Epoch 1/25, Train Loss: 1.3875, Val Loss: 1.4571, Val Accuracy: 42.50%, Val Precision: 0.5859, Val Recall: 0.4250, Val F1 Score: 0.3702

Epoch 2/25, Train Loss: 1.2289, Val Loss: 1.0952, Val Accuracy: 55.00%, Val Precision: 0.5703, Val Recall: 0.5500, Val F1 Score: 0.5477

Epoch 3/25, Train Loss: 1.1479, Val Loss: 1.0560, Val Accuracy: 57.50%, Val Precision: 0.5714, Val Recall: 0.5750, Val F1 Score: 0.5625

Epoch 4/25, Train Loss: 1.0989, Val Loss: 1.0443, Val Accuracy: 57.00%, Val Precision: 0.5646, Val Recall: 0.5700, Val F1 Score: 0.5404

Epoch 5/25, Train Loss: 1.0365, Val Loss: 0.9934, Val Accuracy: 62.50%, Val Precision: 0.6086, Val Recall: 0.6250, Val F1 Score: 0.6128

Epoch 6/25, Train Loss: 0.9796, Val Loss: 0.9719, Val Accuracy: 62.25%, Val Precision: 0.6159, Val Recall: 0.6225, Val F1 Score: 0.6134

Epoch 7/25, Train Loss: 0.9565, Val Loss: 1.0533, Val Accuracy: 57.00%, Val Precision: 0.5864, Val Recall: 0.5700, Val F1 Score: 0.5620

Epoch 8/25, Train Loss: 0.8844, Val Loss: 0.9746, Val Accuracy: 61.75%, Val Precision: 0.6287, Val Recall: 0.6175, Val F1 Score: 0.6214

Epoch 9/25, Train Loss: 0.8380, Val Loss: 0.9708, Val Accuracy: 63.25%, Val Precision: 0.6349, Val Recall: 0.6325, Val F1 Score: 0.6314

Epoch 10/25, Train Loss: 0.8138, Val Loss: 0.9634, Val Accuracy: 62.75%, Val Precision: 0.6318, Val Recall: 0.6275, Val F1 Score: 0.6285

Epoch 11/25, Train Loss: 0.8010, Val Loss: 0.9554, Val Accuracy: 62.50%, Val Precision: 0.6215, Val Recall: 0.6250, Val F1 Score: 0.6223

Epoch 12/25, Train Loss: 0.8039, Val Loss: 0.9443, Val Accuracy: 63.25%, Val Precision: 0.6362, Val Recall: 0.6325, Val F1 Score: 0.6326

Epoch 13/25, Train Loss: 0.7485, Val Loss: 0.9479, Val Accuracy: 63.00%, Val Precision: 0.6287, Val Recall: 0.6300, Val F1 Score: 0.6274

Epoch 14/25, Train Loss: 0.7383, Val Loss: 0.9379, Val Accuracy: 62.75%, Val Precision: 0.6314, Val Recall: 0.6275, Val F1 Score: 0.6268

Epoch 15/25, Train Loss: 0.7259, Val Loss: 0.9355, Val Accuracy: 62.75%, Val Precision: 0.6316, Val Recall: 0.6275, Val F1 Score: 0.6275

Epoch 16/25, Train Loss: 0.7232, Val Loss: 0.9371, Val Accuracy: 62.25%, Val Precision: 0.6271, Val Recall: 0.6225, Val F1 Score: 0.6229

Epoch 17/25, Train Loss: 0.7311, Val Loss: 0.9304, Val Accuracy: 63.25%, Val Precision: 0.6355, Val Recall: 0.6325, Val F1 Score: 0.6316

Epoch 18/25, Train Loss: 0.7486, Val Loss: 0.9315, Val Accuracy: 62.25%, Val Precision: 0.6255, Val Recall: 0.6225, Val F1 Score: 0.6220

Epoch 19/25, Train Loss: 0.7260, Val Loss: 0.9279, Val Accuracy: 63.75%, Val Precision: 0.6358, Val Recall: 0.6375, Val F1 Score: 0.6358

Epoch 20/25, Train Loss: 0.7213, Val Loss: 0.9311, Val Accuracy: 63.00%, Val Precision: 0.6276, Val Recall: 0.6300, Val F1 Score: 0.6280

Epoch 21/25, Train Loss: 0.7131, Val Loss: 0.9320, Val Accuracy: 63.25%, Val Precision: 0.6322, Val Recall: 0.6325, Val F1 Score: 0.6311

Epoch 22/25, Train Loss: 0.7412, Val Loss: 0.9322, Val Accuracy: 63.25%, Val Precision: 0.6315, Val Recall: 0.6325, Val F1 Score: 0.6310

Epoch 23/25, Train Loss: 0.7145, Val Loss: 0.9328, Val Accuracy: 63.00%, Val Precision: 0.6309, Val Recall: 0.6300, Val F1 Score: 0.6293

Epoch 24/25, Train Loss: 0.7244, Val Loss: 0.9307, Val Accuracy: 63.25%, Val Precision: 0.6301, Val Recall: 0.6325, Val F1 Score: 0.6302

Epoch 25/25, Train Loss: 0.7234, Val Loss: 0.9303, Val Accuracy: 62.75%, Val Precision: 0.6256, Val Recall: 0.6275, Val F1 Score: 0.6256

A graph of a graph

Description automatically generated with medium confidence

Test Accuracy: 65.20%, Test Precision: 0.6496, Test Recall: 0.6520, Test F1 Score: 0.6506

Confusion Matrix:

[[57 13 5 17 8]

[12 72 3 5 8]

[ 4 0 83 3 10]

[ 9 7 6 60 18]

[14 11 7 14 54]]