help prepare aid workers beyond what theory and knowledge can offer. This paper explores the modality of applied improvization as an addition to the toolkit for disaster response training. Applied improvization is an approach using the principles and processes of improvizational theatre for non-performance-based contexts. This paper shares how it can be used to cultivate the skills necessary for preparing aid workers and communities for disaster readiness and response. A description of the modality, its relevance for training in these skill areas and how it has been used will follow. The authors' collective experience in this work provides perspectives based on many years of observation and participation with these processes. The paper excerpts interviews with aid specialists who have participated in applied improvization workshops and share their perspectives on the added value that these experiences have brought to their work. The experts quoted identify relevant applications and point to the need for a more comprehensive assessment of the effectiveness of applied improvization in preparing humanitarian workers for the challenges of responding to disasters.

Critical skills needed for disaster response

> For our program leaders, some of the most important skills necessary for effectiveness in disaster situations include comfort with ambiguity, flexibility and adaptability. Two other important attributes are the ability to 1) make a decision in the heat of the moment and stick with it; and 2) quickly develop a vision and communicate it in simple ways that inspire others (Kristin Hibler, Senior Director of Global Leadership Development, Mercy Corps).

Responding to the needs of communities struck by disasters is a difficult and complex task. Twigg (2004) defines disaster as "damage and disruption that exceeds the affected society's capacity to cope" (p. 12). There are differing types of disasters and emergencies, grouped into six main categories: natural, rapid- onset; technological,

rapid-onset; slow-onset; complex political emergencies; permanent emergencies; and, mass population displacements (Twigg, 2004, p. 17). High-profile rapid-onset disasters highlight the problems of access, isolation of communities, debris, and disease and the seemingly insurmountable problems of providing aid to desperate people. Similarly, ongoing conflict, violence and displacement of many thousands of people create yet more challenges for those responsible for providing aid in slow-onset disasters and other types of emergencies. Collins (2009) describes six stages carried out by relief and development workers: Stages 1-3, preparedness, early warning and mitigation, are generally known as "disaster risk reduction". Stages 4-6 typically engage emergency responders and are described as relief, recovery, and rehabilitation. Humanitarian workers operating in Stages 4-6 need particular qualities and skills to succeed in such challenging circumstances. They need to be trained in skills and capacities that they might not need in everyday situations, but that they can draw from in emergent disasters. In disaster scenarios, we have "many people trying to do quickly what they do not ordinarily do, in an environment with which they are not familiar" (Holloway *et al.*, 1978, p. 60):

> A natural disaster is not business as usual, it's business unusual, and our staff need to be able to respond differently. Taking a business-as-usual stance into an emergency just adds to the chaos. The main problem we face in training our staff is that people are unfamiliar with the conditions in an emergency, and they don't happen often enough for people to develop that knowledge (Steve Goudswaard, Humanitarian and Emergency Affairs, World Vision International).

In a 2010 ELRHA Report on Professionalizing the Humanitarian Sector, Walker and Russ cite the work of Donald Schon (1983) to describe what professionalism means for humanitarian workers "[…] professionals are required to do more than simply apply their specialist knowledge unthinkingly to their practice. The true professional has to 'think like a professional'. The 'reflective practitioner' is somebody capable of *thinking on his or her feet*, essentially developing a new understanding in response to every professional situation. It is this concept of professionalism that seems very compatible with humanitarian work, where in the midst of an emergency the clear-headed humanitarian is expected to respond calmly and intuitively in a situation that may be totally new and unexpected" (Walker and Russ, 2010, p. 7, italics added):

> We have a lot of very competent, technical staff in the region. Some of them were sent to [another country] to help with [a disaster] response. The Response Manager needed to turn many away. It wasn't because they weren't technically competent, but they were lacking in terms of speed, adaptability and flexibility (Murray Millar, Humanitarian Emergency Affairs Director, East Asia Region, World Vision International).

Teams deployed in emergencies need to initiate rapid assessments and implement appropriate interventions within days, sometimes hours, of a disaster event. This need for a rapid response is coupled with conditions of extreme physical and mental stress, and the reality that aid workers must often deal with unfamiliar demographics, cultures, political environments and climates. This further complicates the task of implementing relief activities that are relevant, timely and well targeted (Elsharkawi *et al.*, 2010). Auf der Heide observes that "this requirement, to do things in non-routine ways, often under conditions of extreme urgency, is one of the keys to understanding disaster response problems. Often, to a significant degree, disaster-stricken communities end up *improvising* their responses" (1989, p. 32, italics added).

Of all of the skills necessary for effective relief work, keen decision making skills are seen as one of the most important capacities of humanitarian aid workers,

particularly in times of crisis (King, 2005; Van Wassenhove, 2006; Zhang *et al.*, 2002). Disaster scenarios present particularly challenging circumstances impacting decision making including large amounts of information coming frequently and quickly, confusion generated by multiple and often conflicting sources of information, uncertainty generated by a dynamic and quickly evolving situation, ambiguity produced by unknown forces impacting the scenario and the high stakes and consequence potential of critical decisions in the immediacy of disasters. Decision making under pressure involves constant strategic balancing of focus (broad or narrow), responding to complexity (simplifying or elaborating) and calculating pacing (exploratory or immediately decisive) (Friend and Hickling, 2005). Skills for effective decision making in these contexts include being able to think quickly, manage complexity, take risks effectively and move forward in the face of uncertainty and ambiguity.

While this is particularly true for leaders and managers tasked with leading response teams, this is also true for anyone involved in disaster relief, as rapid-fire decisions are often required of those whose jobs do not typically carry this responsibility. Particularly, working beyond the usual hierarchical structure toward a more collective and visionary approach is critical during a crisis (Waugh and Streib, 2006). In crisis scenarios, everyday roles and the usual methods of consulting with others or procedural formats are replaced by processes that are determined by immediate need rather than role or structure. Roles and boundaries blur as people are thrown into tasks and circumstances that they may not be trained for. For example, especially in the early stages of a disaster, humanitarian workers may find themselves isolated from their colleagues, from communications and from information about the situation to which they are responding. During this time, they need to draw on their own capacity to notice what is happening, assess the situation, make decisions, and act. In times of normalcy, there are decision-making hierarchies, guidelines and protocols from which to draw. In their absence, workers unable to think on their feet and move confidently to action may find themselves frozen by indecision, uncertainty and fear. In the immediacy of the situation, they may be tempted or forced to make decisions, which can prove to be destructive when made in hurried, uninformed fashion without the skill of agility under duress. This shifting of roles and need for rapid response presents additional challenges in humanitarian intervention:

> People who have worked in crises in other areas who have never met are suddenly thrown together to respond. Often what they are not equipped with and need most are good communication skills, good coordination and negotiation skills. If they're experienced, they are good at it not because they've been trained but because they have experience. Any responsible NGO would only send people who have those skills, but depending on the situation and the context, you can have a lot of awesome folks who are not great communicators or coordinators (Lorina McAdam, Senior Program Director, Mercy Corps).

Along with skilled decision-making, collaboration, communication and coordination are also critical skills in disaster scenarios. Organizations often respond to crises with a downward spiral of behaviour, including less communication and a centralizing of power and influence. Increased concern for efficiency often leads to conservation of resources and greater behavioural rigidity (Staw *et al.*, 1981) often impeding successful interventions and responses. Not only do individuals and groups within organizations need to work effectively together, but a great deal of inter-organizational and cross context coordination is key in managing disaster scenarios (Balcik *et al.*, 2010; Kovács and Spens, 2007; Simo and Bies, 2007). There is interactivity among

multiple forces and players during disaster scenarios that is not necessarily the case in more stable situations (Van Wassenhove, 2006). Coordination among multiple players is already challenging; the logistics and dynamics of this become far more difficult during crisis scenarios. Heightened competency in areas such as listening, awareness, collective thinking, creative solution building, effective articulation and rapport building can literally make a difference between life and death in emergent situations.

Cultivating skills useful in conflict resolution and peacemaking is also vital for aid workers dealing with conflict issues that are often intertwined with disaster scenarios (Galama and Tongeren, 2002; Tint, forthcoming; Tung *et al.*, 2000; UNDP, 2011). Lederach (2005) identifies four key capacities for peacemakers, which are also relevant for aid workers: bridging relationships – reaching out to those you fear; carrying paradoxical curiosity – touching the heart of complexity and uncertainty; utilizing creativity – imagining beyond what is seen; and taking risks – risking vulnerability one step at a time. This ability to engage successfully in both risk and vulnerability is seen as critical to managing crises and decision-making in emergent situations (Bankoff *et al.*, 2004).

The case for improvization training for disaster response

> Within a week of the Haiyan Cyclone disaster I was deployed (from Indonesia) to the Philippines. I was Zonal Manager, reporting to one boss, then two days later another boss. I was working on one island, then shifted to another. Each time, I would tell myself "let it go" and focus on what I had to do. Let it go, notice more about what is really needed, and to use everything – this is what I learnt from the Applied Improvisation training in Cambodia. This training helped me a lot (Fadli Usman, Support Manager, World Vision Philippines Haiyan Response).

Pedagogy, as described by Watkins and Mortimore (1999, p. 3) is "any conscious activity by one person designed to enhance the learning of another." They assert that "Life continues to change at an increasingly fast pace. The global knowledge base is growing exponentially and the social fabric of our societies is being altered by the massive expansion of communications. Pedagogy must change to keep up with these developments. It must seek to engage those who would otherwise be excluded. It must also support all learners to generate knowledge and to learn what to do when faced with uncertainty" (p. 16):

> It's possible to have years of field experience and have received no training in soft skills. Training can often focus on processes and policies, perhaps technical skills, but not necessarily the soft skills. At Mercy Corps I see more emphasis on leadership training, coaching, communication training. We are building soft skills into evaluation and accountability. You cannot be considered a good team member in relief efforts without good communication and leadership skills (Lorina McAdam, Senior Program Director, Mercy Corps).

Training aid workers in critical skills for disaster readiness is a vital aspect of humanitarian intervention. There is often a strong emphasis in humanitarian circles for technical and evidence-based learning. This often translates as the cost-effective, classroom-based training approach. There are many eyes watching and commenting on how aid money is spent; managers, funders, beneficiaries, the media and the general public want to know where and how the money is used – both to respond to the greater demands of donors and provide stricter professional accountability (Elsharkawi *et al.*, 2010). Any manager in a humanitarian organization that departs from the traditional approach to training and development can expect criticism and questioning from within and outside of the organization. Humanitarian organizations are therefore, often conservative in their approach to staff training, relying heavily on what is known, even when it is proven to be ineffective and does not necessarily qualify people for

complex humanitarian operations (Byrne *et al.*, 2008). While technical training is certainly a necessary dimension of disaster preparedness, it is not fully sufficient for cultivating the vital skills for readiness and response. Experiential preparation is a key element of comprehensive training for disaster response.

Simulations and role-plays have been valuable tools in creating experiences relevant for preparing aid workers for crisis situations (Borodzicz and Van Haperen, 2002; Chen and Borodzicz, 2006; Inbar, 1966; McGonigal, 2011; Mendler de Suarez *et al.*, 2012; Suarez *et al.*, 2014). This type of training puts people through very accurate simulations of actual threats so they can be aware of their own responses, and develop responses based on how they are likely to react in a real scenario. This may be the gold standard of experiential training – getting as close to the actual situation as possible:

> A once-a-year or so simulation is not going to give you the practice you need [to respond to a disaster], even though massive learning takes place and behavior does change. We have an imperative to find cost-effective ways of helping our staff to practice (Murray Millar, Humanitarian Emergency Affairs Director, East Asia Region, World Vision International).

While simulations, technical training and content-based training are clearly important for helping aid workers anticipate certain scenarios they might encounter, these approaches may still focus on technical content rather than the development of skills necessary for agile leadership identified as critical for disaster response. Other forms of innovation would be useful in maximizing skill building for preparedness. The United Nations (2005) Hyogo Framework for Action: Building the Resilience of Nations and Communities to Disasters, identifies one of its five priorities for action as, "Use knowledge, innovation and education to build a culture of safety and resilience at all levels" (p. 18). Similarly, the Inter-Agency Standing Committee (IASC) suggests that aid agencies must find new ways to build the capacity of emergency responders to increase the effectiveness in which disaster-affected populations are supported (IASC, 2010). Bankoff *et al.* (2004) suggest that "Coping strategies are also the result of a process of experiments and innovation through which people build up the skills, knowledge and self-confidence necessary to shape and respond to their environment. This provides people with a sense of 'safety'" (p. 120).

Post-normal science (PNS) (Funtowicz and Ravetz, 2003) is a suggested response to the limitations of traditional scientific method in researching complex science-related issues, and shares much of the VUCA view of the world. PNS considers uncertainty, value loading and diverse perspectives as integral to science and has been developed as an appropriate methodology for integrating with complex natural and social systems. Lederach (2005) emphasizes how even the most serious and dangerous situations can be tackled playfully, incorporating the dynamic nature of connections and the importance of spontaneous creativity. In describing serendipity as "the wisdom of recognizing and then moving with the energetic flow of the unexpected" (p. 115), he describes three guideposts for finding serendipitous moments: acquiring and building a capacity for peripheral vision, developing creative learning disciplines and sustaining platforms (instead of structures) that are smart and flexible.

Disasters provide many challenges, including how to prepare people for the unimaginable. Emergency response training, simulations, procedures, guidelines and mentoring are all used to prepare humanitarian workers for a time when they will be thrust from their everyday work into the uncertain and chaotic world of a disaster response. Humanitarian training is as diverse as the topics it covers, ranging from cognitive, knowledge-based classroom approaches at one end of the spectrum to

multi-day, military-style simulations at the other end. Experiential training sits somewhere in between and is an effective and necessary method of engaging adult learners. Applied improvization adds another layer to this arena that works to build skills rather than enact simulations of disaster scenarios.

Improvizational principles

> Our organization is generally no different to other large bureaucracies in that we default to compliance and regulations, when what we really need are a set of principles from which people act and respond (Steve Goudswaard, Humanitarian and Emergency Affairs, World Vision).

Improvizational principles are drawn from the world of theatrical improvization (sometimes called impro or improv). These principles provide a basic understanding shared amongst improvizers of how to engage and respond when working together. Improvized theatre is a form of unscripted theatre with roots going back to oral traditions and Commedia Dell'Arte. Developed in Italy in the 1600s and characterized by improvized dialogue and stock characters (Salinsky and Frances-White, 2008), this form of theatre requires actors to respond to each other in the moment and co-create the performance rather than follow a pre-determined script. Improvization games and exercises, largely attributed to Spolin (1999), were developed to enhance the skills of actors and then further developed as its own art form. Spolin originally developed these games and activities to work with immigrant and refugee children and families who were struggling with issues of language, acculturation, adaptation and connection. Viola Spolin's mentor, Neva Boyd used many of these activities in military convalescent homes. The Red Cross, which established these convalescent houses, ensured that all wounded veterans engaged in playful games to prepare them for leaving the hospital. By the 1940s, Boyd's methods found their ways into every military hospital in the country.

The most commonly known form today, seen in theatres and on television, is comedy improvization, creating the impression that all theatrical improvization is about humour. While humour can certainly be a part of improvization, it is not necessarily its intended goal or outcome. Rather, applied improvization is focused on honesty, authenticity, spontaneity and creativity (Halpern *et al.*, 1994). One of the great figures in improvizational theatre, Keith Johnstone, developed methods that focus heavily on dynamics of status and power in interactional scenarios (Johnstone, 1992) which have transformed how people both on and off the stage look at human interactions. Another form of theatrical improvization, Playback Theatre (Salas, 1993), uses a theatre group to embody people's stories and experiences; this modality helps build empathy, connect people to each other and explore serious issues and stories in a meaningful way.

Off the stage, we improvize all the time; to be human is to improvize. Rather than operating from a script, we are constantly looking at options, evaluating them, making decisions and acting spontaneously in our lives. Sometimes we can plan ahead but, even when we plan, we are often caught by unexpected circumstances and need to improvize. If we knew in advance that we had guests coming for dinner, we would plan what we would cook and shop for what we needed. When surprised by unexpected guests we draw on what we already know about preparing a meal and work with the resources we have at hand; we assess what food we have available and proceed to improvize. We adapt. We get creative. We get surprised. And sometimes, the result is far better than if we had planned. Improvization is about using our existing skills and knowledge with whatever resources we have at hand. Needing to act in unexpected

circumstances that arise means using the expertise, knowledge and skill we have developed over time and applying it in the moment. So while we cannot always plan for things to be as we expect, we can prepare for the unexpected by cultivating the skills that help us respond more effectively within it.

The improvizational mindset is rooted in an open and flexible attitude, based on a set of fundamental principles. Literature on improvization offers a myriad of descriptions of these principles and skills they support (Gesell, 1997; Halpern *et al.*, 1994; Jackson, 2003; Johnstone, 1992; Koppett, 2013; Poynton, 2008; Ryan-Madson, 2005; Spolin, 1999). While any improvizational activities can be useful, it helps to understand them through a set of core principles that underpin improvization. The P.L.A.Y.! acronym (van Driel, 2013) provides a simple and memorable model for focusing on the fundamental principles of improvization. These specific principles can reinforce how to respond when faced with chaos, uncertainty and when under pressure to act. P.L.A.Y.! builds capacity for staying focused while remaining open to choices in order to maximize results in crisis situations:

- "P" stands for Presence: this refers to being in the "here and now" and being aware of everything that happens around you. Akin to mindfulness, it replaces distraction and fragmentation with keen and clear focus. Anxiety and stress can reduce our ability to focus and see choices. By noticing more, we have more inner and outer resources available to us and we open channels to new ways of responding.

- "L" stands for Leaping Into: sometimes we have to begin a project or a task without planning all the required steps beforehand. Sometimes circumstances demand that we begin before we are ready, and adapt as the situation requires. This is particularly important if we do not have all the information we need or want or if the situation is rapidly changing."L" also stands for Letting Go: things do not always go the way we did like or expect. Sometimes we need to let go: of our attachment to being right, of our need to be in control, of our preconceived notion of how things should be. Rigidity and need for control are often fallback response to stressful situations. Flexibility can often be far more useful.

- "A" stands for Accept and Adapt: this is about accepting offers – seeing opportunities in what others say and do and allowing ourselves to be changed by circumstances, others' opinions and new situations. Rather than being defensive and blocking, we receive others' input, engagement, and participation. This doesn't mean agreeing with everything, but acknowledging what others bring. This principle speaks to overcoming initial restraints and resistance to change and really accepting and adapting to whatever crosses your path. When dealing with complexity it helps to be able to include diverse perspectives and approaches and integrate accordingly.

- "Y" stands for Yes, And […]: this reinforces the acceptance described above ("yes"), while adding to and building on that ("and […]"). This is in contrast with "Yes, but […]" – behaviour, where we tend to focus on why something will not work. With "Yes, and" behaviour we see more constructive collaboration, more energy, more flow and more options. This also switches focus away from a problem focus and towards a solutions focus. Yes, And can apply to others' ideas and it can also apply to how we respond to others relationally. At the core of the improvizational mindset is that of "making the other look good". Operating with a generous, supportive and collaborative approach leads to shared goals

that strive for collective, rather than individual, success. It is this spirit of collaborative generosity that forms the foundation of groups, troupes and teams that work effectively as a whole. Knowing that the mindset of others on your team is one of support allows for courage, risk and vulnerability not necessarily safe in other circumstances.

- "!"Impact: this refers to implementing the four principles above in a convincing and bold manner in order to achieve maximum effect. Commitment, confidence and clarity are qualities that emerge through practicing and applying these improvization principles.

Applied improvization in training for disaster readiness and response

> Improv has a direct link to our way of working; it's the main part of who we are. Our core values are openness, transparency, being creative and having impact on our partners and the world. Our field staff uses the Improv principles a lot when working with children in war zones; it creates safety between people and results in deeper and more open relations with and among them. Improv is playful, connects people, enhances content, brings a LOT of energy and makes you happy (Pauline Klaassen, Manager, War Child Netherlands).

Applied improvization is a training and facilitation modality that uses the principles of improvizational theatre and applies them in other contexts to develop people's capacity to improvize, adapt, move without a script and be effective in the unknown. The ability to confidently improvize – use existing skills and knowledge with available resources to respond in the moment – is a capacity worth developing in humanitarian workers likely to find themselves responding to disasters. Applied improvization enhances experiential training by providing skill building for agile leadership. This includes cultivating skills in awareness, mental agility, decision making; adaptability, flexibility, comfort with ambiguity, focus and confidence.

As an emerging discipline, applied improvization is being discovered as a tool that has far reaching applicability for transformative and sustained learning. More and more, applied improvization is seen as a tool for helping individuals and groups to develop skills and competencies in critical areas for living and working. It has been used for training in leadership (Orlikowski and Hofman, 1997; Tabaee, 2013), negotiation and mediation (Balachandra *et al.*, 2005a, b), medical skills (Hoffman *et al.*, 2008; Shochet *et al.,* 2013; Watson, 2011) and teaching (Sawyer, 2011). Principles of jazz improvization have been used in humanitarian training (Mendonca and Fiedrich, 2006; Mendonca and Wallace, 2007). The authors have used applied improvization methodologies in humanitarian training, conflict resolution work, leadership and organizational development and myriad other subjects:

> We need to get our staff to practice responding when they don't know what to do, and to identify where they are able to apply their skills in a different context, or not. Better to find out during a training, rather than during an emergency. We do this by creating simulations. We create a "universe" and develop "injects" – things that happen without warning, to disrupt – and then encourage people to improvise within that framework. It helps tap into tacit knowledge and intuition. We know that we build tacit knowledge through practice, not through didactic learning processes (Steve Goudswaard, Humanitarian and Emergency Affairs, World Vision).

Applied improvization complements existing training practices. It is similar to other experiential activities and learning strategies in some ways, and very different in others. It is similar in that it often uses character or role development as springboards

for scenarios, can be based in real or imagined situations and is learning that can be highly applicable to real work contexts. It is different in that it does not seek to simulate disaster scenarios. Rather, it takes a "cross training" approach, whereby practicing a certain set of skills, working a certain set of "muscles" can increase capacity to draw from in real disaster situations. Some activities are fast-paced, some are slower and reflective; some are game-based with distinct rules, modes of play and winners and losers; some require collaborative play. Each activity helps reinforce behaviours inherent in successful improvization. As disasters are implicitly full of unpredictable and unscripted scenarios, applied improvization can train aid workers for responding well in uncharted terrain. In this way, the use of applied improvization is a post-normal approach to preparing humanitarian workers for disaster response.

Applied improvization may be perceived as just playing, yet the playful activities themselves are a vehicle for learning and developing vital skills and understanding the improvizational principles. Trainers will use the activities with different goals in mind. These activities are sometimes used for icebreakers or to shift the energy of a group. In these instances the activities are mostly for movement and connection, and the underlying principles that they reveal may not be explored. In most applied improvization work, however, activities are used intentionally to explore multiple dimensions of experiential learning through preparation, participation and debrief. For participants, this opens up possibilities for different ways of engaging, thinking and feeling:

> These applied improv games and activities in trainings give us opportunities to make mistakes and be in a safe environment where you can try again. The fun element means our brains operate differently; we can step outside of our normal work boundaries and play with concepts, reflect on that and apply those in our daily work (Murray Millar, Humanitarian Emergency Affairs Director, East Asia Region, World Vision International).

> We've developed a leadership competency model to capture those leadership characteristics most crucial for success at Mercy Corps. One of the most foundational is self-awareness. Improv can facilitate self-awareness – through simple improv activities people can learn what their triggers are in a safe environment (Kristin Hibler, Senior Director of Global Leadership Development Mercy Corps).

Important skills for a humanitarian worker in an emergency are to stay focused, remain open to choices, be flexible and adaptable as to how to achieve results, be creative, enhance collaboration and manage uncertainty. During a natural or human disaster, humanitarian workers need to drop everything else and contribute whatever skills and knowledge they have using whatever resources are available. They need to improvize. Drills and repetition are the keys to successful improvization. Repetition is the key to developing these skills and having access to use them when it's most important to do so. Drills can become tedious and boring, so most improvizational practice involves playing games that reinforce the new behaviours and ways of thinking.

Training in improvization skills cultivates the constructive improvization mindset as a natural response to crises instead of the often negative and reactive psychological responses we often encounter. In times of crisis, optimal improvization requires overcoming initial and natural stress reactions. While new situations evoke instinctive, yet often counterproductive freeze, fight and flight reactions, the improvizational mindset proves a valuable tool to effectively recognize and build on new opportunities being offered.

Many improvizational activities encompass all the principles of the P.L.A.Y.! model: presence, leaping into, letting go, accept and adapt, yes, and etc., support and impact.

They are also often fun and physical, which helps relieve tension and engage participants successfully. At the heart of applied improvization is play. Play breaks normal habits of action, thought, and perception (Root-Bernstein, 1999). It can also allow us to communicate in ways we may not think of otherwise. This kind of play is not frivolous; it allows us to learn creatively and access necessary inner and outer resources at urgent times. It is important and revealing to encourage participants to notice how they feel before, during and after these activities so as they can determine for themselves what difference they make:

> "Yes [...] and," "accept offers," "show up," "be present," "commit." These improv foundations help people tap into their intuition, listen, trust, collaborate and respond in the moment – all critical capabilities for global leaders. One of the first places I used improv was trying to teach people with limited global exposure about operating effectively in other cultures – what it actually feels like. Improv throws people off balance and they simply have to commit to it and to each other (Kristin Hibler, Senior Director of Global Leadership Development Mercy Corps).

Applied improvization asks us to approach scenarios with a "beginner mind". The beginner mind is open and curious; the expert mind may be closed and certain. We want our technical staff to be expert in each of their areas; yet when faced with complexity and confusion, an expert or closed mind might miss something important and not be flexible enough to see a way out of a dilemma. We need people who are both expert and open. Many applied improvization activities are about creating and practicing openness – a willingness to let go of pre-conceived ideas, to be present to what is actually happening in the here and now, to be able to respond quickly, and to recover and try again when something doesn't work out. The fast repetition of new moments, changing the participants, trying something, letting go of what fails, and leaping into trying something else is a way to drill people into the use of the improvization principles. Without them even realizing it, they are becoming familiar with using the principles, knowing what it feels like to improvize and going beyond a theoretical, cognitive understanding. Once people have this embodied experience they are more receptive to exploring the theory that underpins improvization and identify for themselves what this means within their own work context.

Applied improvization in action
There are hundreds of different improvization activities that might be used for training. With any of them, the effective use of improvizational activities for applied purposes includes five steps:

(1) Intentionally choose activities that focus on the appropriate principles and skills that need to be developed.

(2) Provide clear, consistent instructions for the activity. This sometimes includes modelling or providing examples.

(3) Engage participants in the activity. This involves participants working in pairs, small groups or as a whole group, and may include side coaching by the facilitator.

(4) Debrief the activity. This typically includes reflective questions such as: What happened? What did you notice? What did you feel? What was the activity about?

(5) Relate to the real world context. This includes questions such as: How does this apply to X situation? How might you use this? What might you do differently than you have done before? What has become clear to you?

Since participants are experts on their own contexts, facilitators should be open-minded and give support for the group to make their own interpretations. At the same time, the virtues of the activities, which provide for a "flow", positivity, openness and creativity, should be maintained. This demands that the facilitator switch from a directive, fast paced and diverging style when executing the activities to a more supportive, open, converging and result-oriented style in order to bridge the learning from the exercises to work context.

Here we provide several examples of activities that can be used to address some of the particular skills identified as necessary in disaster response efforts. None of these activities is used in isolation – they are all incorporated into a design that builds awareness and a coherent skills development process. While we have identified particular activities that address particular skills, each activity can be used for multiple purposes and skill development. Furthermore, a variety of different skills might be cultivated by an individual activity. The key is how they are framed, debrief and applied to real world contexts. While we describe some of these activities here, a full understanding of their impact and relevance can only be achieved by experiencing them. To explore a greater range of improvization activities and how they might be used for training, see Jackson (2003), Koppett (2013) and McWaters and Moore (2012).

Having identified certain skills that agile leaders and responders need in disaster scenarios, what follows is a table that connects these skills to some of the improvizational principles and activities that we share (Table I).

Improvizational activities in training
Skill: awareness/noticing more
Heightened awareness is a critical skill during crisis situations. The need to be more aware, notice what's happening around us, use existing information is cultivated in the following activity.

Activity: pass the zap! This is a circle game for a group of participants, where a Zap! is passed around the circle in either direction where participants clap to each other and say Zap at the same time. New elements are added to the game (like Whoosh, where you

Critical skills of agile leaders for disaster response	Improvizational principle that supports the critical skill	Improvizational activity that supports the improvizational principle and builds the critical skill
Awareness/noticing more	(P) Presence	Pass the Zap!
Ability to think quickly/make agile decisions	(L) Leaping into/letting go	I Am a Tree
Adaptability/flexibility/ openness to choices	(A) Accept and adapt	One Word at a Time Story
Support, collaboration, and creative solutions	(Y) Yes, and …	Swedish Stories
Calm and focus in the midst of challenges, uncertainty and risk	(!) Impact	Power Point Karaoke

Table I.
Summary of agile leadership for disaster response

can throw across the circle or Boing, where you can refuse what is passed or sent to you) to make it more confusing and random, eliminating the potential of planning your response. It also includes the opportunity to reject and reframe, and respond quickly to what is actually happening. It requires high focus, attention, readiness and receptivity. As groups play this game more, their ability to respond effectively is increased. The game breaks down often, providing opportunities for mini-debriefs about making mistakes, letting go, responding to refusal, making your partner look good and being present.

Skill: ability to think quickly/make agile decisions
As humanitarian workers often need to make rapid-fire decisions, working with what's there, focusing on what's possible and reframing from negative risk into necessary opportunity, activities that can help cultivate these skills are useful. This exercise helps build the skill of thinking and responding quickly, and using new information to create scenarios.

Activity: I am a tree. In this exercise a group of players stand in a circle. One person steps into the middle and strikes a pose and says, "I am a tree." A second person steps in and strikes a pose in relationships to the tree and says what it is, e.g. "I am the fruit". A third person steps in and completes the tableau, e.g. "I am a hungry bird eating the fruit". The first person then selects who will stay in the center and that person repeats their pose and statement, e.g. "I am the fruit". The activity continues at a fast pace creating tableaus. This exercise reinforces the importance of 'making your partner look good' by not leaving anyone in the center by themselves for too long. The facilitator might side coach reluctant players to step in before they're ready, and to recognize that everyone can contribute something, even if it is just "I am a tree".

Skill: adaptability/flexibility/openness to choices
Stress is an obvious aspect of humanitarian work and sometimes causes people to shut down. Instead of freezing and centralizing communication and action, there is a need for openness and flexibility. This activity works with people to have to adapt to circumstances that they might not choose and be flexible in the direction of a plan. It supports keeping the mind open and connected under stressful conditions.

Activity: one word at a time story. In this exercise two players will share a process where they create a story together. Each player may only contribute one word at a time and the other player must then contribute the next word. While stories may develop into any substantive direction, they must be grammatically coherent. Therefore players must use and build upon the words that come before theirs. Together the duos will build sentences and co-create their own story, neither one being able to fully direct the content or outcome of the story. Once people are familiar with the form, it can be played in larger groups.

Debriefing this activity results in useful observations. First, it is very interesting to see that all participants are engaged at a very high level; they are in the moment, very alert, feeling responsible for their co-created product and having lots of fun by enjoying the spontaneity it evokes. After letting them perform this task for a few minutes, they are asked what helped the interaction, what made it flow? It turns out that the two (and later, more) participants must be really capable of sharing the dialogue. Being adaptable, playful, accepting, positive, being lenient to making errors and supporting each other's ideas turn out to be the most effective behaviours. This exercise helps to

differentiate between interactive skills and cognitive skills (thinking, planning, being faithful to own ideas, calculating) and when they are each useful.

Skill: support, collaboration, and creative solutions
Collaboration is fundamental during times of crises and disaster scenarios. Individuals and groups often are thrown together into diverse teams and also need to work with other humanitarian actors. Learning to build something together and co-create in the moment is a necessary skill for this context. This exercise helps build the skills of working together, letting go of preconceived attachment to outcome and suspending judgment.

Activity: Swedish stories. In groups of four, participants choose one person to start telling a story, real or made-up. After a while the others start shouting out random words (Car! Mistletoe! Microscope!) one at the time, which have to be integrated immediately in the story. During the exercise, the facilitator coaches the storyteller by challenging them to be accepting, positive, playful, alert, bold, open and creative. Each person in the group of four gets a turn being the storyteller. During the debrief, the participants are usually amazed by their own performance during this exercise. They often reflect on how they were initially frozen by the rapid input, but then developed more comfort with the process. Similarly, they often notice that when they became more comfortable, they were and use the "offers" of input in creative and imaginative ways, coming up with ideas that both surprise and delighted them. In having to think quickly and make quick decisions they could not over deliberate and have to make the best of the material in front of them. In connecting this to their work scenarios, they both see and experience the possibilities and necessities inherent in rapid-fire decision-making scenarios.

Skill: calm and focus in the midst of challenges, uncertainty and risk
Moving quickly, calmly and confidently in the face of uncertainty is a critical skill during disaster scenarios. This activity invites participants to work with unknown material, which requires them to invent, take chances, and be confident.

Activity: power point karaoke. In this activity participants are asked to do a presentation with a group of power point slides they have never seen. Each slide is an image that they must respond to and create meaning for in front of others. Each person has six slides to work with and they must create the name of their organization, content of the presentation and description of the slides. This activity requires participants to be poised as a presenter without knowing anything about what is coming next.

These are only a few examples of how applied improvization activities might be used to cultivate these particular skills. Incorporated effectively with other dimensions of relevant context and content, these activities move participants from the theoretical to the experiential. Furthermore, when facilitated effectively, trainings can combine simulations and the real material of disaster scenarios, moving participants between moments of grave severity and more light-hearted playfulness in appropriate and balanced ways. Though it may appear so, it is neither easy nor simple work. It is complex, sophisticated, multi-layered and symbolic; appropriate application and facilitation are key to its success. An applied improvization facilitator will be demonstrating and modelling the skills they are trying to teach; practice and model what you preach is one of the core concepts of applied improvization training. This means being adaptable to the group wishes, providing room for the unexpected and, if necessary, redesigning the training in the moment. Effective applied improvization trainers will have the skills and comfort to do

so. It means constantly balancing between what comes from the group on one hand, and regarding the training outcome on the other hand. This means the facilitator builds a very comfortable space in order to invite participants to get out of their comfort zone, by being this open and flexible and thriving in a complex and uncertain situation.

Case examples
Here we share two examples of how applied improvization has been utilized in the context of humanitarian aid for disaster relief. The first relays this work as a post disaster intervention to work with the survivors of natural disaster and assist in their building skills for readiness for any future events. The second shares the integration of applied improvization methodologies into a longer, pre-planned training programme for an international NGO.

Heroic improvization: disaster preparedness after Typhoon Haiyan, the Philippines
Following typhoon Haiyan's disastrous landfall in 2013, an applied improvization initiative was set up in the Philippines, initiated by local improvizers keen to contribute something to their devastated communities, and focused on local citizens and emergency responders. Typhoon Haiyan survivors said that they felt unprepared for this event or another unknown disaster. Hence the initiative specifically targeted communities to simulate preparedness for unpredictable disasters that might yet arise.

An improvization workshop tackling this aspect was piloted in early 2014 with 12 groups in four regions of the Philippines. Heroic Improvization workshops were offered and built around principles for disaster preparedness. Participants experienced improvization activities that enabled them to feel what it was like, and to practice their responses, to unpredictable situations. They learned to use their bodies and senses to better respond to what was happening; they learned to notice what resources were available; they learned how to connect with each other and tap into the creative group mind; they learned to focus, and they learned to act – even when they were unsure what to do.

Feedback suggests an overall positive response with participants rating their perception of readiness for disaster moving from low to very high: "At the beginning of the workshop, I said I was a 3 and ready to die. Through this workshop, I rate myself an 8 because this workshop gave me weapons to be ready for the next one. Bring it on, I'm ready". Participants indicated a sense of empowerment to lead or follow in response to a next disaster together. Furthermore, the workshops not only offered activities to provide preparedness, but they also allowed survivors to process some of the trauma that they had experienced during the typhoon. (For further information on this case and related projects, see Tyszkiewicz, 2014).

Asia/pacific regional readiness for disaster response
The Centre for Research on the Epidemiology of Disaster (CRED) reported that, in 2013, there were 154 natural disasters in the Asia region, compared with 43 in Europe, 45 in Africa, 64 in the Americas and nine in Oceania. Humanitarian workers in Asia can expect, at some stage in their career, to be involved in responding to a natural disaster.

The World Vision Regional Disaster Management Team (RDMT) in Southeast Asia and the Pacific, provides a group of well-trained and prepared professional humanitarian workers to be available to respond to local disasters, and provide inter-country support, in this region that is prone to more natural disasters than anywhere else on the planet.

The capacity-building focus for RDMT humanitarian workers focuses on developing their technical expertise, as well as their capacity to operate effectively under stressful disaster conditions. As such, much of the training for RDMT members has been focused on interpersonal, or 'soft' skills. Applied Improvization has been used in various trainings to introduce participants to the key principles of improvization described earlier.

In 2010 and 2012, the annual workshops provided for the RDMT focused on applied improvization. In 2010 the overall theme was Leading with Competence in Ambiguous Contexts with a focus on exploring the effects of operating in uncertainty and complexity and ways of operating in an emergent environment with what is available. Participants were introduced to some key improvization principles and activities. In 2012, the overall theme was Confidence and Competence in Collaboration – Optimizing the Effectiveness of Emergency Responders. Each morning, participants would take part in a series of improvization activities to explore, understand and apply the key principles and in the afternoons would take part in simulation exercises. In this way they were exposed to an unconventional approach (applied improvization) and a more mainstream approach (simulations) enabling them to develop and combine their personal skills of being able to operate in uncertainty with their understanding and capacity of their technical expertise.

This work forms part of a longer, ongoing study to research the efficacy of applied improvization in preparing people to respond in uncertainty in general, and disasters, in particular. The following comments extracted from open-ended interviews with participants in the above workshop point to some of the effects of the applied improvization training in the field, and provide a basis for further research:

Because of a big earthquake in China in 2008 we decided we needed to build more local capacity. We train our Regional Response for surge capacity [the swift deployment of humanitarian personnel]. Because we need them to understand the various scenarios that could happen we use applied improvisation techniques a lot. We use a lot of rapid role-plays and then see other perspectives developing. They have a very safe environment to try out various interpretations of the same scenario. It helps people to see very quickly different variations of what could happen in a scenario. It makes it more interesting, it's not a strain on the participants – they find out for themselves. The benefits of applied improv training is that it gives room for a more hands-on training approach. You let the participants do what they want to do rather than a very "traditional" training where you go through 100 PowerPoint slides and by the twentieth they have already all fallen asleep. They wake up an hour later refreshed but they go home with the PowerPoint and I'm not sure if they ever open it or not. As a trainer I can see how much they are getting by how they involve themselves in applied improvisation. It's safe, more real life, and gets people's participation and involvement. And people learn more (Meimei Leung, RDMT Programme Office, World Vision China).

In my job as an Emergency Communications Specialist I have to chase people, get information, and make sense for an external audience. Doing applied improvisation before assignments puts you in a safe place, clears the mind, removes inhibitions. I'm Southeast Asian and naturally shy, introverted but now I give information even when not being asked. I put myself out there, participating in interactions. "Use Everything" and "Notice More" are very much a part of me now and how I take photos and relate to the community. It's an edge as a communicator. I have more patience, finding even the little things that I might have once overlooked. Sometimes the impact of a game is not apparent until in the field. For example, you can become overwhelmed with the level of destruction. Improv helps me find a safe space. It's a reference point I go back to when in the field and feel stuck. The game Pass the Zap! helped me when confronted with many conflicting emotions. It enabled me to decide what to accept and what to push back (Aaron Aspi, Communications Specialist, Humanitarian and Emergency Affairs, World Vision Philippines).

When I came here to the Haiyan response, my expectations were too high. There were experienced people, but not really in a big response like this, so I need to build their capacity. I need to not only give instructions, but communicate and check that they understand. Then when I moved to another part of the Philippines I had to let go of how I had responded previously and respond to what was needed here in this place. The applied Improvisation has helped a lot in terms of 'soft' competencies, not 'hard' competencies are (how to be a logistics manager, or a zonal manager, for example). For 'soft' competencies, managing people – let it go, not be selfish – these have been very good for me. We need to achieve and have good relationships. Before the Cambodia workshop I felt that "because I'm the boss, you need to listen to me" and "I am fully experienced, you should do it this way". After the workshop I feel this must be changed – let it go, follow the flow, recognize others, build relationships (Fadli Usman, Support Manager, World Vision Philippines Haiyan Response).

The challenges of applied improvization

There is a lot of resistance to play and games. Many people don't value and respect this approach. They want a more hardcore, technical approach to training (Murray Millar, Humanitarian Emergency Affairs Director, East Asia Region World Vision International).

Improvizational activities are spontaneous and playful. While we know that this is useful, since playfulness and fun enhance openness, interactivity, creativity and engagement, it can often be perceived as frivolous. "I didn't come all this way to play games!" said one senior humanitarian bureaucrat during a training. Buy-in has to occur not only at the senior levels where decisions on what kinds of training to employ are engaged, but also at the participant levels, where trainees may feel they have far more important things to learn and do with their time. And as we have noted, donors and funders want to be assured that their funds are being used for critical and not extraneous dimensions to development training and intervention. The authors have observed that this work can change individuals, groups and environments; we have all seen the transformational impact it can have. And we also know it must be framed, presented and offered in a way that balances the playful aspects of the activities with the serious nature of the work and its consequences. Furthermore, the fun can sometimes obscure the learning if it is not used properly, leading the participants away from the underlying and meaningful aspects of the activities. The design of improvization training should take this into account, by helping to bridge the learning in the applied improvization workshops to individual work practice. Taking time for debriefing the activities and helping and challenging the participants to apply the improvizational skills and mindset to their work is key.

Learning applied improvization activities can be a real stretch for some participants, especially if they are used to more traditional and mainstream approaches to professional development and learning. In our work, it often seems that the greatest challenge to its efficacy is getting groups or organizations to understand or commit to the process in the conceptual stage. However, once we are in the room with a group of people, there is almost always an incredibly successful and satisfying experience. Participants are frequently amazed at the transformational power of these activities. They have the ability to impact and change people in ways that they could not have anticipated. It is only after they have experienced it do leaders and team members understand the potency of this methodology. A skilled facilitator can help all participants to engage with the activities, playfully explore them, draw out the implications and applications, and encourage further practice and exploration.

Conclusion and recommendations

Learning is not always comfortable. Neither is being unprepared for crisis or disaster when it hits. We understand the grave circumstances that aid workers face on the ground. Collectively, the authors have worked in many hard hit regions of the world including Armenia, Cambodia, China, Ethiopia, India, Indonesia, Israel/Palestine, Kenya, Laos, Malawi, Nepal, Papua New Guinea, Rwanda, Sri Lanka, Uganda and Zambia. Learning to be agile in a VUCA world is a necessary dimension of disaster preparedness. Training people sufficiently in applied improvization results in greater capacities for agile leadership and response. Furthermore, the activities can be very therapeutic for both aid workers and community members in the aftermath of disaster, contributing to community rebuilding.

Applied improvization training can facilitate increased capabilities to respond when faced with chaos, uncertainty, and when under pressure to act, and greater skill and agility working across cultural, language and contextual differences. It does this by building skills in thinking on one's feet and at the very same time being able to reflect on what's happening in a meta-perspective. This results in more collaborative relationships and greater creativity and innovation. Individuals operate with increased presence and authenticity. Preparedness, or disaster risk reduction, is seen as an integral component of disaster scenarios. There is benefit in using applied improvization for alerting, building awareness and understanding and preparing individuals and communities for particular risks that they may face.

The use of applied improvization provides a novel and emerging practice in humanitarian training in general, and disaster preparedness and response in particular. Practical experience and first hand observation over the course of more than ten years have convinced the authors that improvizational approaches have value, both to the facilitator and to those participating in workshops and training. There are other uses for applied improvization in humanitarian contexts, which are outside of the scope of this article, but are recommended for further exploration and research as well. In particular, Playback Theatre and some other forms of applied improvization have been used as a part of psychosocial responses to post traumatic stress disorder (PTSD) experienced by humanitarian workers and community members alike. Similar work has been done with soldiers and war veterans suffering from PTSD. The use of applied improvization in conflict contexts is also an emerging area of application. While almost all practitioners and participants in applied improvization activities claim powerful impact of these processes, further research is recommended as a way to anchor this methodology in more evidence based knowledge and rigorous evaluation.

As with most learning methodologies, applied improvization is not a panacea. A day, or even a week, of training in this modality may not fundamentally change the way people act in a disaster. However, it is enough to introduce participants to the improvization principles and to demonstrate how practice can build greater efficacy in responding to emergent situations. Furthermore, some of these principles and activities can be built into ongoing elements of training, development, logistics and team building processes so they can have a more sustained impact. Our hope is that humanitarian workers will become exposed to these kinds of processes and will feel increasingly more comfortable with and invested in utilizing improvizational activities, knowing that it is time well spent in developing the essential skills for readiness and response. Understanding the importance and seriousness of agile leadership and effective decision-making, communication and collaboration in these contexts is all the more reason to employ innovative, transformational and engaged methods for change. P.L.A.Y.! is serious business.

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