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## The Impact of Instructional Methods on the Biometric Data Collection Agent

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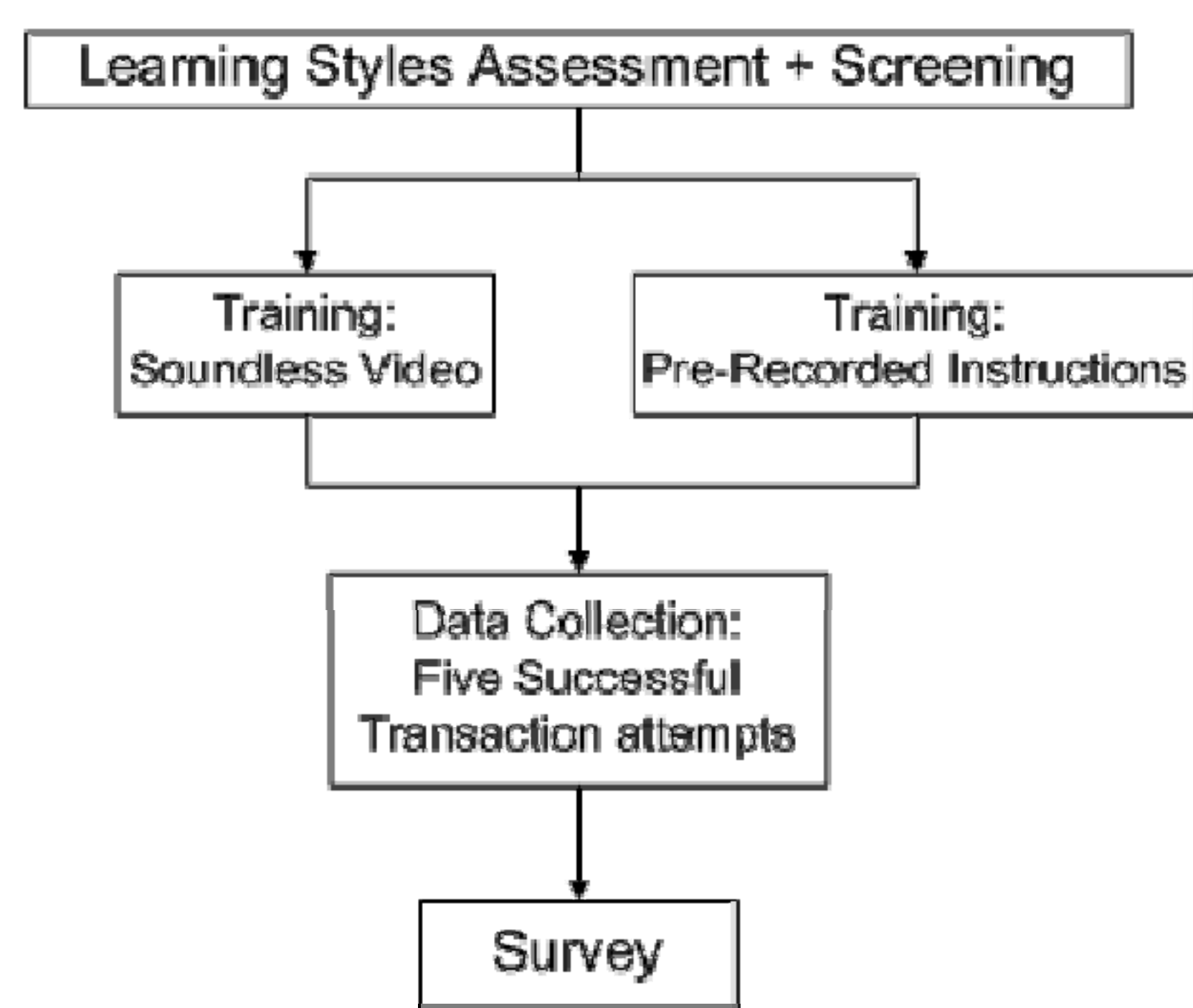
### 1 Motivation

- Data collection agent, *e.g. Army personnel*, has not been thoroughly studied as one of important factor that impacts the process time of biometric system in an attended system.

### 2 Objective

- To evaluate the impact of verbal or visual media on an agent collecting data with a mobile iris recognition system. The effectiveness of the training and the agent efficiency during the data collection will be measured by the time it takes to complete the process.

### 3 Experimental Setup



### 4 Mobile Iris Recognition System



Fig. 1. MobileEyes™ by Retica

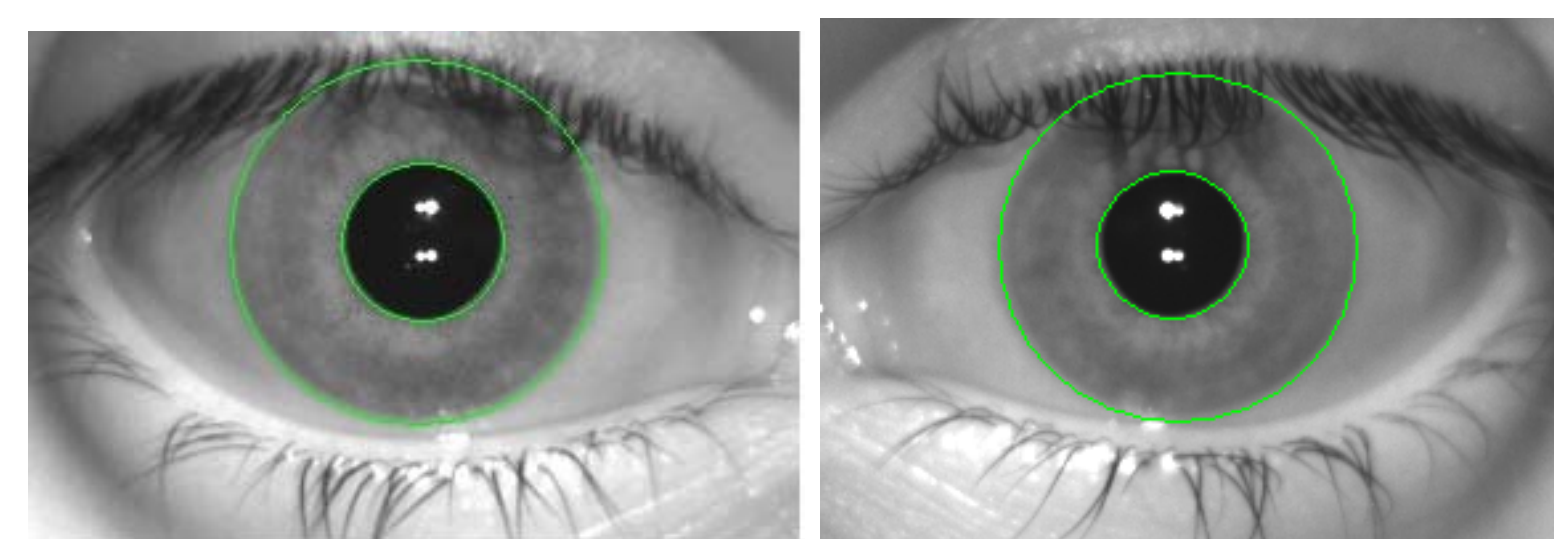


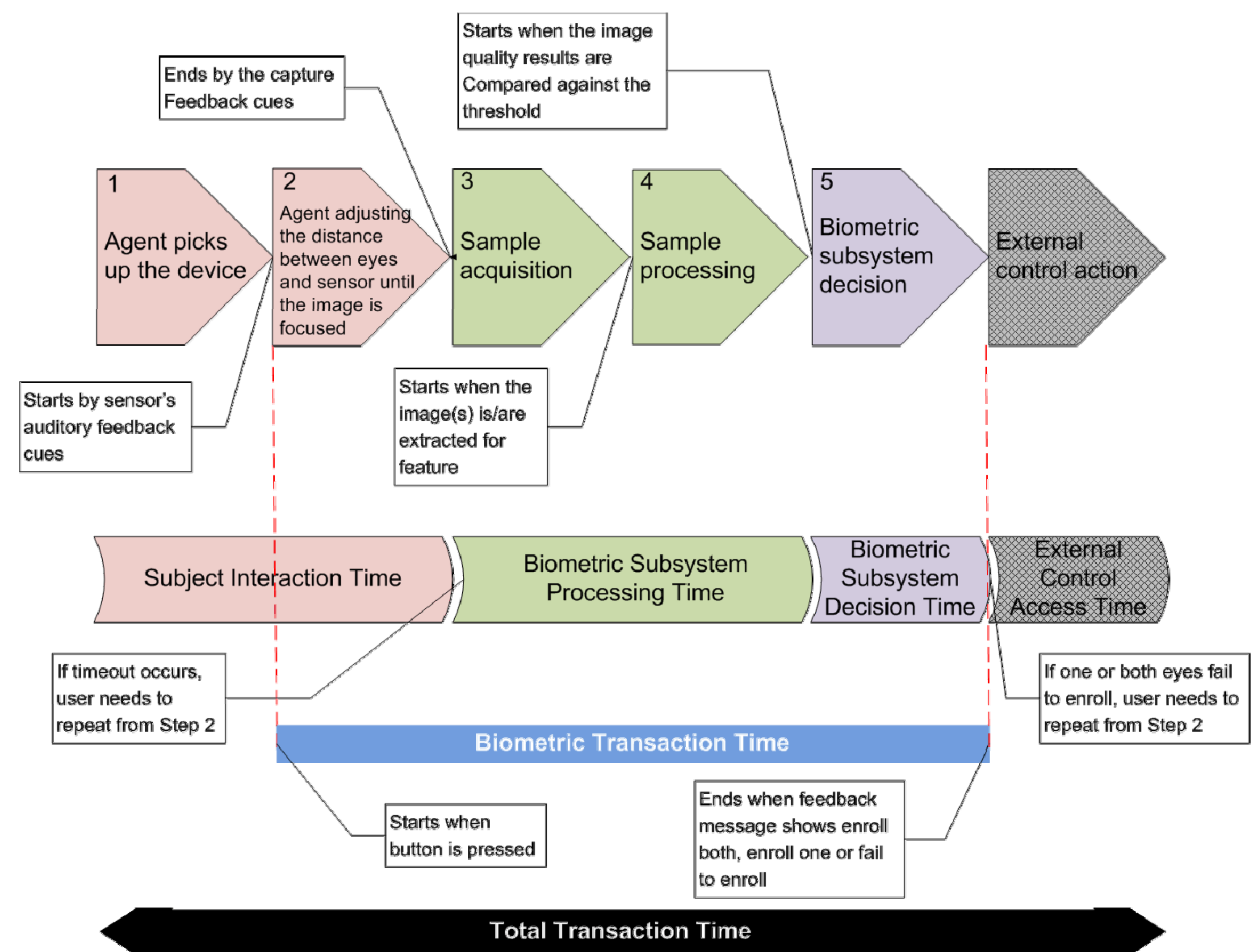
Fig. 2. Iris Images

### 5 The Index of Learning Styles

- Based on the four learning style dimensions of instrument by Felder & Silverman (1987)
  - **Visual-Verbal**, Active-Reflective, Sensing-Intuitive, Sequential-Global Learners
- Visual learners work well with diagrams, flow charts, etc.
- Verbal learners work well with summaries or outlines.

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### 6 Biometric Transaction Time Framework



### 7 Analysis

- Demographic (Gender, Age, Education background)
- The impact of the instructional methods on the effectiveness of the training
  - *Measured by Subject Interaction Time*
- Statistical analysis to test which learners perform faster, in terms of time, given a particular training.