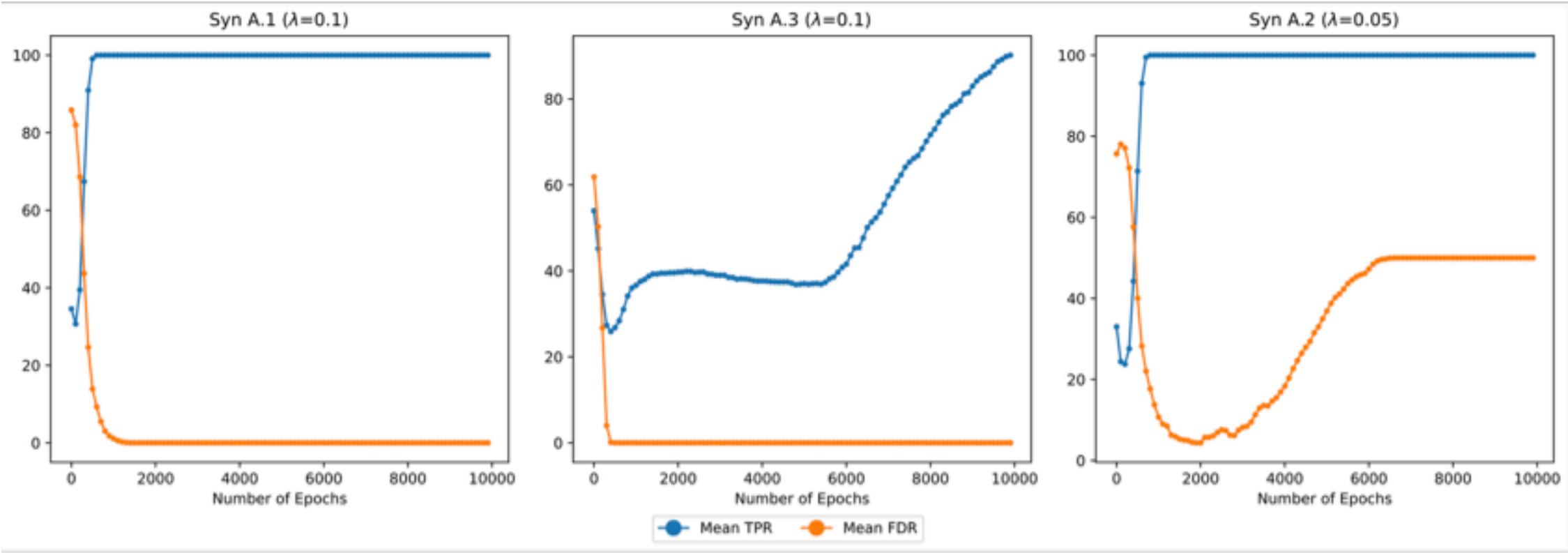
# Analysis of Performance Influencing Factors in INVASE

# Policy to Prevent Explainer Degradation




❖ **Converge** to certain values

❖ Longer Training leads to **Better** results

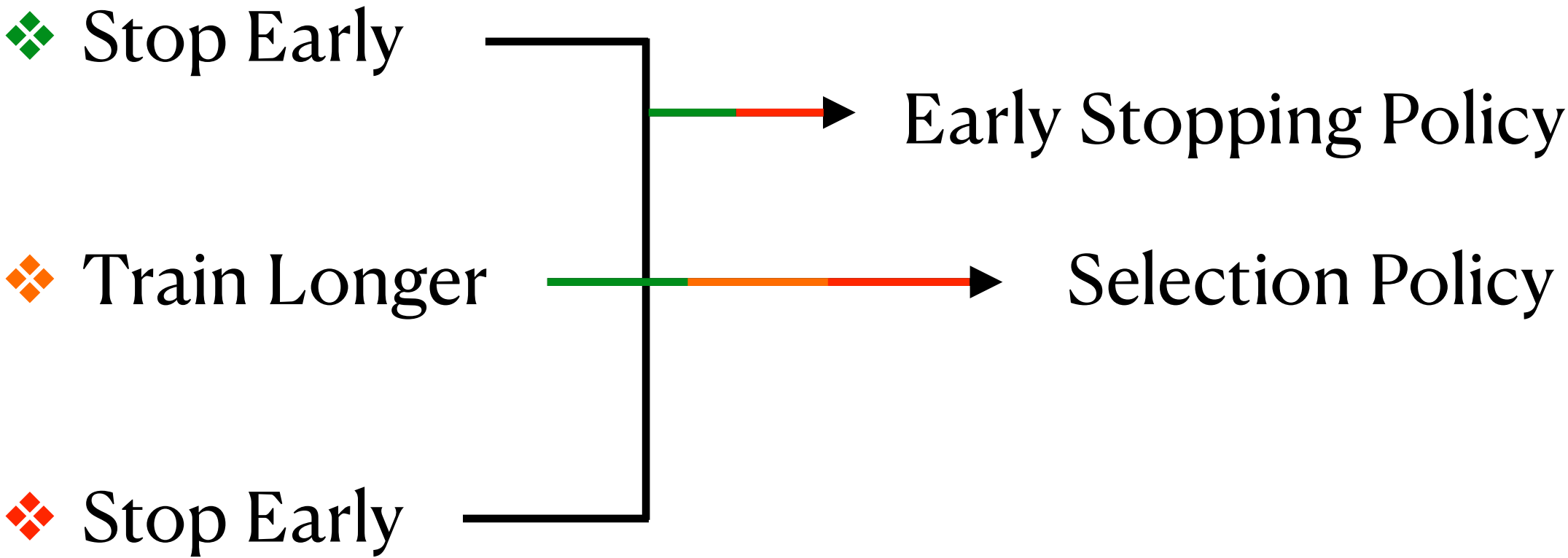
❖ Longer Training leads to **Worse** results

## ✦ Selection Probabilty Stability-based Early Stopping Policy

- A threshold for selection probability change ($\delta$)
- A patience parameter ($T$)

## ✦ Post-Training Selection Policy

1. Save explainer for each *r* iterations
2. Evaluate and save performance of explainer for each *m* iterations
3. After training, select the top-k performing explainers from the saved
4. Re-train the picked explainers & Select the best


Stop Early
Train Longer
Stop Early
Early Stopping Policy
Selection Policy

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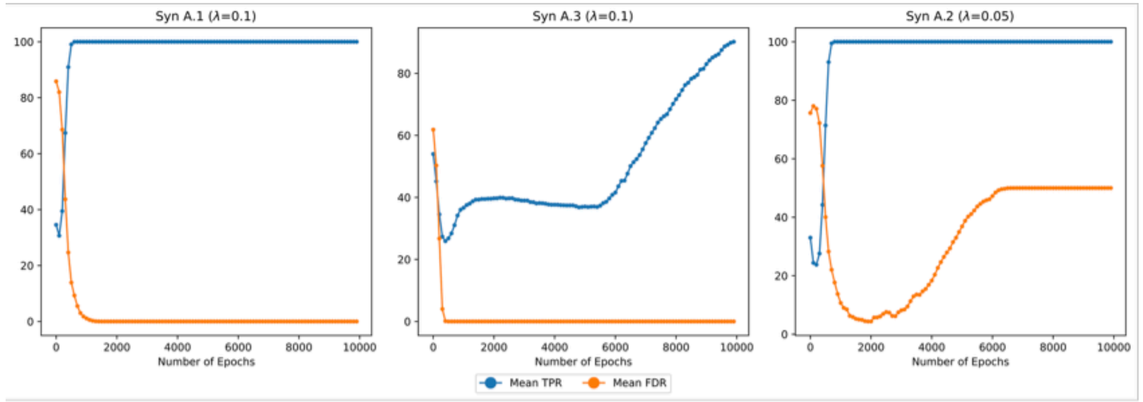


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❖ Stop Early

❖ Train Longer

❖ Stop Early

→ Early Stopping Policy

→ Selection Policy

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