



We study a prediction model on feature vectors with differential under-reporting X where true outcomes Y are a function of the latent 'true' features Z . Missingness ξ is influenced by group membership G . We consider both cases in which feature distributions vary by group membership and cases with $G \perp Z$. In our setting, missingness indicators ξ are unobserved and group membership G is only used for model evaluation and not as a feature. The graph reflects the dependencies at prediction time.