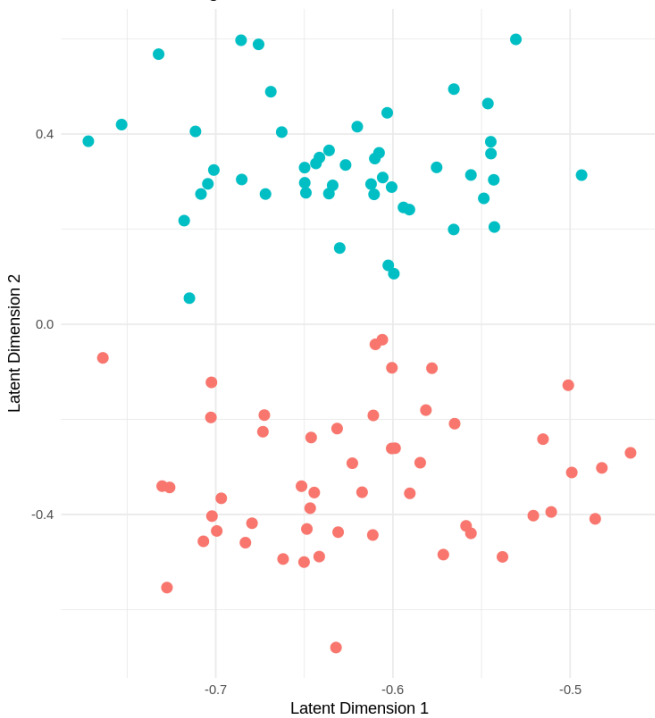
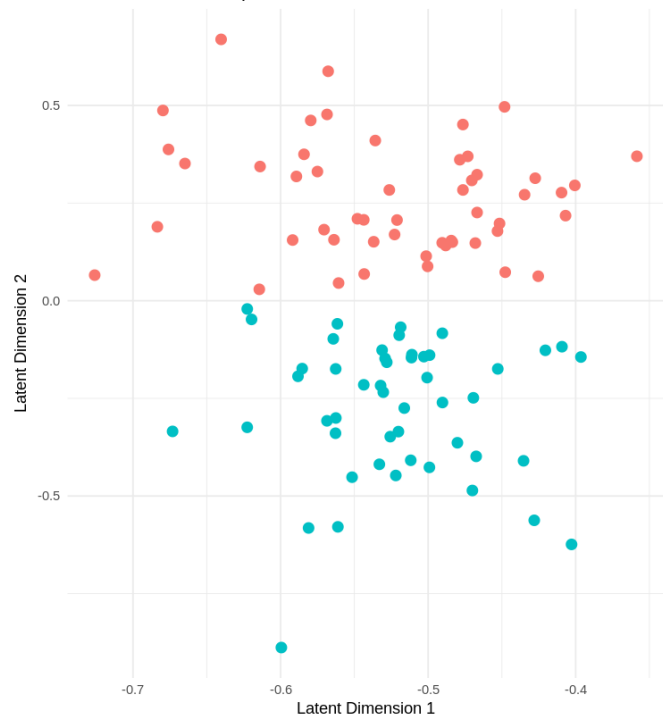


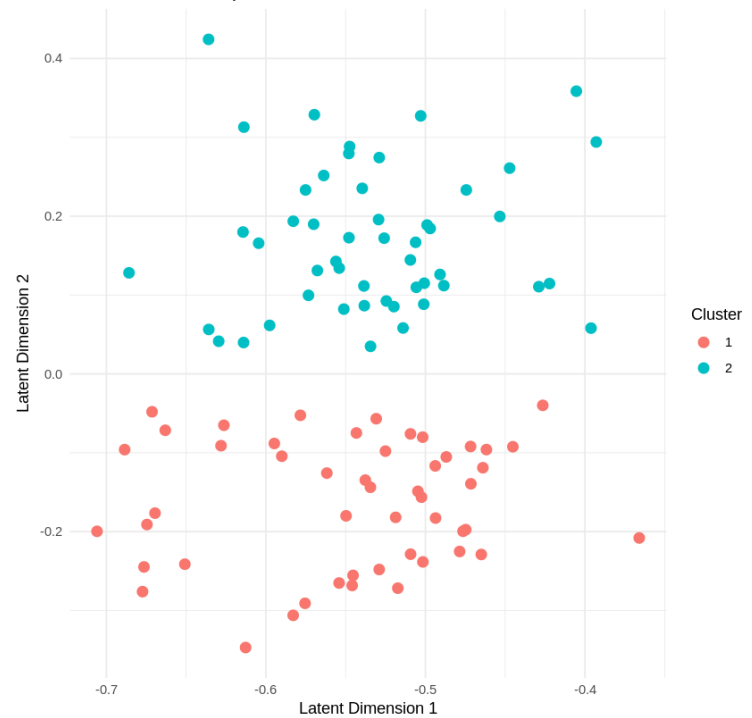
Clusters from Original A



Clusters from Incomplete A



Clusters from Completed A



```

ground_truth = c(rep(1, n / 2), rep(2, n / 2))

#GMM
gmm_original = Mclust(latent_original, G = 2)
gmm_incomplete = Mclust(latent_incomplete, G = 2)
gmm_completed = Mclust(latent_completed, G = 2)

gmm_clusters_original = gmm_original$classification
gmm_clusters_incomplete = gmm_incomplete$classification
gmm_clusters_completed = gmm_completed$classification

#ARI_GMM
ari_original_gmm = adjustedRandIndex(ground_truth, gmm_clusters_original)
ari_incomplete_gmm = adjustedRandIndex(ground_truth, gmm_clusters_incomplete)
ari_completed_gmm = adjustedRandIndex(ground_truth, gmm_clusters_completed)

cat("ARI for Original A (GMM):", ari_original_gmm, "\n")
cat("ARI for Incomplete A (GMM):", ari_incomplete_gmm, "\n")
cat("ARI for Completed A (PMF, GMM):", ari_completed_gmm, "\n")

```

```

ARI for Original A (GMM): 0.9599961
ARI for Incomplete A (GMM): 0.6690693
ARI for Completed A (PMF, GMM): 0.8448327

```