calculate\_alpha\_and\_loadings <- function(data, group\_name) {

numeric\_data <- data[sapply(data, is.numeric)]

factor\_analysis <- psych::fa(numeric\_data, nfactors = 1, rotate = "varimax")

factor\_loadings <- factor\_analysis$loadings

print(paste("Factor Loadings for", group\_name))

print(factor\_loadings)

cronbach\_alpha <- psych::alpha(numeric\_data)$total$raw\_alpha

print(paste("Cronbach's Alpha for", group\_name, ":", cronbach\_alpha))

}

perform\_CFA <- function(model\_input, data\_input, group\_name) {

model <- paste(model\_input)

fit <- lavaan::cfa(model, data = data\_input, std.lv = TRUE)

print(paste("Standardized Factor Loadings for", group\_name))

print(lavaan::inspect(fit, "std")$lambda)

factor\_loadings <- lavaan::inspect(fit, "std")$lambda

cronbach\_alpha <- psych::alpha(data\_input)$total$raw\_alpha

print(paste("Cronbach's Alpha for", group\_name, ":", cronbach\_alpha))

}