Challenge
1. Disaster and emergency personnel need to:
   • master a variety of specific medical competences
   • be trained for stressful context

Reported stressful context
• Information (inaccurate, unreliable and continually changing)
• Loss of control
• Danger of threat for own life
• Time pressure
• Group pressure
• Working alone
• Ethical dilemma’s
• Specific patients
• Practical difficulties
• Dizziness and nausea
• Improvisation

Learners’ characteristics
Medical disaster and emergency personnel:
• are highly educated
• are expected to be self critical individuals
• have different learning and coping styles
• want to have an important say in how and when they want to learn
• require continuous training

Learning didactics
Learning challenge:
• (stressful) context & medical performance
• continuous learning
• learners’ characteristics

Learning didactics: Self Directed Adult Learning
Self Directed Adult Learning
1. Taking active control (where, when, what and how)
2. Self-regulating learning strategies
3. Reflection (on the task and on the learning process)
4. Interaction with social environment (colleges, coach)
5. Interaction with physical environment


Learning didactics
Learning challenge:
• (stressful) context & medical performance
• continuous learning
• learners’ characteristics

Learning didactics: Self Directed Adult Learning

Learning technology: Serious Games

Serious Games

Research for Disaster and Emergency Medicine Domain
1. Theoretically serious gaming could be useful
2. There are no games available that include all the above characteristics
3. Study on the possibility of serious gaming for medical personnel
First responders (n=62) about the scenario ‘Virtual reality simulating a crisis’

0 = totally disagree to 100+ totally agree

<table>
<thead>
<tr>
<th>Scales</th>
<th>M</th>
<th>(SE)</th>
<th>Items</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive for preparation on disaster</td>
<td>76</td>
<td>(3.25)</td>
<td>6</td>
<td>.93</td>
</tr>
<tr>
<td>Can fit in the organization</td>
<td>76</td>
<td>(3.19)</td>
<td>4</td>
<td>.88</td>
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<tr>
<td>Decide yourself how to prepare</td>
<td>72</td>
<td>(4.60)</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Like to do this in my free time</td>
<td>46</td>
<td>(5.86)</td>
<td>1</td>
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</tbody>
</table>

Concluding

Learning challenge: (stressful) context & medical performance, continuous learning & learners’ characteristics

Learning didactics: Self Directed Adult Learning

Learning technology: Serious Games

Learner: continuous, personalized learning, intrinsic motivation

More information?
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