### Lewin’s Field Theory in Crowd Behavior Experimentation

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The conceptual framework of our crowd behavior research is Lewinian Field Theory. This second poster will give an overview of how field theory methods are used. Experiments and laboratories are configured to test hypotheses based on the fundamental concepts of goal regions and valenced psychological forces and tensions toward regions.

### Subject Terms

Field Theory, Lewin, locomotion, goal region, motion capture, psychological forces, attraction, repulsion, valence, human behavior, human experimentation, non-lethal weapons, crowd, metrics, effectiveness metrics, vector field region, Target Behavioral Response Laboratory
LEWIN’S FIELD THEORY IN CROWD BEHAVIOR EXPERIMENTATION
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**Brief Abstract**
The conceptual framework of our crowd behavior research is Lewinian Field Theory. This second poster will give an overview of how field theory methods are used. Experiments and laboratories are configured to test hypotheses based on the fundamental concepts of goal regions and valenced psychological forces and tensions toward regions.

• Lewin conceptualized goal regions as having positive and negative valences. People locomote towards “positive-valence regions” and locomote away from “negative-valence goal regions”.
• These valenced goal regions give rise to psychological tensions, psychological forces, and then locomotion.
• People are attracted to positive valence goal regions and thus attempt to move toward such regions. Conversely people are repulsed from negative valence goal regions and thus attempt to move away from such regions.
• Field theory makes this conceptual orientation useful in terms of predicting how non-lethal weapons move crowds.

**Experimental Design**
Groups of 12-19 individuals. Controlled motivations toward goal and away from control force with money.

• The concepts of attraction and repulsion allow for the use of standard methods for vector analysis from engineering and physics.
• These vector field regions can be used to render forces arising from positive and negative valence goal regions as fields of attraction and fields for repulsion graphically.
• We can use these vector methods in comparing effectiveness of non-lethal weapons in that we can compare the recorded negative repulsive forces arising from the Soldier wielding the measured negative force filed.
• The stronger the measure negative force field the more effective the weapon.