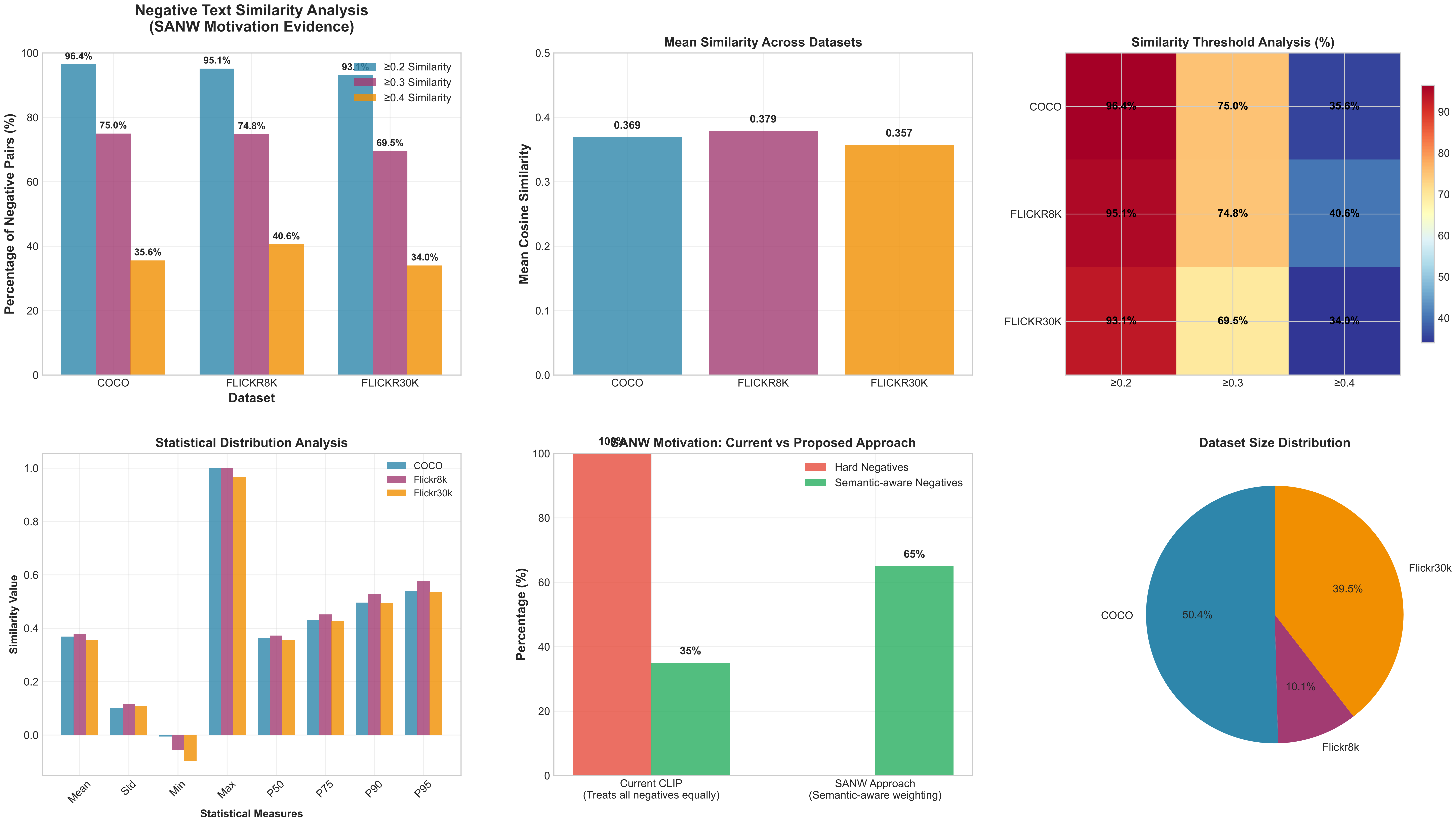


**KEY FINDINGS:**

**• 93-96% of "negative" pairs have similarity ≥ 0.2 (very high!)**

**• 69-75% of "negative" pairs have similarity ≥ 0.3 (extremely high!)**

**• 34-41% of "negative" pairs have similarity ≥ 0.4 (significant!)**

**CONCLUSION:**
**Current CLIP training treats many semantically similar captions as "negatives" when they should be reweighted (SANW motivation).**

**METHODOLOGY:**

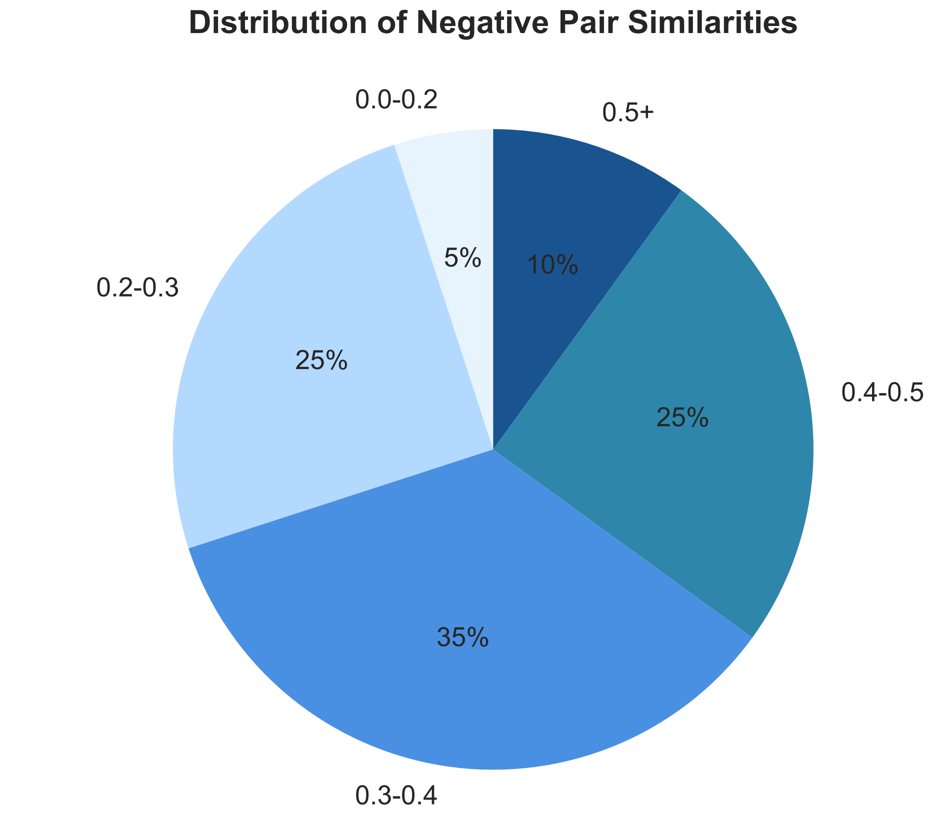
**1. Loaded captions from 3 datasets:**
**• COCO (202K captions)**
**• Flickr8k (40K captions)**
**• Flickr30k (159K captions)**

**2. Used OpenCLIP ViT-B-32 (laion400m_e32) text encoder**

**3. Computed cosine similarities between all caption pairs in random batches (256 captions)**

**4. Analyzed off-diagonal similarities (excluding same-image pairs)**

**5. Calculated statistics across 50 batches per dataset**


Distribution of Negative Pair Similarities